

APPENDIX H

YBI TRAFFIC FORECAST AND OPERATIONS REPORT

Yerba Buena Island Project Report Traffic Forecast Report

1.0 INTRODUCTION

This report presents the traffic forecasting procedures and the results of the forecasted future traffic volumes on the Bay Bridge and six on- and off-ramps to and from Yerba Buena Island in both eastbound and westbound directions.

2.0 EXISTING TRAFFIC VOLUMES

Figure 1 presents the existing traffic volumes on the Bay Bridge and ramps in both the eastbound and westbound directions, during both the AM and PM peak hours, respectively. Existing Bay Bridge ramp traffic volumes were collected by Fehr & Peers from May 4th (Sunday) to May 10th, (Saturday) 2008. Average traffic volumes for the three mid-week weekdays (Tuesday (May 6, 2008) to Thursday (May 8, 2008)) were selected for the analysis. The AM peak hour was identified as 8:00 a.m. to 9:00 a.m. and the PM peak hour was identified as 4:00 to 5:00 p.m. The Bay Bridge mainline traffic volumes were obtained from the Freeway Performance Measurement System¹ (PeMS) database for the same three days and during the same peak hour to ensure consistency. The data point is located approximately 2,300 feet west of the Bay Bridge westbound metering lights. It should be noted that the Bay Bridge traffic volumes do not represent the actual demand; it represents the actual volumes counted at this point. Westbound traffic volumes at this point are constrained by the number of vehicles controlled by metering lights during both the AM and PM peak periods, and Caltrans sets a limit of 9,600 vehicles per hour onto the Bay Bridge.

There are no metering lights in the eastbound direction in the Bay Bridge corridor. Due to the complex on- and off-ramp configuration on the San Francisco side of the Bay Bridge and chronic traffic queuing at the approaches to the Bay Bridge, the eastbound Bay Bridge capacity was estimated using the highest counted traffic volumes from the PeMS database. PeMS data were examined between 2003 and 2007 and the highest volume counted was 9,785 vehicles on April 12, 2007 between 4:00 p.m. and 5:00 p.m. Thus, it was determined that the eastbound capacity is approximately 9,750 vehicles per hour.

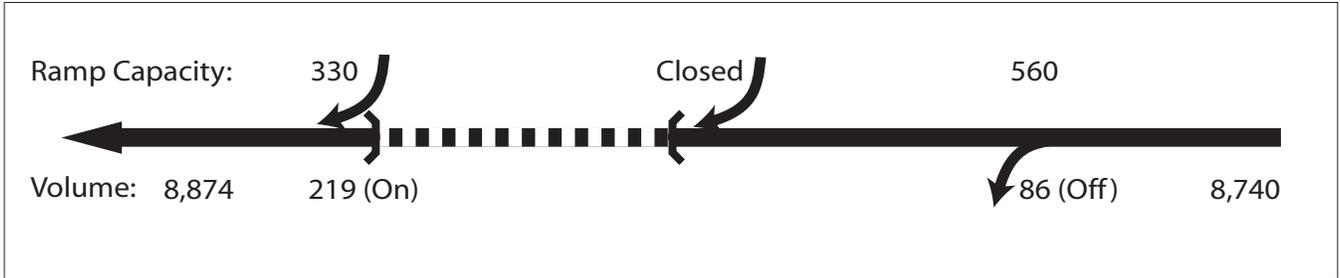
2.1 Historical Traffic Volumes on the Bay Bridge

A review of historical data published by the Metropolitan Transportation Commission (MTC) showed that traffic volumes during the AM peak period were effectively the same in 2001 as in 1991 in both the eastbound and westbound directions. However, traffic volumes during the PM peak period increased in both eastbound and westbound directions during the same time period. A recent report prepared by the MTC, *Bay Area Transportation: State of the System 2005*, shows a reduction of 4 percent in average daily traffic on the Bay Bridge in the westbound direction.

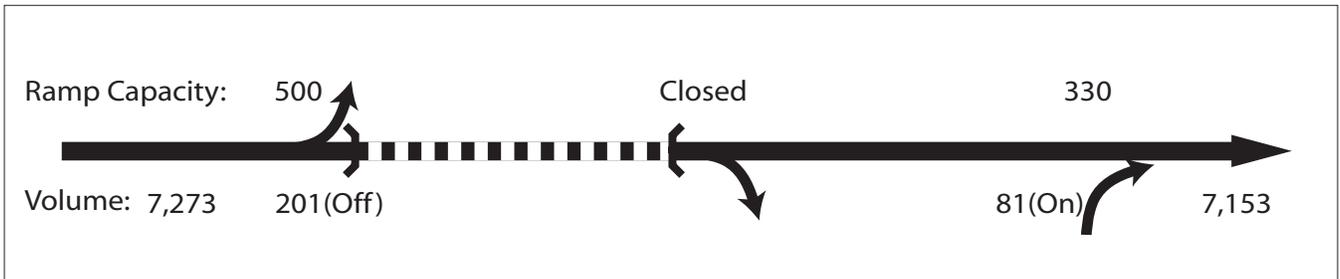
¹ PeMS data were obtained from <https://pems.eecs.berkeley.edu/>

AM PEAK HOUR

Westbound

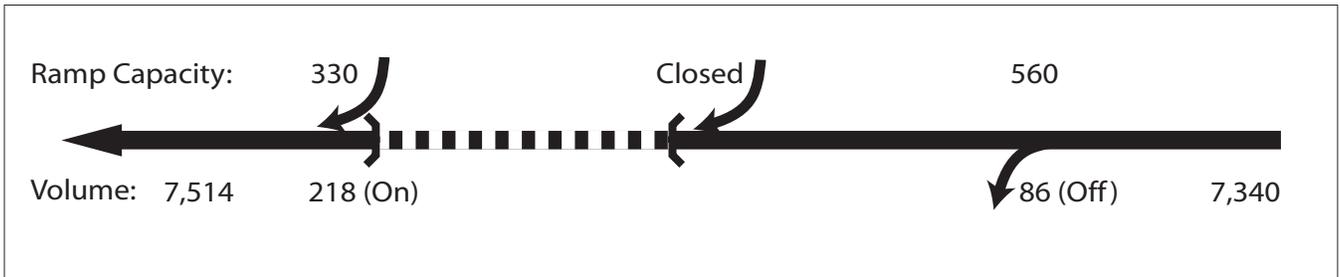


Eastbound

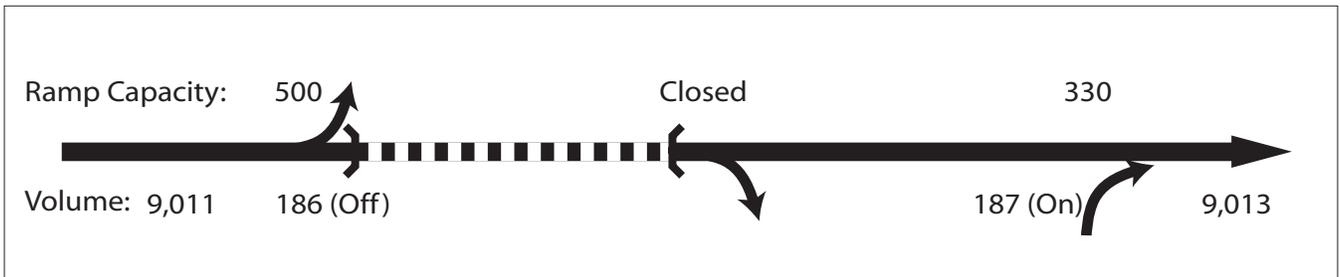


PM PEAK HOUR

Westbound



Eastbound



It should be noted that Bay Bridge peak hour traffic volumes vary substantially. Table 1 presents the mean, 85 percentile, and highest volumes counted in 2006 and 2008.

Table 1 - PeMs Traffic Data (2006 and 2008)

	AM Peak Hour		PM Peak Hour	
	Eastbound	Westbound	Eastbound	Westbound
2006				
Mean	7,000	8,276	8,766	7,271
85 percentile	8,012	9,331	9,404	8,047
Maximum	8,552	9,571	9,777	8,493
2008				
Mean	6,838	8,759	8,853	7,195
85 percentile	7,244	9,385	9,351	7,891
Maximum	7,561	9,732	9,591	8,485

3.0 FUTURE TRAFFIC VOLUMES

The future year for this project is 2035, 20 years from the completion of the proposed project. Future traffic demand volumes for the Treasure Island and the Bay Bridge were estimated using two different methods and then integrated to ensure consistency. Future demand volumes for the Treasure Island were estimated based on the proposed land use program for the *Treasure Island and Yerba Buena Island Redevelopment Plan (TIYBIRP)* and was regarded as a full-build of the Treasure Island. Future demand volumes for the Bay Bridge were based on the MTC’s travel forecasting model for the AM peak hour and San Francisco County Transportation Authority’s (SFCTA) travel forecasting model for the PM peak hour. Both forecasting methods and integration procedures are described in detail below.

3.1 Future Traffic Demand on the Treasure Island

Future traffic demand volumes for the Treasure Island development project was obtained from the trip generation report prepared by Fehr and Peers, and recently approved by the San Francisco Planning Department for use in the *TIYBIRP EIR*. Vehicle trip generation for the *TIYBIRP EIR* was calculated using the methodology described in Appendix A, a technical memorandum titled “Proposed 4-D Adjustments to Trip Generation Rates Treasure Island Transportation Impact Analysis”. Future traffic volumes were estimated for the baseline transit investments only (only those funded improvements were included in the modal split analysis).

Table 2 presents the proposed land use program for TIYBIRP and estimated person and vehicle trips for the TIYBIRP under the baseline transit scenario. Table 1 (baseline transit) shows that TIYBI RP would generate approximately 2,416 vehicle trips during the AM peak hour (1,062 inbound and 1,354 outbound vehicle trips) and approximately 3,835 vehicle trips during the PM peak hour (2,136 inbound and 1,699 outbound vehicle trips) during the PM peak hour.

It should be noted that the vehicle trips presented in Table 2 are total vehicle trips that would be generated by the proposed developments on Treasure Island and Yerba Buena Island at build out, including the vehicles currently accessing Treasure Island and Yerba Buena Island and will

remain after the construction of the TIYBIRP project. The net increase in vehicle volumes would be 1,664 vehicles during the AM peak hour and 2,909 vehicles during the PM peak hour².

Table 2 - Yerba Buena Island and Treasure Island Redevelopment Plan Trip Generation by Mode (Baseline Transit Scenario)

Land Use	Total Use	Person Trips					Vehicle Trips ²		
		Ferry	Bus	Auto	Internal ¹	Total	In	Out	Total
Weekday AM Peak Hour									
Residential	6,000 units	431	526	1,405	1,387	3,749	234	838	1072
Hotel	500 rooms	100	126	352	339	917	163	103	266
Retail	270,000 sf	131	222	858	712	1,923	346	260	606
Open Space	300 acres	9	15	59	48	131	33	8	41
Marina ³	400	6	8	34	29	77	11	13	24
Flex	325,000 sf	41	50	134	133	358	87	14	101
Police/Fire	135,000 sf	33	40	107	106	286	67	13	80
School		91	111	296	291	789	121	105	226
Total		840	1098	3,245	3,045	8,230	1,062	1,354	2,416
Weekday PM Peak Hour									
Residential	6,000 units	510	623	1,534	1,778	4,445	757	430	1187
Hotel	500 rooms	50	63	165	186	464	66	60	126
Retail	270,000 sf	397	669	2418	2320	5,804	895	823	1718
Open Space	300 acres	17	29	107	102	255	31	45	76
Marina ³	400	9	14	53	50	126	19	18	37
Flex	325,000 sf	237	289	712	826	2064	310	241	551
Police/Fire	135,000 sf	7	9	21	24	61	5	11	16
School		90	90	138	211	529	53	71	124
Total		1,316	1787	5,144	5,496	13,748	2,136	1,699	3,835

Note:

1. Walk and bicycle person trips will be internal to Treasure Island
2. Vehicle-trips includes passenger vehicles and vans
3. The marina use has already been approved and is not part of the proposed project (although the landside services associated with the Marina are included). The trip generation associated with the Marina is presented for informational purposes because it will be used to assess cumulative conditions.)

Source: *Treasure Island Transportation Plan*, Treasure Island Community Development, LLC, September 2006 and Fehr & Peers 2008

² A letter report to Bill Wycko, San Francisco Planning department "Proposed Trip Generation, Distribution, and Mode Split Forecasts for Treasure Island Transportation Impact Study", Fehr and Peers, December 8, 2008

3.2 Future Traffic Volumes on the Bay Bridge

Future traffic volumes for the Bay Bridge mainline were estimated using the MTC’s travel forecasting model (BAYCAST 2009 RTP) for the AM peak hour and using the SFCTA’s travel forecasting model (Champ 3.2) for the PM peak hour. The decision on using the model results from two different models is presented below.

- The MTC model was only validated for the AM peak period, not the PM peak period. Its AM peak hour data appears to be reasonably validated against the PeMS data plus observed unserved demand in both eastbound and westbound direction during the AM peak hour.
- The SFCTA model was validated for the PM peak period. Its PM peak hour data appears to be reasonably validated against the PeMS data plus observed unserved demand in both eastbound and westbound direction during the PM peak hour.

Table 3 presents a comparison of the two model results for the base year (2006) and 85 percentile traffic volume data obtained from PeMS data for 2006. It should be noted that SFCTA model’s base year is 2005, so the 2006 SFCTA model demand is estimated based on a interpolation of the model output data between 2005 and 2030.

Table 3 - Comparison of the MTC and SFCTA model results and PeMs data (2006)

	MTC Model	SFCTA Model	PeMs Data (85 percentile)
AM Peak Hour			
Eastbound	8,541	9,399	8,012
Westbound	12,375	11,364	9,571
PM Peak Hour			
Eastbound	13,703	10,402	9,777
Westbound	8,771	9,399	8,493

Both the MTC model and the SFCTA model use ABAG’s Projection 2007 data as the basis for the forecasts. The future year for the MTC model is 2035 and for the SFCTA model is 2030. Since the future year of SFCTA model is 2030, 2035 SFCTA model demand is estimated based on a straight line extrapolation of the model output data between 2005 and 2030.

In order to estimate I-80 mainline future traffic demand, the vehicle trips in the MTC and SFCTA model’s trip table for Treasure Island and Yerba Buena were replaced with the vehicle trips presented in Table 1 and then the updated trip table was re-assigned to the roadway network.

Figure 2 (baseline transit) presents the forecasted future traffic demand as well as estimated volumes for the Bay Bridge mainline and Yerba Buena Island ramps. Because the metering lights limit the number of vehicles in the westbound direction to no more than 9,600 vehicles per hour, the actual vehicular volumes on the Bay Bridge after the metering lights are reduced to 9,600 vehicles. Likewise, the actual vehicular volumes on the Bay Bridge in the eastbound

direction are reduced to 9,750 in the eastbound direction. The constrained volumes are marked by “*” in Figure 2 and these volumes will be used for the traffic operations analysis.

Table 4 presents a comparison of existing and future traffic demand and growth factors as well as constrained volumes and growth factors. It shows that traffic demand in the eastbound direction would grow by 2.5% in AM peak hour and 8.2% in PM peak hour and westbound direction would grow by 29.5% in AM peak hour and 15.1% in PM peak hour.

Table 4 – Approach Traffic Volumes and Future Growth Factors

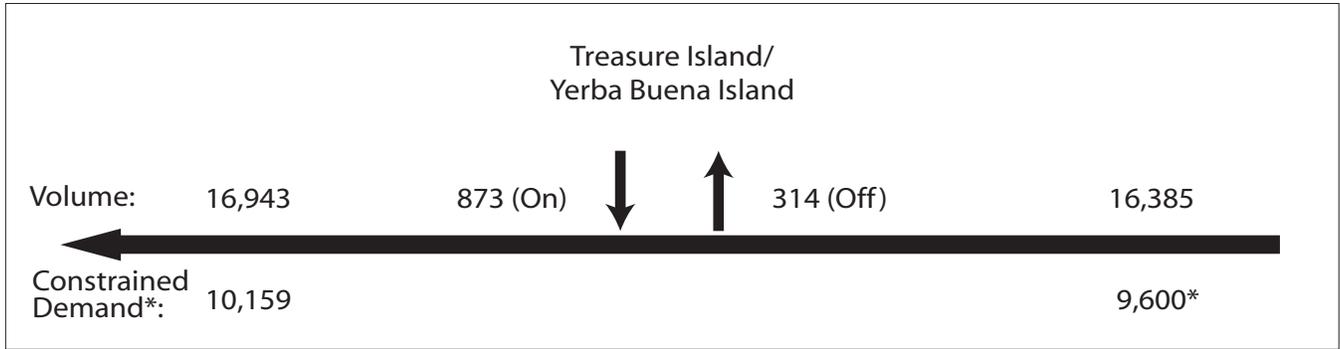
	Existing (2008)	Future with Baseline Transit	
		Total Volumes (2035)	Future Demand (2035)
Eastbound (SF approach)			
AM Demand	8,557		8,769
AM Volumes	7,273	8,769	
PM Demand	10,402		12,002
PM Volumes	9,011	9,750	
Westbound (East Bay approach)			
AM Demand	12,652		16,385
AM Volumes	8,740	9,600	
PM Demand	9,087		10,462
PM Volumes	7,340	9,600	

Note:

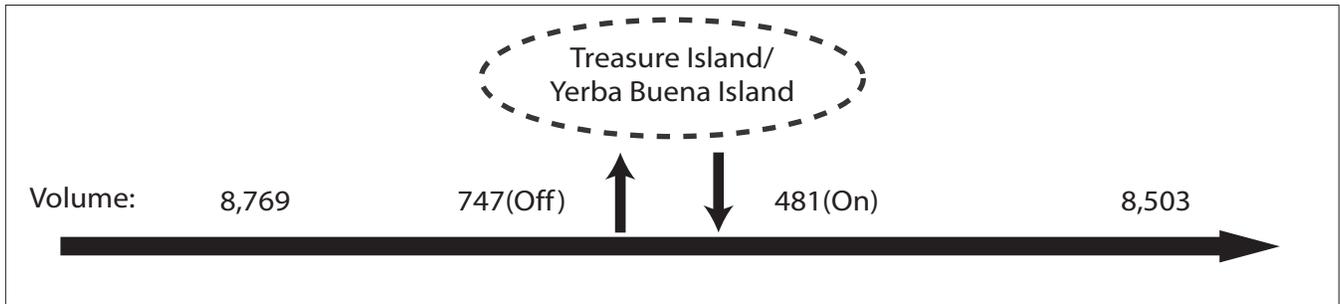
1. AM peak hour demands were based on the MTC model and PM peak hour demands were based on the SFCTA’s model.
2. 2008 volumes are 85 percentile volumes obtained from the PeMS database.

AM PEAK HOUR

Westbound

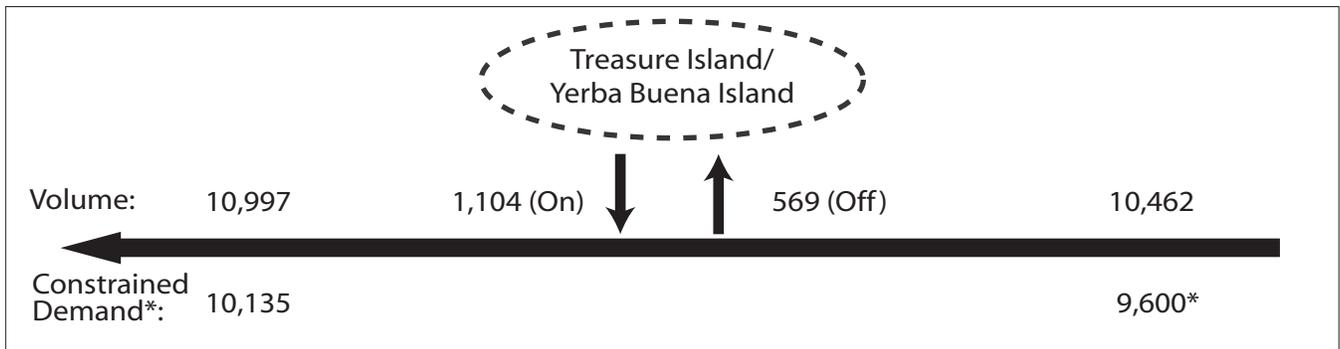


Eastbound

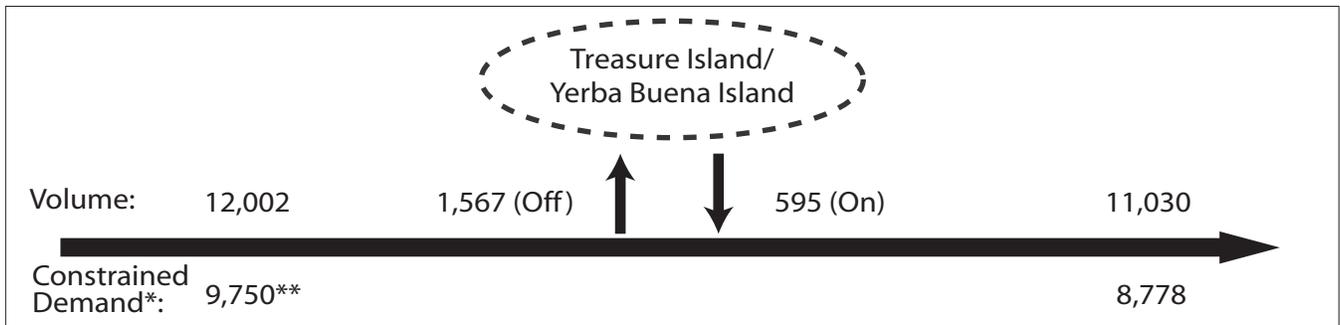


PM PEAK HOUR

Westbound



Eastbound



* Bay Bridge westbound traffic volumes are controlled by metering lights during both the AM and PM peak periods, and Caltrans sets a limit of 9,600 vehicles per hour onto the Bay Bridge.

** Bay Bridge eastbound capacity is constrained by the ramps and mainline configuration near 1st Street. The highest volume counted between 2005 and 2007 was approximately 9,750 vehicles per hour.



Appendix

Appendix A - Proposed 4-D Adjustments to Trip Generation Rates Treasure Island
Transportation Impact Analysis



December 8, 2008

Mr. Bill Wycko
San Francisco Planning Department
1650 Mission Street, 4th Floor
San Francisco, CA 94103

**Re: *Proposed Trip Generation, Distribution, and Mode Split Forecasts for
Treasure Island Transportation Impact Study***

Dear Bill:

This letter report presents the trip generation, trip distribution, and mode split forecasts that we propose to use for the Treasure Island Transportation Impact Study. The proposed trip generation forecasts were developed using methods developed by Fehr & Peers and others (known as the 4D's method) to estimate trip generation as a function of design variables, such as:

- Density
- Diversity of uses
- Design of the street network to accommodate pedestrian and bicycle travel
- Distance to robust transit service

A brief description of the proposed project and the resulting traffic generation forecasts follows.

TREASURE ISLAND DEVELOPMENT

The Treasure Island Development Authority (TIDA) is proposing a redevelopment plan for Treasure Island and Yerba Buena Island that would include redeveloping most existing development on the islands, which primarily consists of low-density residential and light industrial development, into a new mixed-use development that includes housing, retail/commercial, recreational open space, and community facilities.

Specifically, the proposed project would remove about 1,000 dwelling units (of which approximately 800 are available for occupancy) and about 100 non-residential buildings, some of which are currently occupied. The proposed project would replace these uses with the following:

- Up to 6,000 new dwelling units, broken down as follows:
 - 1,454 townhomes/condominium flats
 - 495 rental flats
 - 1,058 affordable units (including rental, for sale, and supportive housing)
 - 2,876 high- and mid-rise units
 - 117-room condominium hotel
- 270,000 square feet of retail uses, including neighborhood-serving, lifestyle, and entertainment

- 325,000 square feet of “flex space,” including new construction and adaptive reuse of office, PDR/industrial, and museum space.
- 135,000 square feet of institutional uses, including an elementary school, police/fire services, community facilities, and a sailing center.
- 500 hotel rooms, including a 50-room wellness spa, 70 timeshare units, and approximately 300-380 room full-service hotel
- 300 acres of public recreational open space
- Expansion of the existing 100-berth marina near Clipper Cove to provide up to 400 berths¹

TRIP GENERATION

The methods commonly used for forecasting trip generation of projects in San Francisco are based on person-trip generation rates, trip distribution information, and mode split data described in the *SF Guidelines*. These data are based on a number of detailed travel behavior surveys conducted within San Francisco. The data in the *SF Guidelines* are generally accepted as more appropriate for use in the complex environs of San Francisco than more conventional methods because of the relatively unique mix of uses, density, availability of transit, and cost of parking commonly found in San Francisco. However, the methods described in the *SF Guidelines* cannot be directly applied at Treasure Island because of its unique location and because the proposed project is expected to fundamentally change the character of the island, limiting the usefulness of any information about existing uses at the island.

Similarly, standard vehicle-traffic generation rates, such as those provided by *Trip Generation*, 7th Edition, 2003, Institute of Transportation Engineers (ITE), would not be suitable for Treasure Island, unless appropriate adjustments were made to account for the project size, mix, and availability of transit. This trip generation report describes an exercise conducted by Fehr & Peers to estimate traffic generation of the proposed project using state-of-the-practice methods for adjusting standard traffic generation rates. This method was originally developed by Fehr & Peers and others for the US Environmental Protection Agency (EPA) and has been endorsed for use in project-specific and planning-level analyses by a number of jurisdictions, including the California Department of Transportation (Caltrans). This method is commonly referred to as the “4D” method, and generally accounts for the following factors that may influence traffic generation:

- **Density of the project** – the higher the proposed project’s density, the less vehicular traffic generated per unit of development
- **Diversity of uses** – an appropriate mix of uses can lead to internalization of trips within a project

¹ Construction of the additional marina berths has already been approved, and they are not technically part of the proposed project. Landside services for the marina are part of this project. This trip generation report describes expected trip generation associated with the marina berths for informational purposes because the additional traffic associated with that already-approved project will be included in the cumulative analysis.

- **Design of project** – a walkable, pedestrian- and bicycle-oriented circulation system can help to reduce automobile dependence within a project site
- **Distance to transit** – locating uses near major transit facilities (typically within ½ mile), has been shown to increase transit use associated with trips to and from a project

A detailed description of how these factors can be used to adjust standard traffic generation rates was provided in a separate letter. That letter is attached as an appendix to this trip generation letter report. However, the general concept behind the 4D method is that projects that deviate from the base case (in this case, ITE methods) with respect to the four bulleted variables above exhibit different traffic generation patterns. Elasticities have been derived from travel behavior surveys to help estimate how traffic generation changes as a function of changes in the 4D's.

Internal Trips

The first step in the 4D method is to define the base case. In this case, the ITE trip generation methodology was selected as the base case, as it represents typical suburban, automobile-oriented development. The estimated project traffic generation using ITE methods is shown below in Tables 1 and 2 for the AM and PM peak hours, respectively.

The travel behavior surveys conducted by the City of San Francisco (summarized in the *SF Guidelines*) found that certain land uses, particularly retail uses, generate more person-trips than typical suburban developments. Specifically, assuming an automobile occupancy of 1.8 for retail trips, as documented in the 1995 *National Personal Transportation Survey*, the vehicle trip generation predicted by ITE for the project's retail uses can be converted to person trips. The number of peak hour person trips per unit of development, as summarized in the *SF Guidelines* for retail uses, is 70 percent higher than the ITE person trip prediction (again, when converting automobile trips to person-trips using a factor of 1.8).

There are a number of reasons why uses in a denser, more walkable area such as San Francisco might generate higher activity levels. However, as a conservative measure, for the base analysis, the retail vehicle trips predicted by ITE and shown in Tables 1 and 2 were adjusted upwards by 70 percent.

Once the base case is defined, the next step in the 4D process is to define the application area (i.e., the catchment area for trip internalization). For purposes of this analysis, we assumed the Treasure Island development would be contained within a single catchment area. This means that trips from anywhere within the development to anywhere else in the development could be internalized and that all uses are within reasonable walking or cycling distances from each other.

**Table 1
 Treasure Island Trip Generation Estimates (ITE Methodology¹)
 AM Peak Hour - Base Case**

Land Use	Size	Units	ITE Land Use Code	Rate or Eqn.	AM Trip Generation		
					AM Trips	In	Out
Retail¹							
Neighborhood Serving	115.0	ksf					
Shopping Center	87.0	ksf	820	Eqn	246	150	96
Grocery Store	28.0	ksf	850	Rate	156	95	61
Lifestyle + Entertainment	155.0	ksf					
Restaurant	54.0	ksf	932	Rate	529	275	254
Shopping Center	101.0	ksf	820	Eqn	269	164	105
Commercial/Flex/Adaptive Reuse							
Buildings 1, 2, and 3	325.0	ksf					
General Office	85.0	ksf	710	Eqn	165	145	20
Manufacturing	80.0	ksf	140	Rate	59	45	14
Multiplex Movie Theater	160.0	ksf	445	n/a	0	0	0
Residential							
All	6,000	Units					
Townhomes + Stacked Flats	1,454	Units	230	Rate	641	109	532
Rental Stacked Flats + TIDA/TIHDI Affordable Units	1,553	Units	220	Rate	793	159	634
High-Rise Units (10+ Stories)	2,876	Units	222	Rate	864	216	648
Condo Hotel	117	Units	311	Rate	46	25	21
Hotel							
3 Hotel Facilities	500	Rooms					
Wellness Spa	50	Rooms	331	Rate	17	12	5
Timeshare	70	Rooms	310	Eqn	86	52	34
Full-Service Hotel	380	Rooms	310	Eqn	470	287	183
Institutional							
Miscellaneous Institutional Uses	135.0	Ksf					
Elementary School	105.0	Ksf	520	Rate	493	266	227
Police/Fire Station	30.0	ksf	730	Rate	178	149	29
Recreational Community Center	13.5	Ksf	495	Rate	23	14	9
Sailing Center/Marina	15.0	Ksf	420	Rate	24	8	16
Recreational Open Space	300	Acres		Rate	82	65	17
Grand Total					5,141	2,236	2,905

Notes:

1. Vehicle trip generation for retail uses increased by 70 percent from ITE methodology based on evidence that retail uses in San Francisco generate approximately 70 percent more person-trips than typical suburban uses. This is a conservative assumption because a higher portion of the additional person trips generated by San Francisco retail uses are likely walk trips due to land use proximity.

Source: Fehr & Peers, September 2008

**Table 2
 Treasure Island Trip Generation Estimates (ITE Methodology¹)
 PM Peak Hour - Base Case**

Land Use	Size	Units	ITE Land Use Code	Rate or Eqn.	PM Trip Generation		
					PM Trips	In	Out
Retail¹							
Neighborhood Serving	115.0	ksf					
Shopping Center	87.0	ksf	820	Eqn	971	466	505
Grocery Store	28.0	ksf	850	Eqn	581	296	285
Lifestyle + Entertainment	155.0	ksf					
Restaurant	54.0	ksf	932	Rate	1,003	612	391
Shopping Center	101.0	ksf	820	Eqn	1,073	515	558
Commercial/Flex/Adaptive Reuse							
Buildings 1, 2, and 3	325.0	ksf					
General Office	85.0	ksf	710	Eqn	175	30	145
Manufacturing	80.0	ksf	140	Rate	60	22	38
Multiplex Movie Theater	160.0	ksf	445	Eqn	1,056	676	380
Residential							
All	6,000	Units					
Townhomes + Stacked Flats	1,454	Units	230	Rate	757	507	250
Rental Stacked Flats + TIDA/TIHDI Affordable Units	1,553	Units	220	Rate	964	626	338
High-Rise Units (10+ Stories)	2,876	Units	222	Rate	1,008	615	393
Condo Hotel	117	Units	311	Rate	48	22	26
Hotel							
3 Hotel Facilities	500	Rooms					
Wellness Spa	50	Rooms	331	Rate	22	10	12
Timeshare	70	Rooms	310	Rate	42	22	20
Full-Service Hotel	380	Rooms	310	Rate	225	119	106
Institutional							
Miscellaneous Institutional Uses	135.0	Ksf					
Elementary School	105.0	Ksf	520	Rate	330	142	188
Police/Fire Station	30.0	ksf	730	Rate	38	12	26
Recreational Community Center	13.5	Ksf	495	Rate	23	7	16
Sailing Center/Marina	15.0	Ksf	420	Rate	55	33	22
Recreational Open Space	300	Acres		Rate	160	66	94
Grand Total					8,591	4,798	3,793

Notes:

1. Vehicle trip generation for retail uses increased by 70 percent from ITE methodology based on evidence that retail uses in San Francisco generate approximately 70 percent more person-trips than typical suburban uses. This is a conservative assumption because a higher portion of the additional person trips generated by San Francisco retail uses are likely walk trips due to land use proximity.

Source: Fehr & Peers, September 2008

The third step in the 4D process is to determine the characteristics of the proposed project, as they relate to the 4D variables described above. This process was done by comparing the project with typical suburban development patterns. The proposed project's percentage differences from typical developments were applied against elasticities developed from travel behavior surveys conducted by the Contra Costa Transportation Authority (CCTA). The resulting output from the 4D analysis tool is provided in the Appendix. Generally, the 4D analysis found that approximately 44 percent of all AM peak hour trips and 46 percent of all PM peak hour trips would be internal to the island. However, some post-processing adjustments were made to ensure a worst-case scenario.

Sensitivity to Jobs/Housing Mix

As noted at the beginning of this letter, one of the factors affecting traffic generation in the 4D method is the diversity of uses. A mix of uses within a single development can reduce vehicle traffic generation in a number of ways, such as accommodating shopping trips, dining out, and allowing walking or cycling to work within a mixed-use development. However, there is some question as to whether the residents expected to live at Treasure Island would be a good match for the jobs expected, which are likely to be primarily retail and service jobs.

To determine the effect that the jobs-housing mix has on the final internalization rate predicted by the 4D method, a sensitivity test was conducted. Reducing the elasticity for home-based work trips associated with the jobs/household mix to zero results in a reduction in overall trip internalization in both the AM and PM peak hour analyses of seven percentage points. (The 4D spreadsheet analyses with a 50 and 100 percent reduction in the elasticities for jobs/household diversity for home-based work trips are included in the Appendix.)

To ensure that the project's traffic impact analysis is performed for a worst-case scenario, we recommend the trip generation analysis be based on the scenario in which the jobs/housing mix has no effect on home-based work trips (i.e., we will assume that nobody who lives on the island also works on the island). Therefore, the final trip internalization percentages we propose to use are:

- 37% of AM peak hour trips will be internal to the island
- 40% of PM peak hour trips will be internal to the island

Those percentages were applied to the vehicle trip generation estimates from ITE, described in Tables 1 and 2, and represent primarily walk and bicycle trips on Treasure Island. The remaining trips represent transit and auto trips onto and off of the island.

Comparison to Other High-Density, Mixed-Use Developments

The conclusion that between 37 and 40 percent of all peak hour person-trips made on Treasure Island would be internal to the island is relatively high compared to typical reductions taken to account for trip internalization. Therefore, in order to determine if this reduction is reasonable, a comparison was made to other high-density, mixed-use development projects around the United States. This comparison is summarized in Table 3.

**Table 3
 Predicted vs. Observed Internalization at Other Mixed-use Sites**

Site	Project Description	Internal % Count	Internal % 4D Estimate	Error
S Davis¹	791 Acre Site: <ul style="list-style-type: none"> • 550 ksf Office • 559 ksf Retail • 0 Hotel Rooms • 4,402 Residential Units 	45%	50%	5%
Moraga¹	6,109 Acre Site: <ul style="list-style-type: none"> • 1,720 ksf Office • 180 ksf Retail • 0 Hotel Rooms • 6,000 Residential Units 	47%	36%	-11%
Galleria¹	165 Acre Site: <ul style="list-style-type: none"> • 137 ksf Office • 1,150 ksf Retail • 229 Hotel Rooms • 722 Residential Units 	38%	17%	-21%
Village Commons²	72 Acre Site: <ul style="list-style-type: none"> • 293 ksf Office • 231 ksf Retail • 0 Hotel Rooms • 317 Residential Units 	28%	46%	18%
Crocker²	26 Acre Site: <ul style="list-style-type: none"> • 209 ksf Office • 87 ksf Retail • 256 Hotel Rooms • 0 Residential Units 	41%	18%	-23%
Mizner²	30 Acre Site: <ul style="list-style-type: none"> • 88 ksf Office • 163 ksf Retail • 0 Hotel Rooms • 136 Residential Units 	40%	43%	3%
Boca del Mar²	253 Acre Site: <ul style="list-style-type: none"> • 303 ksf Office • 198 ksf Retail • 0 Hotel Rooms • 1,144 Residential Units 	33%	38%	5%
Country Isles²	61 Acre Site: <ul style="list-style-type: none"> • 59 ksf Office • 193 ksf Retail • 0 Hotel Rooms • 368 Residential Units 	33%	42%	9%

Notes:
 1. Cordon counts conducted by Fehr & Peers
 2. From mixed-use trip generation estimation methodology, *ITE Handbook*, Appendix C
 Fehr & Peers, October 2008

As shown in Table 3, there are a number of sites with similar land use mixtures and densities where trip internalization rates between 35 and 45 percent have been observed. In addition, at the sample sites, application of the 4D method improved the accuracy of trip generation forecasting, with standard errors of +/- 25 percent, compared to typical standard errors of +/- 90 to +/- 140 percent for office and residential land uses, respectively, when estimated directly from the ITE *Trip Generation* manual.

In light of the above, the conclusion that approximately 37 to 40 percent of Treasure Island trips would be internal to the island appears reasonable.

Mode Split (Transit Usage)

Transit usage associated with development on Treasure Island is estimated based on data presented in *Characteristics of Rail and Ferry Station Area Residents in the San Francisco Bay Area: Evidence from the 2000 Bay Area Travel Survey*, Metropolitan Transportation Commission (MTC), September 2006, (BATS Study). That report describes a number of characteristics, including residential proximity to transit service, that influence transit ridership in the Bay Area.

According to the BATS Study, 34 percent of work trips and 17 percent of all non-work trips made by San Francisco residents living within ½ mile of a rail or ferry terminal are via transit². Further, the study notes that of work-related transit trips made by San Francisco residents living within ½ mile of a rail or ferry terminal, approximately 50 percent are made by ferry/rail and the remaining 50 percent are made by bus. Non-work trips are more likely to be made by bus, with 65 percent of transit trips made by bus and 35 percent made by rail/ferry. The transit mode shares for work and non-work trips from the BATS Study were applied to the proposed Treasure Island development to estimate bus and ferry ridership.

Given the disincentives to driving and incentives for transit use proposed by the project, it is reasonable to expect the proposed project to have a slightly higher transit mode share than the average San Francisco development. However, to be conservative, and because data on the effectiveness of such disincentives is limited, the Treasure Island project was treated as a typical San Francisco project (i.e., no additional transit ridership was assumed associated with the disincentives to driving).

Based on the portion of work vs. non-work trips associated with each land use described in the *Transfer and Reuse of Naval Station Treasure Island Final EIR* (Appendix E, San Francisco Planning Department, June 2006, State Clearinghouse #1996092073), the transit mode share for each land use was forecast. These transit mode share percentages were applied to the ITE trip generation forecasts described in Tables 1 and 2, with the appropriate conversion to person-trips. A more detailed calculation of external vehicle traffic generation using the ITE methodology, with 4D adjustments and transit ridership calculations is provided in Table A-1 in the Appendix.

² These observed percentages are of all trips, including walk and bicycle trips which are analogous to the internal trips described earlier for Treasure Island. Thus, although the transit mode shares taken as a percentage of only external trips are higher than 34 and 17 percent for work and non-work trips, respectively, application of these percentages to all trips generated by the Treasure Island project is consistent with the findings of the BATS Study. If taken as a percentage of external trips only, transit is expected to represent approximately 37 percent of all person-trips generated by the proposed project.

The resulting person-trip generation for all modes is summarized in Table 4, below.

Table 4 Final Adjusted Trip Generation by Mode					
Land Use	Person-Trips ¹				Vehicle-Trips ²
	Ferry	Bus	Auto	Internal	
<i>Weekday AM Peak Hour</i>					
Residential	431	526	1,405	1,387	878
Hotel	100	126	352	339	220
Retail	131	222	858	712	536
Open Space	9	15	59	48	37
Marina ³	6	8	34	29	21
Flex	41	50	134	133	84
Police/Fire	33	40	107	106	67
School	91	111	296	291	185
Total	840	1,098	3,245	3,045	2,028
<i>Weekday PM Peak Hour</i>					
Residential	510	623	1,534	1,778	959
Hotel	50	63	165	186	103
Retail	397	669	2,418	2,320	1,511
Open Space	17	29	107	102	67
Marina ³	9	14	53	50	33
Flex	237	289	712	826	445
Police/Fire	7	9	21	24	13
School	90	90	138	211	86
Total	1,316	1,787	5,144	5,496	3,215
1. Walk and bicycle person trips will be internal to Treasure Island 2. Vehicle-trips includes passenger vehicles and vans 3. The marina use has already been approved and is not part of the proposed project (although the landside services associated with the Marina are included). The trip generation associated with the Marina is presented for informational purposes because it will be used to assess cumulative conditions.					
Source: <i>Treasure Island Transportation Plan</i> , Treasure Island Community Development, LLC, September 2006 and Fehr & Peers 2008					

Base Transit Case

As proposed, the Treasure Island project would provide a high level of transit service during peak hours, including:

- New ferry service to San Francisco every 10 minutes
- New bus service to Downtown Oakland every 7 minutes
- Maintenance of the existing bus service to the Transbay Terminal (Muni Route 108-Treasure Island) in San Francisco every 5 minutes
- New bus service to the San Francisco Civic Center area every 12 minutes

Assuming a bus capacity of 55 passengers and a ferry capacity of 450 passengers, the total transit capacity in a single direction (on or off of the island) is 4,075 passengers per hour, including 2,700 passengers on ferries and 1,375 passengers on buses during the peak hours.

However, funding and/or operating details for all of this service has not yet been resolved. Therefore, the transportation analysis is also including a scenario in which ferry service would be provided every 50 minutes (corresponding to a single ferry operating at one of the existing docks in San Francisco), Route 108-Treasure Island would operate at its current 15-minute headway, and no new transit route between Treasure Island and San Francisco Civic Center would be provided. AC Transit service to the East Bay would be the same as in the base case. This would reduce the overall transit capacity to 1,200 person trips per hour, a reduction of 70 percent. Specifically, this would reduce ferry capacity by 80 percent, to 540 passengers per hour and bus capacity by 52 percent, to 660 passengers per hour.

Recent studies summarized by the Victoria Transport Policy Institute (VTPI) have shown a range of transit ridership elasticities with respect to service level of between 0.5 and 0.7³. Using the 0.5 elasticity, an 80 percent reduction in the supply of ferry transit and a 52 percent reduction to the supply of bus transit provided to Treasure Island is expected to yield 40 and 26 percent reductions to ferry and bus ridership, respectively. Therefore, for the base case, the ferry ridership is reduced by 40 percent and the bus ridership is reduced by 26 percent compared to the full project case, with the difference assumed to switch to automobile person trips.

Table A-2 in the Appendix provides a detailed calculation of vehicular traffic generation for the base transit case. The net result is an additional 388 AM peak hour vehicle trips and 620 PM peak hour trips.

TRIP DISTRIBUTION

The final component of this analysis is an estimation of the trip distribution of project-generated trips. The proposed project trip distribution was tested using two different travel demand forecasting models, the San Francisco CHAMP model, maintained by the San Francisco County Transportation Authority, and the Alameda County Congestion Management Agency (ACCMA) model. Table 5 provides a summary of geographic distribution of project traffic from the two travel demand forecasting models.

As shown in Table 5, the SF CHAMP model, which has a concentration of detail within San Francisco, tends to predict a higher amount of Treasure Island traffic would be destined for San Francisco than the ACCMA model. Similarly, the ACCMA, which has a higher amount of detail in the East Bay, tends to predict a higher amount of traffic with origins and destinations in the East Bay. Because having a higher amount of detail in a particular geographic region of a model can lead to over-prediction of traffic in that area, it is likely that the SF CHAMP and the ACCMA models each over-predict traffic within their specific focal regions. Table 5, therefore, presents an average of the trip distributions predicted by the two models. The average trip distribution between the SF CHAMP and ACCMA models corrects for over-prediction of trips to either San Francisco or the East Bay.

³ <http://www.vtpi.org/tranelas.pdf>

Table 5 Treasure Island Development – Trip Distribution Patterns					
Source	Place of Trip Origin/Destination				
	San Francisco	East Bay	North Bay	South Bay	Internal
SF CHAMP Model	42%	4%	4%	8%	41%
ACCMA Model	32%	21%	4%	2%	40%
Average of Forecasting Models	37%	13%	4%	5%	41%
Source: Fehr & Peers, September 2008					

CONCLUSION

The vehicle trip generation forecasts developed using the 4D method are reasonable, and similar to other large, high-density, mixed use sites observed by Fehr & Peers and ITE. We therefore recommend using the person-trip generation summarized in Table 4 for identifying impacts associated with the Treasure Island development.

Prior to completing that analysis, we will provide you with draft cumulative conditions traffic forecasts for area freeways and an analysis of the effects of congestion pricing. We can complete the first draft of the Treasure Island Transportation Impact Analysis following your approval of the traffic forecasts and congestion pricing and the recommendations in this memo. We hope you have found the results of this trip generation study useful. We look forward to receiving your comments. Please feel free to call if you have any questions.

Sincerely,
 FEHR & PEERS



Chris Mitchell, PE
 Associate

SF07-0340

APPENDIX



August 4, 2008

Ms. Pat Siefers
San Francisco Planning Department
1650 Mission Street, 4th Floor
San Francisco, California 94103

**Re: *Proposed "4-D Adjustments" to Trip Generation Rates
Treasure Island Transportation Impact Analysis (Revised)***

Dear Pat:

The proposed development on Treasure Island will consist of a number of design features that will have a substantial influence on travel characteristics at the site, compared to more typical developments. This letter describes our proposed approach to quantifying the effects that these design features will have on the trip-making characteristics of the project. This approach has been developed and utilized by Fehr & Peers for several projects throughout the United States, and has been endorsed by the Environmental Protection Agency (EPA) (see attached document: *INDEX 4D Method*, October 2001), the California Department of Transportation (Caltrans), and others, as being an appropriate method for developing traffic forecasts that are sensitive to the types of local land use characteristics and TDM measures proposed by the Treasure Island project.

The unique nature of this site, in terms of its design, the transportation features it will offer, and its setting in the midst of San Francisco Bay, renders traditional methods of estimating vehicle traffic generation ineffective. Specific reasons traditional methods, which are based on national or even locally-derived average rates, may not be relevant to Treasure Island are as follows:

- The island location and congestion on the Bay Bridge will limit vehicular connectivity to off-island sites, thus encouraging on-island travel when possible; proposed congestion pricing will further reduce off-island vehicle trips (although the effects of congestion pricing will be addressed separately)
- Mixed land uses in close proximity will encourage on-island internalization of many trips
- High frequency transit service, both bus and ferry, will reduce auto trips during commute periods; additionally, transit-oriented residents are likely to self-select this transit-oriented development
- Substantial travel demand management (TDM) measures are proposed to reduce vehicle travel and vehicle ownership, including:
 - Bus and ferry service to San Francisco and bus service to Downtown Oakland¹
 - Signal-controlled metering of traffic volumes onto Bay Bridge
 - Car share
 - Bicycle share
 - On-island shuttle
 - Guaranteed ride home
 - Commuter checks
 - On-island travel coordinator
 - Unbundled parking (sold/rented separately from commercial and residential sites)

¹ If additional AC Transit service is recommended as a mitigation, we will include this in the analysis.

- Priced parking
- On-street residential permit parking
- Transit passes included in HOA dues/leases

These site and travel characteristics are essential elements of a walkable, livable community, but are often disregarded in environmental review. Outside of San Francisco, conventional practice conservatively analyzes the trip generation potential for new development in isolation, and under the assumption that such development is a typical suburban and generally auto-oriented project. In San Francisco, these elements are captured by using locally-calibrated person-trip generation rates and mode split percentages derived from surveys and observations. However, the extent and combination of high density development; a pedestrian, transit, and bicycle-oriented circulation network; mixing of uses; and the proximity of the project site and proposed transit service to major destinations; and the isolated nature of this project are unlike other parts of San Francisco. As a result, locally-derived information from other parts of San Francisco may still not predict the traffic-generating characteristics of the proposed project.

To more accurately model the travel characteristics of a proposed development, Fehr & Peers has developed a methodology for adjusting trip generation based on the unique characteristics of a project site. Adjustments for external vehicle trip length (and thus Vehicle Miles Traveled (VMT)) are also typically considered in the Fehr & Peers approach, as ultimately it is VMT rather than VT (vehicle trips) that congests roadways, produces greenhouse gases, uses non-renewable fossil fuels, etc. We will work with Turnstone Consulting and ESA to determine whether the VMT adjustment is a useful component for their studies.

We will provide a qualitative discussion of the differences between this method and the ITE and San Francisco guidelines for traffic analysis in our analysis memo. We will also review available and relevant data from comparable locations (such as Granville Island/ City of Vancouver) and consult with the MTC and SFCTA regarding reasonable mode splits and trip generation for travel to, from, and within Treasure Island.

The purpose of this memo is to summarize the theory and background for this methodology and outline the proposed adjustment steps and assumptions.

THEORY AND BACKGROUND

The origin of this methodology lies in the research of UC Berkeley professor Robert Cervero.² This research found that certain characteristics of the neighborhood a household lived in affected the number of vehicle trips generated and vehicle-miles traveled by that household. This effect was independent of the household characteristics (income, household size, number of workers, etc.) typically used in trip generation equations. Where study areas vary significantly in character from the conventional trip generation site (typically a suburban, low-density site), trip generation should therefore include an adjustment of household-based trip-generation rates to reflect the characteristics of the area surrounding the household. The *ITE Trip Generation Manual*, among others, has been recommending such an adjustment for its last three editions. The *ITE Trip Generation Manual*, 7th Edition, provides some guidance on adjustments for trip internalization (or interaction between uses) at multi-use sites, but adjustments are based on a small number of studies in Florida that may not be applicable to an urban setting such as Treasure Island.

² Cervero, R. and K. Kockelman (1997) "Travel Demand and the 3Ds: Density, Diversity, and Design," *Transportation Research D*, Vol. 2, pp. 199-219

To respond to a need for site-specific adjustment factors, Fehr & Peers developed a Smart Growth Trip Generation Adjustment tool to compare trip generation characteristics of a study location to the typical characteristics of the trip generation rate survey locations.

NEIGHBORHOOD CHARACTERISTICS INCLUDED IN THE ADJUSTMENT

The choice of which neighborhood characteristics to adjust for is evolving over time and may vary from place to place. The methodology described in this memo includes adjustments for up to seven neighborhood characteristics. These characteristics, often referred to as the “Ds,” are:

Net Residential and Employment Density – This variable is measured in units of dwelling units per acre for residential density and total jobs per acre for employment density. The acreage should include pocket parks and local streets, but exclude large parks, open space, lakes, etc. This matches the practice in general plans where areas designated for residential and commercial development typically show large non-residential and non-commercial features but typically do not include details of local streets and neighborhood amenities. Research suggests that, all else being equal, denser developments generate fewer vehicle-trips per dwelling unit and per job than less dense developments.

Jobs/Housing and JobMix Diversity – Research, including the previously-cited Cervero study and *INDEX 4D Method* (see attached), suggests that having residences and jobs in close proximity will reduce the vehicle-trips generated by each by allowing some trips to be made on foot or by bicycle. This variable measures how closely the neighborhood in question matches the “ideal” mix of jobs and households, which is assumed to be the ratio of jobs to households measured across the region as a whole. The equation for this is:

Jobs/Housing Diversity =

$$\{1 - [\text{ABS}(b * \text{households} - \text{employment}) / (b * \text{households} + \text{employment})]\}$$

where: $b = \text{regional employment} / \text{regional households}$

Research also suggests that having retail and non-retail jobs in close proximity will reduce the vehicle-trips generated by each by allowing some non-home-based trips, such as running errands or going to lunch, to be made on foot or by bicycle (see attached *INDEX 4D Method*). This variable measures how closely the neighborhood in question matches the “ideal” mix of retail and non-retail jobs, which is assumed to be the ratio of retail to non-retail jobs measured across the region as a whole. The equation for this is:

JobMix Diversity =

$$\{1 - [\text{ABS}(b * \text{retail jobs} - \text{non-retail jobs}) / (b * \text{retail jobs} + \text{non-retail jobs})]\}$$

where: $b = \text{regional retail jobs} / \text{regional non-retail jobs}$

Walkable Design – Many pedestrian and bicycle improvement projects are based on the assumption, supported by the attached research findings³, that improving the

³ Note that research also shows that these improvements are only effective in areas where the land uses are conducive to walking and bicycling. Otherwise, these improvements will have less benefit.

walking/biking environment will result in more non-auto trips and a reduction in auto travel. The difficulty with using this variable in an equation is that there are many factors in the pedestrian experience and it is difficult to come up with a single definition that captures them all. The current equation used to measure the design variable is:

$$\text{Design} = 0.0195 * \text{street density} + 1.18 * \text{sidewalk completeness} + 3.63 * \text{route directness}$$

where: 0.0195, 1.18, and 3.63 are coefficients expressing the weighting of each variable relative to the other variables in the Design formula,

street density = length of street in miles/area of neighborhood in square miles

sidewalk completeness = percent of street frontage with sidewalks

route directness = airline distance/distance along street routes for typical trips

The coefficients weighting the design variables were derived from regression analysis based on data provided by the Sacramento Area Council of Governments (SACOG). Test applications of the methodology have found that the data required for the design variable is often either not available or would be expensive and time-consuming to obtain. In such cases it may be better for the user to develop their own design variable based on whatever relevant information is available, or even to simply assume a certain percentage difference from the base case (i.e. "The proposed community is designed to be significantly more ped-friendly than the older areas around it, and so we are assuming a 20% improvement in the design variable"). Users should be conservative when deviating from the original equations. In any case, the design variable usually has the weakest influence on the overall adjustment, so it is unlikely to be a major source of error.

Distance from Transit (Residential): The Bay Area Transportation Survey (BATS) in 2000 demonstrated that the distance from a person's place of residence to a transit station has a significant effect on the number of vehicle miles traveled per day and on transportation mode choice (e.g., whether to drive or take transit) for both work and total trips. Recent research by UC Berkeley Professor Robert Cervero suggests this is partially explained by a self selection process, wherein transit riders select to live in transit-oriented locations.

Conventional trip generation rates do not account for proximity to transit. Even San Francisco's uniquely observed mode split data is not sensitive to the proximity of a use to a major transit facility (i.e., BART, LRT, or Caltrain station). So, modification to trip generation and mode split information are necessary to reflect expected patterns at Treasure Island in a way that is sensitive to the amount and type of transit to be provided.

The BATS 2000 data suggests the following reductions are appropriate for home-based work trips and total daily trips (generalized for the Bay Area):

Within 1/2 mile of a rail station or ferry terminal:

- 29.4% for work trips
- 19.2% for all trips

Within 1/2 to 1 mile of a rail station or ferry terminal:

- 16.5% for work trips
- 8.4% for all trips

Greater than 1 mile, the transit deduction varies based on residential density. For high density suburbs (an analogous use to the Treasure Island development if it were greater than 1 mile from a major transit facility), the following reductions apply:

- 7.1% for work trips
- 3.3% for all trips

These data show that across the Bay Area, residential developments within ½ mile of a rail station or ferry terminal have a transit mode share 22.3% higher than those developments that are greater than 1 mile from a major transit facility for home-based work trips.

Distance from Transit (Employment): Jennifer Dill (2000) conducted a survey of over 1,000 large employment sites in the San Francisco Bay Area to establish similar links between vehicle trips and distance from employment locations to transit. The study considered distance from BART, Caltrain, and Santa Clara Light Rail Stations. Depending on the frequency and cost of transit service to/from Treasure Island, transit deductions for employment on the island may be analogous (i.e., the increase from the background case to the case where a job is within ½ mile of transit). The deductions are summarized in the following table. For employment land uses, these deductions are generally applied to AM and PM peak hour trips. For daily trips, they may be applied at approximately one-half. As shown in the table, employment locations within ½ mile of a rail station have a transit mode share 8.6% higher than those employment locations that are greater than ½ mile from a major transit facility (11.1% for employment locations within ½ mile of a rail station compared to 2.5% for those locations greater than ½ mile from a major transit facility).

The list of variables is expected to evolve over time. As the preceding list shows, the methodology has proceeded beyond Cervero's original three D's and may ultimately include as many as ten variables.

SUMMARY OF TRANSIT USE BY WORK SITE LOCATION			
Location of Work Site	Percent of Commute Trips by Transit (Trip Deductions)	Number of Work Sites Surveyed	Number of Respondents
All sites	4.4%	1,153	251,835
BART Stations			
Up to 1/4 mile from BART	33.6%	44	12,813
Up to 1/4 mile from non-downtown Oakland BART	19.7%	12	2,891
Up to 1/4 mile from non-Oakland or Berkeley BART	6.2%	3	468
1/4 -1/2 mile from BART	7.9%	22	3,852
1/4 -1/2 mile from non-Oakland or Berkeley BART	5.7%	13	2,151
CalTrain Stations¹			
Up to 1/4 mile from CalTrain	7.0%	14	3,134
1/4 -1/2 mile from CalTrain	4.1%	39	9,905
Santa Clara Light Rail Stations			
Up to 1/4 mile from Light Rail	5.9%	49	9,833
1/4 -1/2 mile from Light Rail	3.1%	56	16,633
All Rail Stations			
Up to 1/4 mile from rail	19.8%	107	25,780
1/4 -1/2 mile from rail	4.0%	117	30,390
Up to 1/2 mile from rail	11.1%	224	56,170
Work Sites over 1/2 mile from rail			
All sites	2.5%	929	195,665
¹ Note that Caltrain ridership is significantly affected by employer shuttles to transit			
Source: Dill, Jennifer. "Transit Use and Proximity to Rail: Results from Large Employment Sites in the San Francisco Bay Area." TRB 2003 Annual Meeting CD-ROM.			

APPLICATION

The above adjustment factors will be applied to standard, traditional traffic generation estimates for purposes of forecasting traffic generation for the Treasure Island development. The steps we propose to take are described below.

Step 1: Define the Base Case

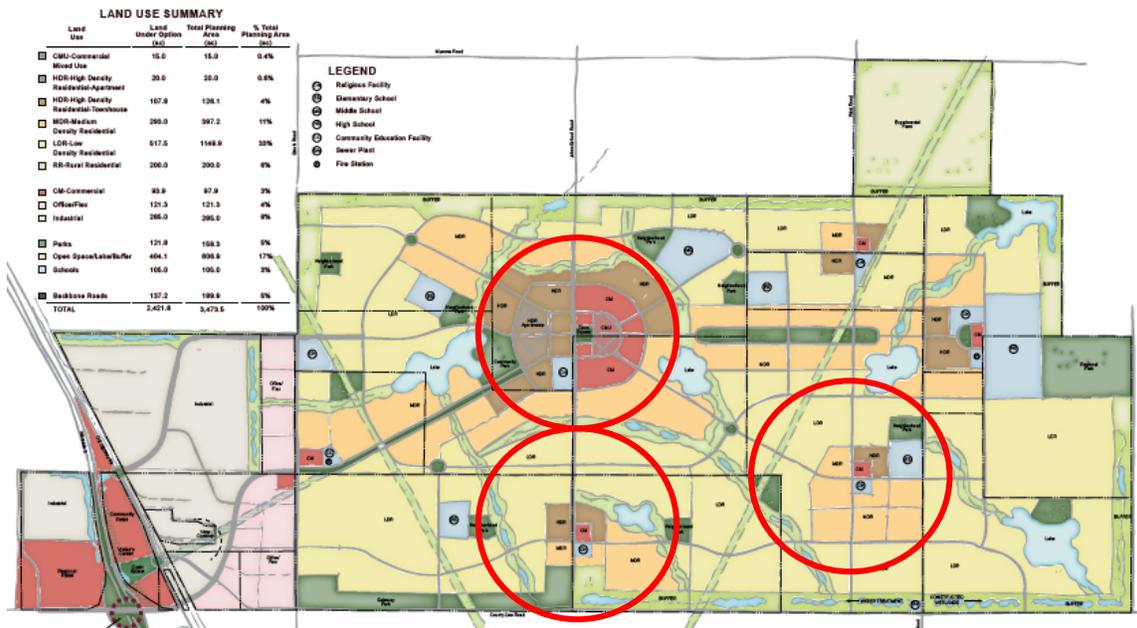
The outputs this methodology produces are percentage adjustments to vehicle-trips (VT) and vehicle-miles-traveled (VMT). Obviously, this methodology presumes that there is some default estimate of VT and VMT to which the adjustments can be applied; i.e. a base case. For most applications the base case should be taken from the original source of the trip-generation rates used for the project. For the Treasure Island project, we will define two base cases, and apply the appropriate adjustments. One base case will be application of City person-trip generation

rates, and weighted average mode split percentages for uses over the entire City. Other characteristics evaluated (e.g., density, design, diversity, etc.) will be based on the proposed project's deviation from citywide averages. The second base case will be the application of standard vehicle-trip generation rates based on nationwide surveys in primarily suburban locations from the Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition. The adjustment factors applied to these rates will be based on the proposed project's deviation from typical suburban characteristics.

Step 2: Define the Application Area

The equations used in the methodology were derived from survey areas one-half mile in radius⁴ which corresponds roughly to a typical watershed. The user must therefore define the adjustment area to match this size. There are several possible cases (the Treasure Island project is similar to Case 3, but all cases are presented for informational purposes):

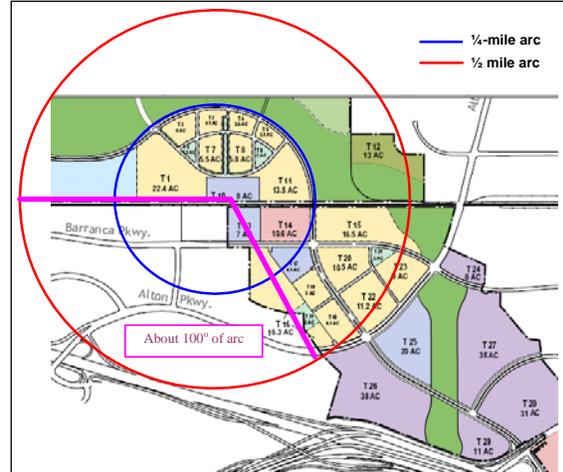
Case 1: The project is larger than the ½-mile radius. In such a case the user should define one or several non-overlapping areas and apply the methodology separately to each. In practice we have found that larger projects often include areas that are similar enough to the base case that no adjustment need be made.



Case 1: The site extends beyond the ½-mile radius used for analysis. Separate analyses should be done for different portions of the site. (Image created by Fehr & Peers for Heritage Fields Development, Irvine, CA)

⁴ Other area sizes were checked, including ¼ mile radius, 1-mile radius, and TAZs, were found to be less statistically valid than the ½ mile radius.

Case 2: The project is smaller than the ½-mile radius. In this case the area for adjustment will extend beyond the project into the surrounding area. The rationale is that future residents of the project make no distinctions between the project and other areas, and so such boundaries are irrelevant to the behavior we are trying to predict. In the figure shown below, the study site is shown in color while the ½-mile radius is shown in red. The white areas within the ½-mile radius southwest of the site are existing office buildings that would interact with the proposed residential development. In this case, application of this methodology will require obtaining estimates of the density, diversity, and design of the area beyond the boundaries of the study site but within the ½-mile radius.



Case 2: The ½-mile radius extends beyond the study site (Image created for Heritage Fields Development, Irvine, CA)

Case 3: The ½-mile radius includes significant barriers to pedestrian movement, such as rivers, freeways, and soundwalls. This is the case for Treasure Island, where walk trips to other uses outside of the Treasure Island development are precluded by the San Francisco Bay to the north, east, and west, and by steep inclines and the Bay Bridge to the south. In such a case the user should include in the analysis only the areas within ½ mile of the center along walkable paths. An example of this application can be seen in the figure below. The project included a dense, mixed-use village core area as well as a golf course, several lakes, and some low- and medium-density residential developments. The golf course and lakes act as barriers to pedestrian movement except across bridges. In this case the adjustment methodology was applied only to the area outlined in red in the figure, and the remaining portion of the project was treated as the conventional development it was. The adjustment area actually extended to the north outside the project but since this was an agricultural preserve it had no practical impact on the application.



Case 3: Barriers to pedestrian movement eliminate from consideration some areas that lie within the 1/2 mile radius. (Image created by Fehr & Peers for project in Sacramento region.)

Step 3: Input Base Case and Application Area Characteristics

Once the base case and the analysis area have been defined, the next step is to enter their data into the analysis tool. The tool then calculates the “Ds” characteristics for the two base cases (i.e., the San Francisco citywide averages and the national averages) and the test scenario (i.e., the proposed project) and computes the percentage difference between the proposed project and the two base cases. The analysis tool then applies the elasticities associated with the first three “D’s” (Density, Diversity, and Design) to develop initial estimates of reductions in VT associated with the site design characteristics. Ceiling and floor values can be applied to set a maximum allowable adjustment overall or for an individual “D.”

4-D VEHICLE TRIP ELASTICITY VALUES							
Trip Purpose	Net Residential Density	Net Employment Density	Job Mix Diversity	Jobs/Housing Diversity	Design	Home-based Work Destinations	Non-Home-based Work Destinations
Vehicle Trip (VT) Elasticities							
Home-based Work (HBW)	-0.117	N/A	N/A	-0.059	0.000	-0.375	N/A
Home-based Other (HBO)	-0.119	N/A	N/A	-0.044	-0.032	N/A	-0.408
Non-Home-based (NHB)	N/A	-0.339	-0.462	N/A	0.000	N/A	-0.822
Vehicle Miles Traveled (VMT) Elasticities							
Home-based Work (HBW)	-0.238	N/A	N/A	-0.260	0.000	-1.234	N/A
Home-based Other (HBO)	-0.133	N/A	N/A	-0.160	-0.030	N/A	-1.405
Non-Home-based (NHB)	N/A	-0.444	-0.459	N/A	0.000	N/A	-1.318
Source: Sacramento County Association of Governments (SACOG) Household Surveys							

Step 4: Internalization Results

The tool returns the following results:

- VT Internalization Reductions: Adjustments to trip generation rates if the rates are disaggregated by purpose; otherwise, an estimate for an overall trip generation reduction.
- VMT Internalization Reductions: VMT reduction estimates provide some indication of the overall reduction in the project’s impact on regional traffic. While we are not proposing to re-run the SFCTA travel demand model, a better estimate of project-related VMT reductions could be made by applying the VT reductions to the trips generated by project traffic analysis zones (TAZs), then running the model and checking how much VMT changed, compared to the proposed project generating traffic at the citywide average.

Step 5: Additional External Trip Reductions

In this final step we will take additional reductions for pass-by trips, diverted link trips, transit proximity, and TDM strategies. Adjustments for the fourth “D” (Distance from transit), will be applied to the national average base case directly from the tables presented earlier. We will apply the “distance from transit” adjustment factor to the San Francisco-specific base case based on the difference between the transit mode share for developments within ½ mile of a major transit station to those that farther than ½ mile (both residential and commercial). The quality and

frequency of transit service will also be considered in the transit adjustment. Service characteristics will be applied using ridership elasticities based on planned transit frequency and type (multiple scenarios) versus the baseline frequency and type inherent in the distance from transit adjustments in the BATS data and Dill research.⁵

External SOV to HOV, bicycle, or pedestrian mode shifts will also be applied in this final step. The results of the MEA TransBay Area employee data analysis and other relevant sources will be considered to validate the mode split if available.

By following the five steps listed above and using elasticities derived from previous analyses, we can estimate how the proposed project would differ from both the average development in San Francisco (Base Case 1) and the average development in the United States (Base Case 2), in terms of vehicle-trips generated and increases to vehicle-miles traveled. The result will be percentage reductions to standard vehicle-trip generation rates in San Francisco and to ITE trip generation rates. The 4Ds analysis output will be a quantification of mode shifts to non-SOV transportation for both internal trips and external trips.

Both internal and external reductions to auto shares will be treated as additions to other modes, with trip volumes not disappearing but rather being added to multi-modal volumes.

The mix of housing proposed at Treasure Island is 80% market rate and 20% affordable, consistent with requirements for most new housing developments in San Francisco. To be conservative, we are not proposing any reductions to vehicle trip generation for the affordable portion of the housing.

The vehicle-trip generation rates derived using this approach will be compared to those derived by Korve/DMJM Harris in the Treasure Island Transportation Plan to determine if those rates are reasonable.⁶ If so, we recommend using the estimates from the Plan. Otherwise, we will recommend adjustments to those estimates based on our analysis results.

⁵ Elasticities are available online at <http://www.vtpi.org/elasticities.pdf>. Local elasticities will also be requested from local transit service providers.

⁶ We will update the input numbers in the TIDA Transportation Plan to reflect the current proposed project (and associated improvements) to ensure an apples-to-apples comparison.

We hope this letter has provided sufficient detail describing our proposed approach, but are more than happy to provide additional detail or supporting documentation if requested.

Sincerely,

FEHR & PEERS



Chris Mitchell, PE
Associate



Meghan Mitman
Transportation Planner

SF07-0340

**TREASURE ISLAND AM PEAK
PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Full Elasticity**

Region 3 (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Residential Land Uses						
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Mult-Family Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123

	Jobs		Acres		Jobs		Acres	
Retail Employment								
Regional Commercial	310	10			310	10		
Neighborhood Shopping	230	9			230	9		
Total	540	19	0	0	540	19		

	Jobs		Acres		Jobs		Acres	
Non-Retail Employment								
Industrial-PDR	160	11			160	11		
Institutional - police, school, sailing, community center	135	12	300	67	435	79		
Hotel	449	7			449	7		
Museum/Entertainment	192	19			192	19		
Office	340	10			340	10		
Total	1,276	59	300	67	1,576	126		

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
Blue-font cells are for regional data
Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	-21.37%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.55	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.55	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	42.4%	0.55	0.35
Home-Based Other (HBO)	55.1%	0.58	0.35
Non-Home-Based (NHB)	2.5%	0.40	0.40
Total	100.0%	0.56	0.35
% VT Internalized		43.6%	

Regional Retail/Non-Retail Ratio: 0.28
Regional Jobs/Housing Ratio: 1.07

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			-0.059	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4 Ds: 600%

Ceiling and Floor Values
Maximum allowable 4D adjustment for any individual trip purpose: 15% (Ceiling), -65% (Floor)

Maximum allow change from all factors combined = 65%

**TREASURE ISLAND AM PEAK
PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Half Elasticity**

Region 3 (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Residential Land Uses						
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Mult-Family Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123
Retail Employment						
Regional Commercial	310	10			310	10
Neighborhood Shopping	230	9			230	9
Total	540	19	0	0	540	19
Non-Retail Employment						
Industrial-PDR	160	11			160	11
Institutional - police, school, sailing, community center	135	12	300	67	435	79
Hotel	449	7			449	7
Museum/Entertainment	192	19			192	19
Office	340	10			340	10
Total	1,276	59	300	67	1,576	126

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
Blue-font cells are for regional data
Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	-10.68%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.62	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.62	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	42.4%	0.62	0.35
Home-Based Other (HBO)	55.1%	0.58	0.35
Non-Home-Based (NHB)	2.5%	0.40	0.40
Total	100.0%	0.60	0.35
% VT Internalized		40.5%	

Regional Retail/Non-Retail Ratio: 0.28
Regional Jobs/Housing Ratio: 1.07

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			-0.030	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4 Ds: 600%
Ceiling and Floor Values
Maximum allowable 4D adjustment for any individual trip purpose: 15% (Ceiling), -65% (Floor)
Maximum allow change from all factors combined = 65%

**TREASURE ISLAND AM PEAK
PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Zero Elasticity**

Region 3 (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Residential Land Uses						
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Mult-Family Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123
Retail Employment						
Regional Commercial	310	10			310	10
Neighborhood Shopping	230	9			230	9
Total	540	19	0	0	540	19
Non-Retail Employment						
Industrial-PDR	160	11			160	11
Institutional - police, school, sailing, community center	135	12	300	67	435	79
Hotel	449	7			449	7
Museum/Entertainment	192	19			192	19
Office	340	10			340	10
Total	1,276	59	300	67	1,576	126

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
Blue-font cells are for regional data
Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	0.00%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.70	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.70	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	42.4%	0.70	0.35
Home-Based Other (HBO)	55.1%	0.58	0.35
Non-Home-Based (NHB)	2.5%	0.40	0.40
Total	100.0%	0.63	0.35
% VT Internalized		37.3%	

Regional Retail/Non-Retail Ratio: 0.28
Regional Jobs/Housing Ratio: 1.07

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			0.000	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4 Ds: 600%
Ceiling and Floor Values
Maximum allowable 4D adjustment for any individual trip purpose: 15% (Ceiling), -65% (Floor)
Maximum allow change from all factors combined = 65%

TREASURE ISLAND PM PEAK

PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Full Elasticity

Region **3** (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

Residential Land Uses	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Multifamily Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123

Retail Employment	Jobs		Acres		Jobs		Acres	
Regional Commercial	310	10			310	10		
Neighborhood Shopping	230	9			230	9		
Total	540	19	0	0	540	19	0	0

Non-Retail Employment	Jobs		Acres		Jobs		Acres	
Industrial-PDR	160	11			160	11		
Institutional - police, school,	135	12	300	67	435	79		
Hotel	449	7			449	7		
Museum/Entertainment	192	19			192	19		
Office	340	10			340	10		
Total	1,276	59	300	67	1,576	126		

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
 Blue-font cells are for regional data
 Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	-21.37%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.55	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.55	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	40.8%	0.55	0.35
Home-Based Other (HBO)	42.4%	0.58	0.35
Non-Home-Based (NHB)	16.8%	0.40	0.40
Total	100.0%	0.54	0.36
% VT Internalized		46.2%	

Regional Retail/Non-Retail Ratio **0.28**
 Regional Jobs/Housing Ratio **1.07**

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			-0.059	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4Ds **60%**
 Maximum allowable 4D adjustment for any individual trip purpose **15%**
 Maximum allow change from all factors combined = **65%**
-65%

TREASURE ISLAND PM PEAK

PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Half Elasticity

Region **3** (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

Residential Land Uses	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Multifamily Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123

Retail Employment	Jobs		Acres		Jobs		Acres	
Regional Commercial	310	10			310	10		
Neighborhood Shopping	230	9			230	9		
Total	540	19	0	0	540	19	0	0

Non-Retail Employment	Jobs		Acres		Jobs		Acres	
Industrial-PDR	160	11			160	11		
Institutional - police, school,	135	12	300	67	435	79		
Hotel	449	7			449	7		
Museum/Entertainment	192	19			192	19		
Office	340	10			340	10		
Total	1,276	59	300	67	1,576	126	0	0

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
 Blue-font cells are for regional data
 Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	-10.68%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.62	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.62	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	40.8%	0.62	0.35
Home-Based Other (HBO)	42.4%	0.58	0.35
Non-Home-Based (NHB)	16.8%	0.40	0.40
Total	100.0%	0.57	0.36
% VT Internalized		43.1%	

Regional Retail/Non-Retail Ratio **0.28**
 Regional Jobs/Housing Ratio **1.07**

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			-0.030	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4Ds **60%**
 Maximum allowable 4D adjustment for any individual trip purpose **15%**
 Maximum allow change from all factors combined = **65%**
 Ceiling and Floor Values
 Maximum allowable 4D adjustment for any individual trip purpose **-65%**

**TREASURE ISLAND PM PEAK
PROJECT SCALE 4Ds ADJUSTMENT WORKSHEET - HBW Zero Elasticity**

Region 3 (Enter the number corresponding to your region in table to the right)

Region Table

- 1 Sacramento County
- 2 Contra Costa County
- 3 CCTA with sampling for S/W coverage; density correction
- 4 0
- 5 0
- 6 0
- 7 0
- 8 0
- 9 0
- 10 0

	Project Site		Other Uses Within 1/2 Mile		Total Uses Within 1/2 Mile	
	DUs	Acres	DUs	Acres	DUs	Acres
Residential Land Uses						
Single-Family Dwellings	0	0			0	0
Hotel dwellings	500	7			500	7
Mult-Family Dwellings	6,000	101	80	15	6,080	116
Total	6,500	108	80	15	6,580	123
Retail Employment						
Regional Commercial	310	10			310	10
Neighborhood Shopping	230	9			230	9
Total	540	19	0	0	540	19
Non-Retail Employment						
Industrial-PDR	160	11			160	11
Institutional - police, school,	135	12	300	67	435	79
Hotel	449	7			449	7
Museum/Entertainment	192	19			192	19
Office	340	10			340	10
Total	1,276	59	300	67	1,576	126

Walkable Design	Project	Regional Average
Sidewalk Coverage	100%	82%
Route Directness	0.70	0.57
Average Blockface (miles)	0.11	0.17
Street density	18.18	11.76

Green-shaded cells are for inputs
Blue-font cells are for regional data
Purple-shaded cells are outputs

Computation of 4Ds	Project Area	ITE Typical	Percent Difference	4Ds Adjustment for HBW		4Ds Adjustment for HBO		4Ds Adjustment for NHB	
				VT	VMT	VT	VMT	VT	VMT
Net Residential Density	53.50	15.00	256.64%	-30.03%	-61.08%	-30.54%	-34.13%	0.00%	0.00%
Net Employment Density	14.59	25.00	-41.63%	0.00%	0.00%	0.00%	0.00%	14.11%	15.00%
JobMix Diversity	0.90	0.25	259.76%	0.00%	0.00%	0.00%	0.00%	-65.00%	-65.00%
Jobs/Housing Diversity	0.46	0.10	362.18%	0.00%	-65.00%	-15.94%	-57.95%	0.00%	0.00%
Design	4.08	3.64	11.97%	0.00%	0.00%	-0.38%	-0.36%	0.00%	0.00%
HBW Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Other Destinations	1,000	1,000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4D Adjustment BEFORE Ceiling & Floor				0.70	0.14	0.58	0.28	0.40	0.40
4D Adjustment AFTER Ceiling & Floor				0.70	0.35	0.58	0.35	0.40	0.40

Trip Purpose	% of All VT*	Adjustment	
		VT	VMT
Home-Based Work (HBW)	40.8%	0.70	0.35
Home-Based Other (HBO)	42.4%	0.58	0.35
Non-Home-Based (NHB)	16.8%	0.40	0.40
Total	100.0%	0.60	0.36
% VT Internalized		40.1%	

Regional Retail/Non-Retail Ratio 0.28
Regional Jobs/Housing Ratio 1.07

Settings Used in this Scenario

4D Elasticities from SACOG household surveys	Net Res. Density	Net Emp. Density	Jobmix Diversity	Jobs/HH Diversity	Index Design	HBW Destinations	Non- HBW Destinations
VT Elasticities							
HBW	-0.117			0.000	0.000	-0.375	
HBO	-0.119			-0.044	-0.032		-0.408
NHB		-0.339	-0.462		0.000		-0.822
VMT Elasticities							
HBW	-0.238			-0.260	0.000	-1.234	
HBO	-0.133			-0.160	-0.030		-1.405
NHB		-0.444	-0.459		0.000		-1.318

Maximum allowable percentage change for any of the individual 4Ds 60%
Maximum allowable 4D adjustment for any individual trip purpose 15%
Maximum allow change from all factors combined = 65%
Ceiling and Floor Values
Maximum allowable 4D adjustment for any individual trip purpose -65%

Appendix B – Comparisons of Existing and Future Traffic Volumes Among the MTC, SFCTA,
and ACCMA Forecast Models

Comparison of Existing and Future Traffic Volumes for Bay Bridge (Peak 1 Hour)

PeMS												
2008												
	WB APP	WB DEP	EB APP	EB DEP								
AM	8,740			7,153								
PM	7,340			9,013								

SFCTA (CHAMP 3.2)												
2005												
2030												
Delta												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	11,161	11,332	9,080	8,672	12,852	13,791	11,742	10,961	1,691	2,459	2,662	2,289
PM	8,934	9,192	10,224	9,992	10,207	11,097	11,706	10,367	1,273	1,905	1,482	375

ACCMA (2007)												
2005												
2030												
Delta												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,140	12,242	6,970	6,856	17,978	17,901	8,320	7,388	5,838	5,659	1,350	532
PM	7,015	7,115	12,858	12,790	8,181	8,939	17,104	17,341	1,166	1,824	4,246	4,551

MTC (2009 RTP)												
2006												
2035												
Delta												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,385	12,536	8,561	8,456	16,401	16,730	9,269	8,613	4,016	4,194	708	157
PM	8,795	8,951	13,753	13,691	10,097	11,026	16,937	16,466	1,302	2,075	3,184	2,775

Adjusted MTC Model Outputs												
2006												
2035												
Delta												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,375	12,497	8,541	8,442	16,384	16,794	8,768	8,598	4,009	4,297	227	156
PM	8,771	8,918	13,703	13,599	10,100	10,572	17,084	16,520	1,329	1,654	3,381	2,921

Comparison of Existing and Future Growth Factors for Bay Bridge (Peak 1 Hour)

PeMS												
2008												
	WB APP	WB DEP	EB APP	EB DEP								
AM	8,740			7,153								
PM	7,340			9,013								

SFCTA (CHAMP 3.2)												
2005												
2030												
% Growth												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	11,161	11,332	9,080	8,672	12,852	13,791	11,742	10,961	15%	22%	29%	26%
PM	8,934	9,192	10,224	9,992	10,207	11,097	11,706	10,367	14%	21%	14%	4%

ACCMA (2007)												
2005												
2030												
% Growth												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,140	12,242	6,970	6,856	17,978	17,901	8,320	7,388	48%	46%	19%	8%
PM	7,015	7,115	12,858	12,790	8,181	8,939	17,104	17,341	17%	26%	33%	36%

MTC (2009 RTP)												
2006												
2035												
% Growth												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,385	12,536	8,561	8,456	16,401	16,730	9,269	8,613	32%	33%	8%	2%
PM	8,795	8,951	13,753	13,691	10,097	11,026	16,937	16,466	15%	23%	23%	20%

Adjusted MTC Model Outputs												
2006												
2035												
% Growth												
	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP	WB APP	WB DEP	EB APP	EB DEP
AM	12,375	12,497	8,541	8,442	16,384	16,794	8,768	8,598	32%	34%	3%	2%
PM	8,771	8,918	13,703	13,599	10,100	10,572	17,084	16,520	15%	19%	25%	21%

Yerba Buena Island Ramps Project Traffic Operations Report

1.0 INTRODUCTION

This report documents the traffic operations on the San Francisco Oakland Bay Bridge (SFOBB) and its six (6) on- and off-ramps to and from Yerba Buena Island (YBI) in the eastbound and westbound directions. This report also analyses the operational difference between the existing and projected Build and No Build Alternative in the year 2035. There are no operational differences between the two Build Alternatives, Alternative 2b and Alternative 4, so they are referred to in this document as the Build Alternative.

The current geometric design of the ramps has remained mostly unchanged since the 1930s. The ramps do not meet Caltrans' standards, the on-ramp merge lengths and off-ramp deceleration lengths for the six ramps, and the entrances and exits at the I-80 / YBI interchange are non-standard; all of these conditions create operational constraints.

The goal of this report is to illustrate the geometric and operational condition of the existing on- and off-ramps and the affect they have on the mainline of the SFOBB; therefore illustrating the result of the No Build Alternative. The proposed project using the Build Alternative will improve geometry and operations by reconstructing two new ramps on the east side of YBI.

2.0 EXISTING CONDITIONS ANALYSIS

2.1 Bay Bridge Travel Time

Travel time runs for the Bay Bridge were performed during the morning and evening peak periods on October 7, 2008. The morning peak period hours fell between 6:30 AM – 9:30 AM and the evening peak period hours fell between of 3:30 PM – 6:30 PM. The travel time data was collected using a test car method known as the floating car technique. The floating car technique employs a test vehicle that is driven along the study route, the driver floats with the traffic by passing as many vehicles as pass the test car. This technique is preferred for capturing the typical driver behavior and vehicular operation of the selected study roadway.

Test Car Study Sections

The beginning and end points of each test car run were consistent, however, the study sections for each period varied slightly. In the eastbound direction, the starting point for the data collection was the merge onto I-80/Bay Bridge, from the First Street/Harrison Street on-ramp location; the ending point was 4.6 miles from the start just prior to the turnaround location at the toll plaza. In the westbound direction, the starting point for the data collection was an overhead sign location west of the toll plaza; the ending point location was 5.1 miles from start at the intersection of Fremont Street/Howard Street. The interim data location points were typically mile markers, as well as the on- and off-ramp locations on Yerba Buena Island. The following tables show the study collection points for each peak period.

Table 1 – Travel Time Study Sections for Peak Period

Westbound		Eastbound	
<i>Location Description</i>	<i>Post Mile (Abs)</i>	<i>Location Description</i>	<i>Post Mile (Abs)</i>
Start	6.69	Start	2.14
1 Mile	5.69	1 Mile	3.14
2 Mile	4.69	Off Ramp 1	4.14
Off Ramp 1	4.33	Off Ramp 2	4.39
On Ramp 1	4.24	On Ramp 1	4.51
On Ramp 2	4.06	3 Miles	5.14
3 Miles	3.69	4 Miles	6.14
End	2.69	End	6.69

Travel Time Results

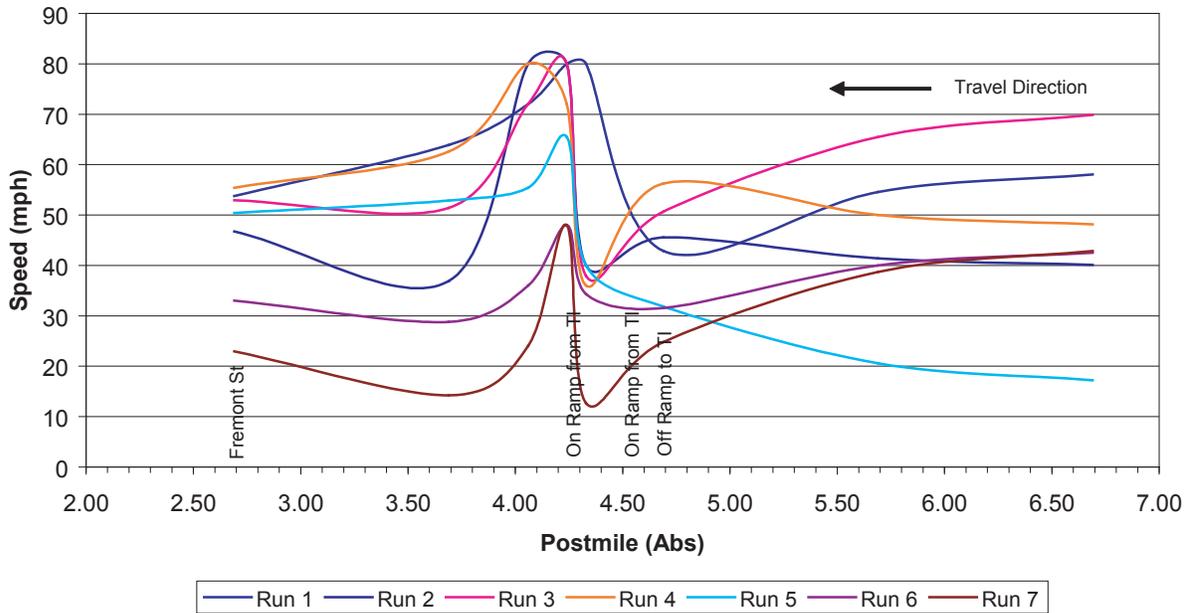
Figure 1 shows average travel speed calculated from the travel time study conducted on the Bay Bridge during morning and evening peak periods. Average travel speed was calculated from the recorded time at the post miles shown in Table 1. Each test car run is shown as an interpolation of the calculated travel speeds versus post mile.

During the morning and evening peak periods for the eastbound direction, speeds are fairly consistent between runs indicating minimal congestion and a low occurrence of reduced speed areas. Travel speeds for the morning peak period on average are greater than the evening peak period in the eastbound direction.

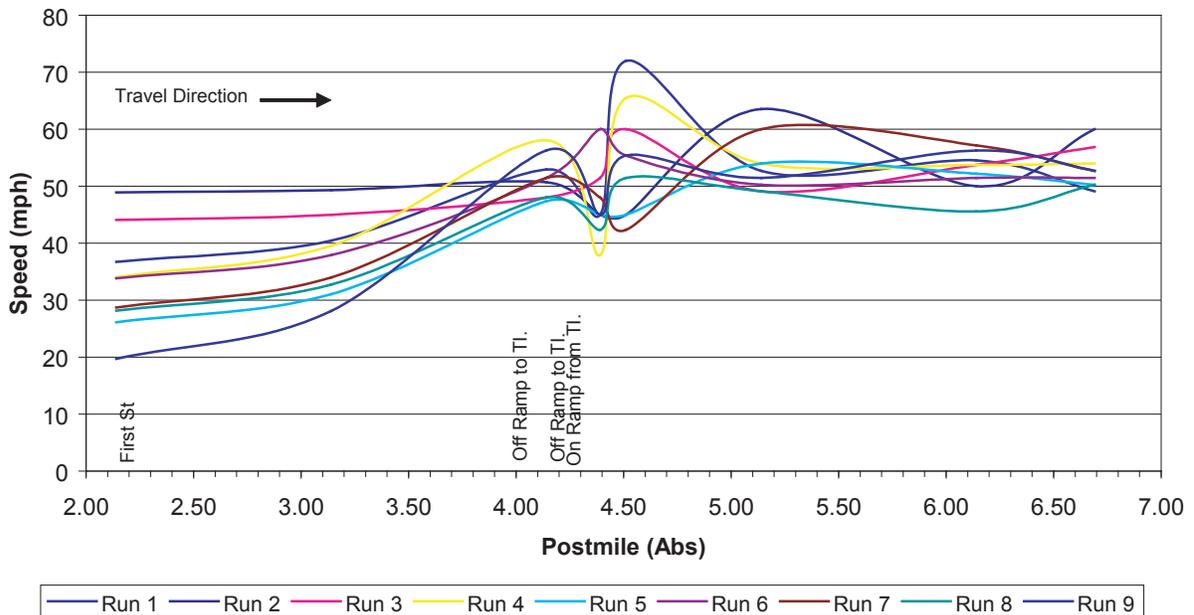
Heading westbound, the rightmost lanes 4 and 5 operate with slower speeds than leftmost lanes 1, 2, and 3 at the approaches to the Fremont Street off-ramp during the morning peak hours. The slower speeds of lanes 4 and 5 are caused by the queue of cars on the Fremont Street off-ramp, caused by the lack of capacity; which existed before the closure of the Harrison Street off-ramp. The slower speed operation typically begins at approximately mid-span. Occasionally, the slower speed traffic extends to the vicinity of the westbound on-ramp junction on the west side of the Bay Bridge. During other times, the retrofit construction activity further east, near 5th Street, causes traffic to slow down on the Bay Bridge.

Peak Hour Travel Speed

Westbound AM Peak Hour



Eastbound PM Peak Hour



Note: The peak hour travel speed is the average speed between two observed locations.



2.2 2008 Existing Condition HCM Analysis

The analysis of traffic operations of the existing ramp configuration were completed using the methodologies described in the Highway Capacity Manual (HCM 2000). Ramp analysis was completed using methods from Chapter 25, Ramps and Ramp Junctions, of the HCM.

Existing Traffic Volumes

The existing traffic conditions were evaluated by considering the highest ramp volume for each ramp within the peak periods of 7 AM – 9 AM for the morning peak hour and 4 PM – 6 PM for the evening peak hour. Existing ramp traffic volumes were collected for the Treasure Island Development Plan (TITP) EIR which was provided by Fehr & Peers Transportation Consultants. The ramp volumes were collected during week of May 4, 2008. At the time of the count, only one eastbound off-ramp and westbound on-ramp were available for use. The highest weekday ramp volumes were counted on Wednesday May 7, 2008 which is shown in Table 3 and graphically illustrated in Figure 2. The Bay Bridge mainline traffic volumes were obtained from the PeMS database for the same time period.

It should be noted, that Bay Bridge westbound traffic volumes are controlled by metering lights, during both the AM peak periods, and approximately half of the time during the PM peak periods. Although capacity of the Bay Bridge is 9,500 vehicles per hour (vph), it is Caltrans general practice to maintain acceptable operations on the Bay Bridge by limiting the traffic entering the bridge. This allowable traffic volume is determined by actual traffic volumes recorded at the monitoring station immediately west of the metering lights. Average weekday traffic volumes recorded at this monitoring station for the past three years (2006 – 2008) is approximately 8,600 vph in the morning.

Existing Levels of Service

Traffic operating characteristics of intersections are described by the concept of Level of Service (LOS). LOS is a qualitative description of a ramp segment or intersection performance based on the criteria outlined in the *2000 Highway Capacity Manual*. LOS ranges from A, which indicates free flow or excellent conditions with short delays, to F, which indicates congested or overloaded conditions with extremely long delays. Caltrans criteria are used to establish a goal of LOS C, when possible. A project resulting in LOS E or F is considered to have a significant, adverse impact. LOS results for the Bay Bridge on- and off-ramps were determined from methods described in Chapter 25 of the *2000 Highway Capacity Manual* for ramps and ramp junctions. The travel density, LOS and average speed for each existing ramp junctions is shown in Table 2.

Figure 2 presents the volumes and ramp configuration and their associated capacities in the westbound and eastbound directions during both the morning and evening peak hours. The capacity of the existing westbound on-ramps is assumed to be 330 vph. This value was developed based on a combination of the highest volume measured and gap analysis, as documented in the *Disposal and Reuse of Naval Station Treasure Island, Administrative Final Environmental Impact Statement, September 2002*. The capacity of the mainline was assumed to be 1900 vphpl (vehicles per hour per lane) based on measured data and methods for field conditions adjustments outlined in the *HCM 2000, Chapter 22, Basic Freeway Segments*. The

capacity of the existing eastbound off-ramps are assumed to be 1800 vph in accordance with *HCM 2000, chapter 25, Ramps and Ramp junctions, exhibit 25-3 Approximate Capacity of Ramp Roadways*. The capacity of the proposed diagonal on- and off-ramps was also assumed to be 1500 vph and 1800 vph, respectively, based on free-flow speed. The capacity of the proposed loop on-ramp is assumed to be 1200 vph based on free-flow speed.

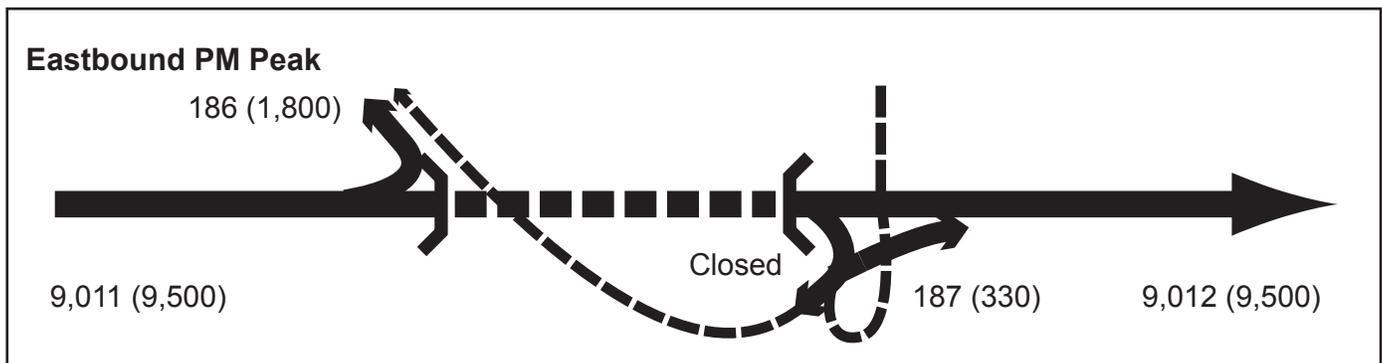
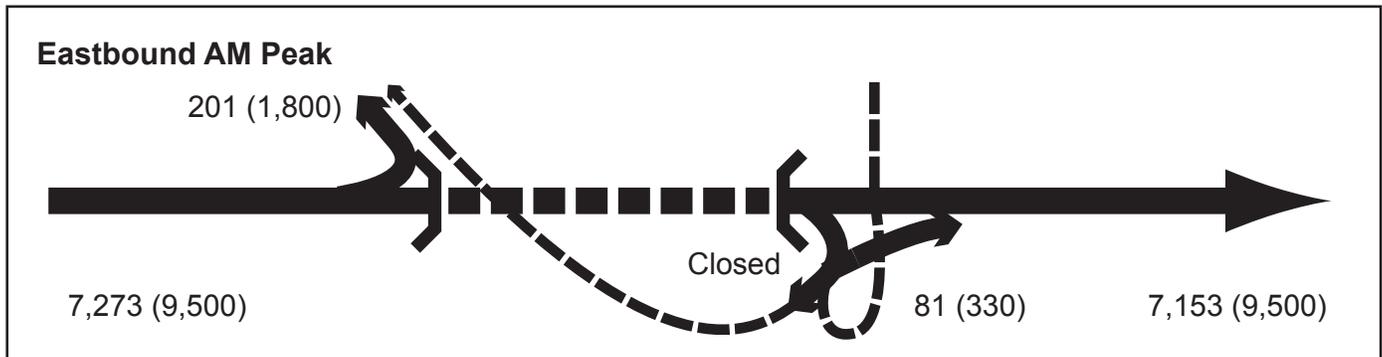
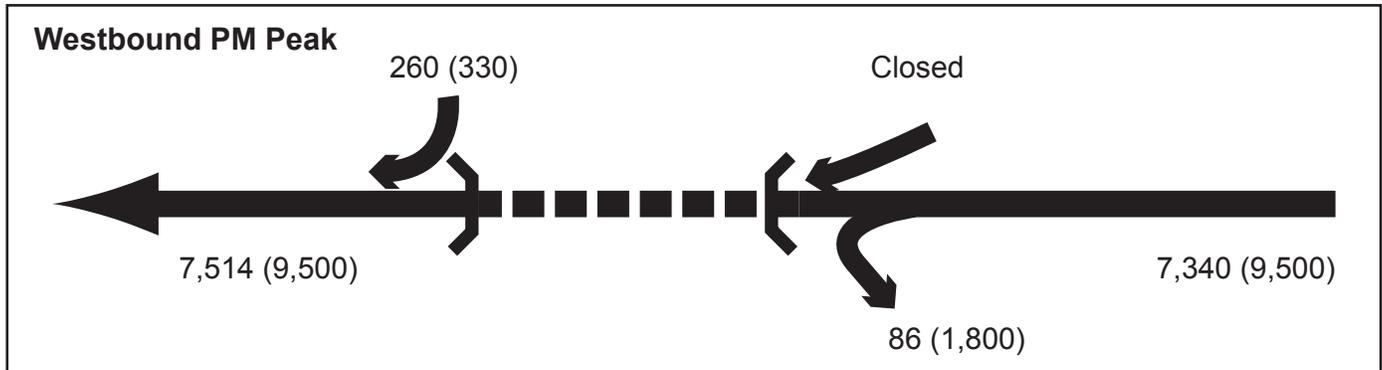
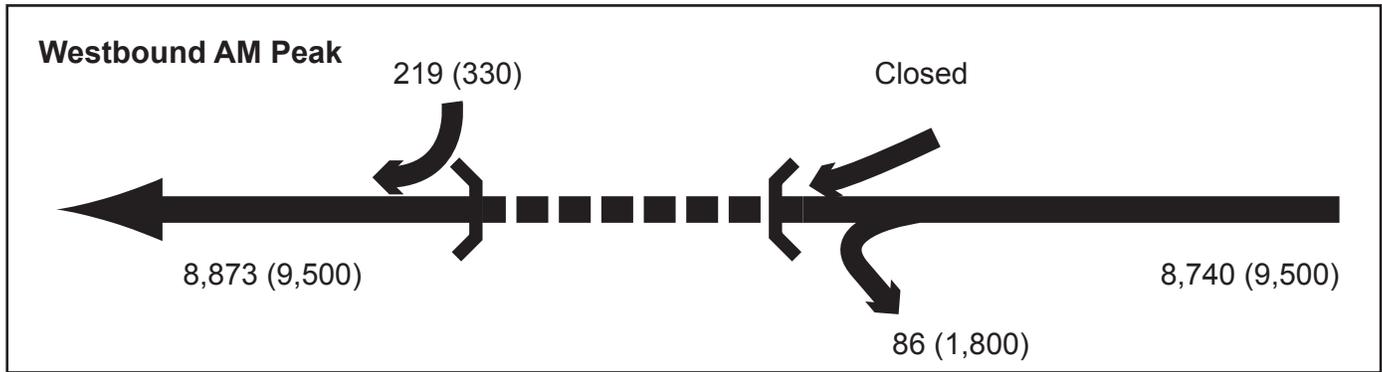
Table 2 – Existing Ramp Junction Analysis

	Existing AM			Existing PM		
	LOS	Density	Speed	LOS	Density	Speed
Westbound						
Off-Ramp to TI (L)	D	28	65	C	25	65
On-Ramp from TI	D	31	56	D	27	59
On-Ramp from TI	D	31	58	D	28	61
Eastbound						
Off-Ramp to TI (L)	C	25	65	D	31	65
Off-Ramp to TI	C	25	62	D	30	59
On-Ramp from TI	D	27	61	D	34	56

Note:

1. TI represents Treasure Island.
2. (L) represents the ramp is on the left-hand side of the freeway.
3. LOS calculation are from the HCM analysis

Existing (2008) Peak-Hour Volume



1. The volume and capacity are shown as xx (yy).
2. Bay Bridge westbound traffic volumes are controlled by metering lights during both the AM and PM peak periods, and Caltrans sets a limit of 9,600 vehicles per hour onto the Bay Bridge.
3. Bay Bridge eastbound capacity is constrained by the ramps and mainline configuration near First Street. The highest volume counted between 2005 and 2007 was approximately 9,500 vehicles per hour.



3.0 FUTURE 2035 CONDITION ANALYSIS

The future 2035 condition operation analysis considers the 20 year growth following the completion of the YBI Ramps project. The future traffic demand for the Bay Bridge was evaluated for the following scenarios:

- 2035 No Build Condition
- 2035 Build Condition
- 2035 Build Condition with Ramp Metering

Future traffic demand volumes for the Treasure Island project and the Bay Bridge were estimated using two different methods and then integrated to ensure consistency. Future demand volumes for the Treasure Island project were estimated based on the proposed land use program for the *Treasure Island and Yerba Buena Island Redevelopment Plan (TIYBIRP)* based on a full build-out of the Treasure Island baseline redevelopment project, but without its enhanced Travel Demand Management (TDM) measures or any of its proposed transit service improvements. The demand analysis also does not consider any of the constraining effects of the ramp metering. The redevelopment project proposes a number of TDM measures (including congestion pricing, residential transit subsidies, bicycle sharing, etc.) and a high level of transit service during peak hours, including:

- New ferry service to San Francisco every 10 minutes
- New bus service to Downtown Oakland every 7 minutes
- Maintenance of the existing bus service to the Transbay Terminal (Muni Route 108-Treasure Island) in San Francisco every 5 minutes
- New bus service to the San Francisco Civic Center area every 12 minutes

The level of transit supply and TDM measures are expected to result in a substantial shift from automobile transit to use of the new transit supply. However, funding and/or operating details for all of this service has not yet been resolved. Therefore, the transportation analysis for the Yerba Buena Island Ramps Project is based on a scenario with limited TDM measures (no congestion pricing, for example) and the following reduced transit service assumptions:

- New ferry service to San Francisco every 50 minutes
- New bus service to Downtown Oakland every 7 minutes
- Maintenance of the existing bus service to the Transbay Terminal (Muni Route 108-Treasure Island) in San Francisco every 15 minutes
- No new bus service to the San Francisco Civic Center area every 12 minutes

As a result, the Yerba Buena Island Ramps study is based on the assumption of a substantially reduced transit supply, from what is ultimately proposed by the full Treasure Island project with TDM measures. The analysis included in this study, represents a worst-case scenario in terms of peak hour vehicle trips, using the proposed ramps.

Future demand volumes for the Bay Bridge were based on the MTC's travel forecasting model for the morning peak hours and San Francisco County Transportation Authority's (SFCTA)

travel forecasting model for the evening peak hours. Two different travel demand models were used because the MTC model was not validated for the evening peak period. In the following sections, both forecasting methods and integration procedures for the future traffic demand, as well as future bay bridge volumes, are discussed. Also, the performance results of the base condition alternatives are described.

3.1 Future 2035 Traffic Volumes on the Bay Bridge

Future traffic volumes for the Bay Bridge mainline were estimated using the MTC’s travel forecasting model (BAYCAST 2009 RTP) for the morning peak hours and using the SFCTA’s travel forecasting model (Champ 3.2) for the evening peak hours. Table 3 summarizes existing mainline volumes as well as future demand for year 2035. These results were documented and approved in the traffic forecasting report dated December 2008. It was estimated that approximately 18% of total traffic will be High Occupancy Vehicles (HOV).

Table 3 – Approach Existing and Future Traffic Volumes

	Existing (2008)	No Build
		Future Volumes (2035)
<i>Eastbound (SF approach)</i>		
AM Demand	8,557	8,769
AM Volumes	7,273	8,769
PM Demand	10,402	12,002
PM Volumes	9,011	9,500
<i>Westbound (East Bay approach)</i>		
AM Demand	12,652	16,385
AM Volumes	8,740	9,500
PM Demand	9,087	10,462
PM Volumes	7,340	9,500

Note:

1. AM peak hour demands were based on the MTC model and PM peak hour demands were based on the SFCTA’s model.
2. 2008 volumes are 85 percentile volumes obtained from the PeMS database.

3.2 Future 2035 Condition Analysis

The 2035 No Build Condition consists of future 2035 traffic volumes with the TI/YBI development project, existing ramp configurations and their respective capacities. Figure 3 illustrates the future 2035 peak hour traffic demand volumes, in both directions of travel, ramp configurations, and capacities. During the morning peak hour period, the Bay Bridge mainline demand volumes will reach 10,054 and 8,769 vehicles per hour in the westbound and eastbound directions, respectively. The evening peak hour mainline demand volumes are expected to reach 10,030 and 9,750 vehicles per hour in the westbound and eastbound directions, respectively. However, these demand volumes will be constrained to 9,500 vph in both directions.

Table 4 summarizes results of the future No Build ramp junction analysis. The No Build condition yields a lower LOS as compared to the existing condition. In addition, the No Build condition will yield lower average speeds ranging from 38 mph – 50 mph as compared to 56 mph – 65 mph in the

existing condition. The capacity for both westbound on-ramps are 330 vph for this scenario. Since the demand volumes exceed this capacity, delays and queues will be expected on the island.

Table 4 – 2035 Future No Build Ramp Junction Analysis

	Future 2035 No Build AM			Future 2035 No Build PM		
	LOS	Density	Speed	LOS	Density	Speed
Westbound						
Off-Ramp to TI	F	49	40	F	47	47
On-Ramp to TI	F	49	38	F	48	45
On-Ramp from TI	E	41	45	E	41	47
Eastbound						
Off-Ramp to TI (L)	D	34	50	E	37	50
Off-Ramp to TI	D	33	49	D	33	48
On-Ramp from TI	E	40	48	E	40	48

Note:

1. TI represents Treasure Island.
2. (L) represents the ramp is on the left-hand side of the freeway.
3. Assumes no ramp metering

The 2035 Build Condition assuming no constraints (ramp metering) consists of the same 2035 traffic volumes used in the No Build scenario. The westbound off-ramp on the left side is replaced with an off-ramp on the right side and the on-ramp east of tunnel is modified to improve the geometry. Figure 4 illustrates the future 2035 Build condition peak hour traffic demand volumes, in both directions of travel, ramp configurations, and capacities. In addition to modifications of the ramps east of the tunnel, the westbound on-ramp west of tunnel will be reserved exclusively for buses and emergency vehicles. The existing configuration of the off-ramps in the eastbound direction will remain unchanged. Table 5 summarizes results the 2035 Build condition for the ramp junctions. Compared to the No Build condition, average operating speeds on the SFOBB are lower for the Build condition. This is due to the increased capacity of the new on-ramp on the east side compared to the old, 1200 vph versus 330 vph. Most of the westbound on-ramp traffic is allowed to enter the mainline unimpeded. Subsequently, there is no on-ramp queuing for this scenario.

Table 5 – Future 2035 Build Ramp Junction Analysis

	Future 2035 Build AM			Future 2035 Build PM		
	LOS	Density	Speed	LOS	Density	Speed
Westbound						
Off-Ramp to TI (R)	F	53	36	F	49	46
On-Ramp from TI	F	45	42	E	45	47
On-Ramp from TI	E	40	47	E	40	47
Eastbound						
Off-Ramp	D	34	50	E	37	50
Off-Ramp to TI	D	33	49	D	33	48
On-Ramp from TI	E	40	49	E	40	49

Note:

1. TI represents Treasure Island.
2. (L) represents the ramp is on the left-hand side of the freeway.
3. Assumes no ramp metering

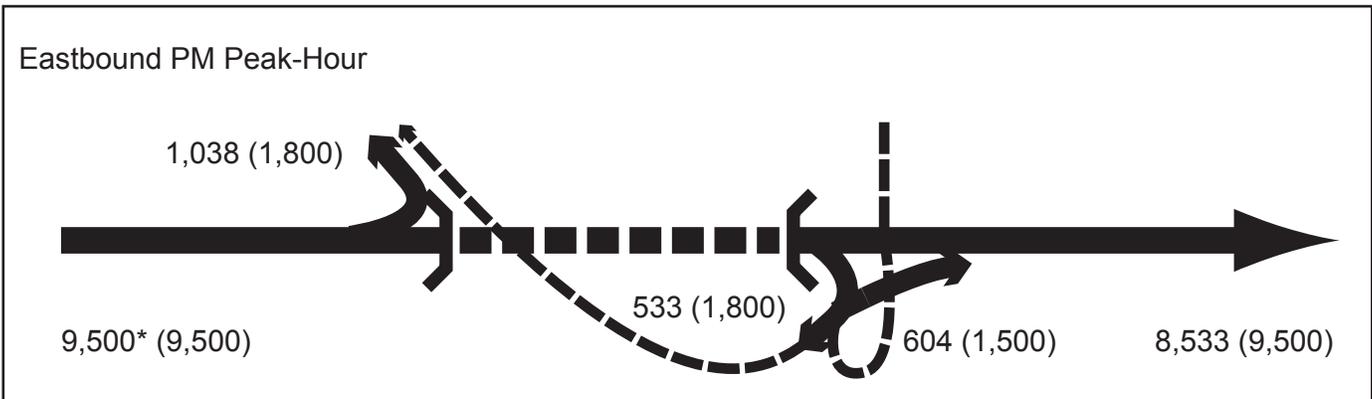
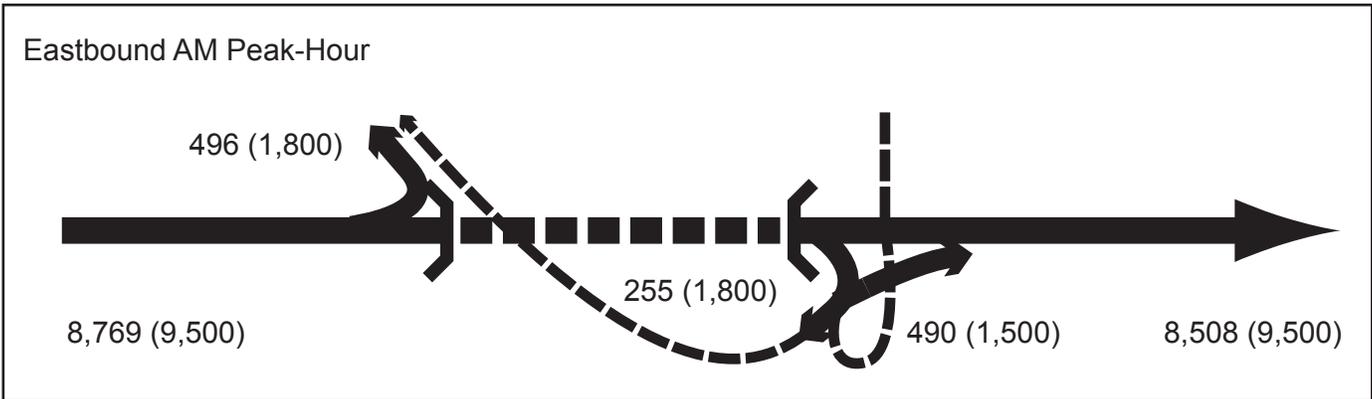
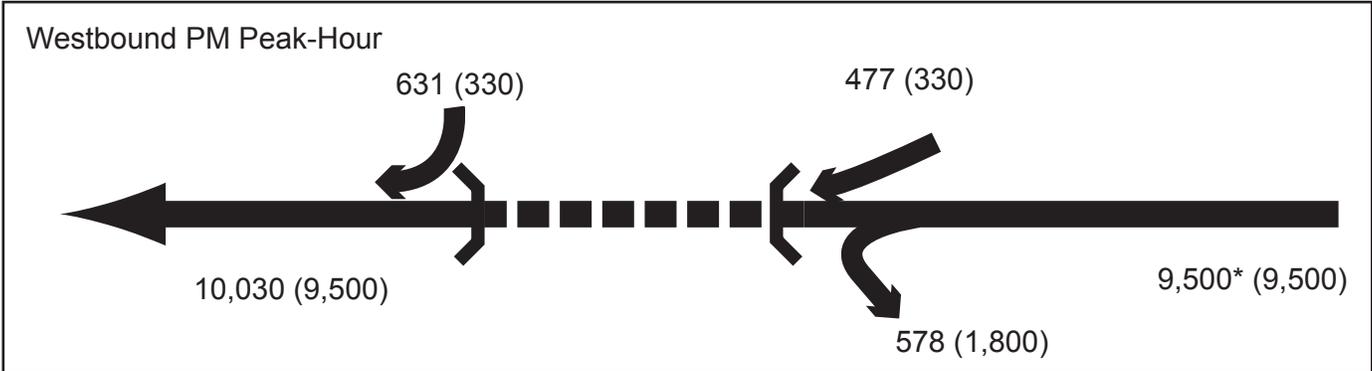
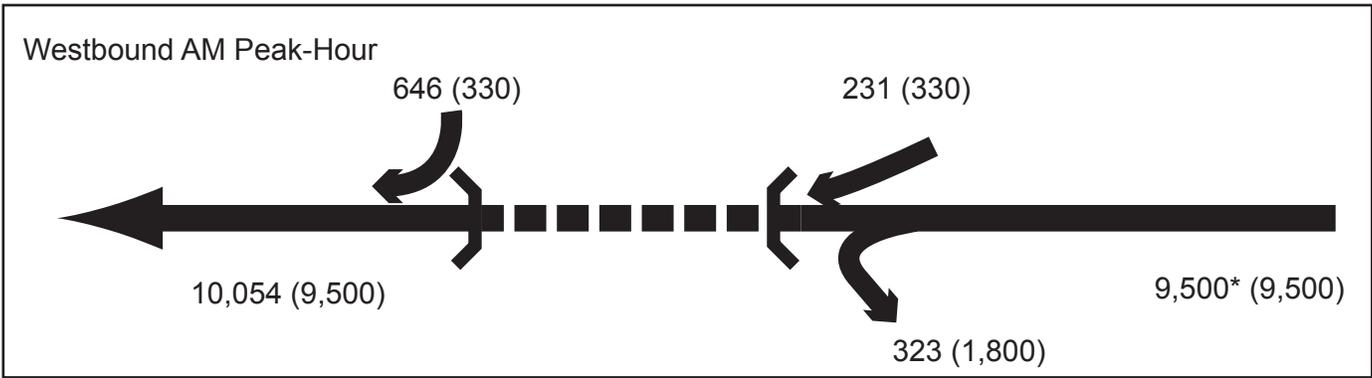
3.3 Ramp Metering

Caltrans will require ramp metering for the westbound on-ramp on the east side of the island. Based on extensive coordination and discussions with Caltrans staff, it was determined that the methodology used to set the metering rate for the westbound on ramp will be based on the amount of traffic exiting the Bay Bridge mainline at the off-ramp. Therefore, for the purpose of this study, the westbound on-ramp metering rate should be approximately 323 vph and 578 vhp in the AM and PM peak periods, respectively. It was also noted that ultimately, Caltrans Bay Bridge Operations will use a combination of mainline and ramp metering rates. In other words, there might be times when Caltrans deemed appropriate to lower the allowable limit entering the mainline to increase the metering rate of the ramps, and vice-versa. Under the 2035 Build Condition with ramp metering, long delays and queues will be expected on the island.

4.0 CONCLUSION

The main objective of this analysis is to evaluate the impact of the proposed westbound Yerba Buena Island ramps on the Bay Bridge in the design year. Based on the future 2035 traffic operational analysis of the Bay Bridge, it was determined that the YBI Ramps project with ramp metering will not adversely affect the operations of the Bay Bridge and the associated local road network on Treasure Island and Yerba Buena Island.

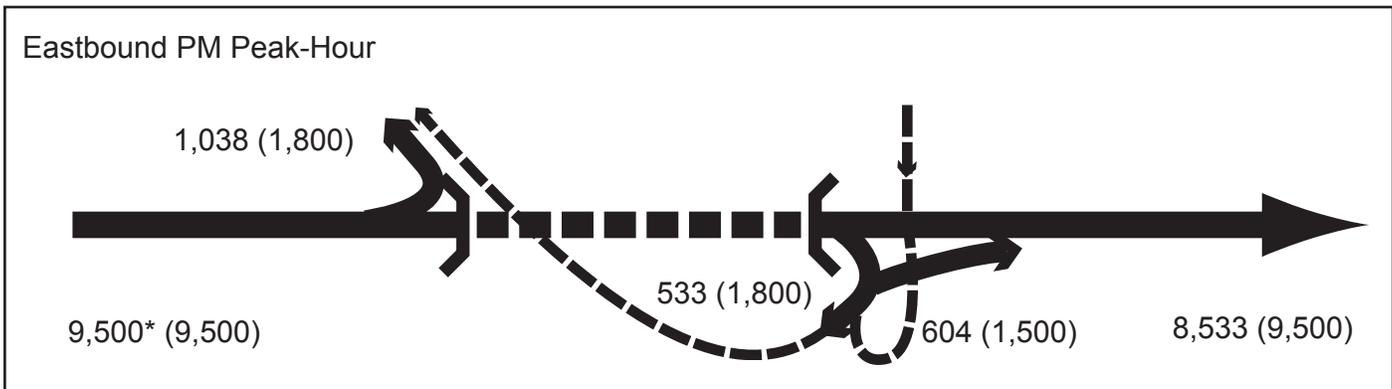
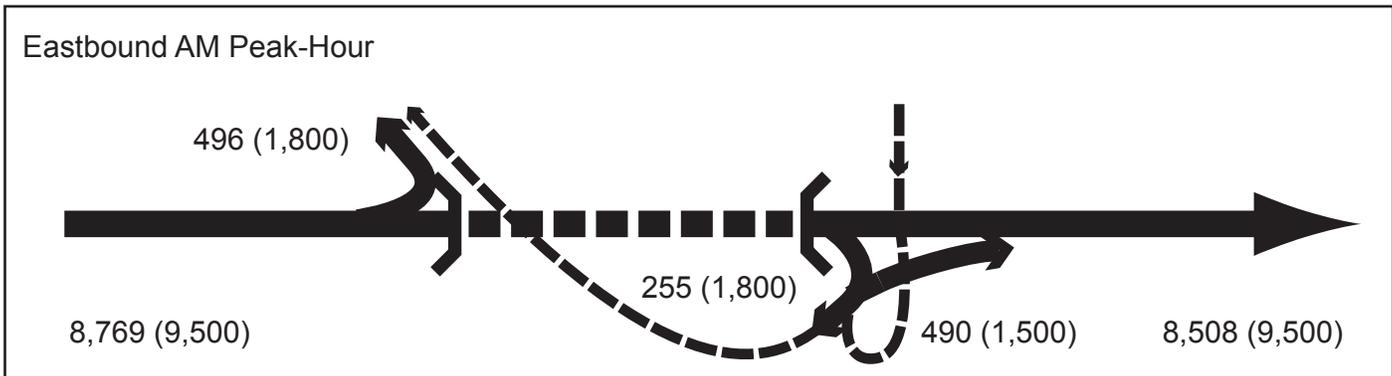
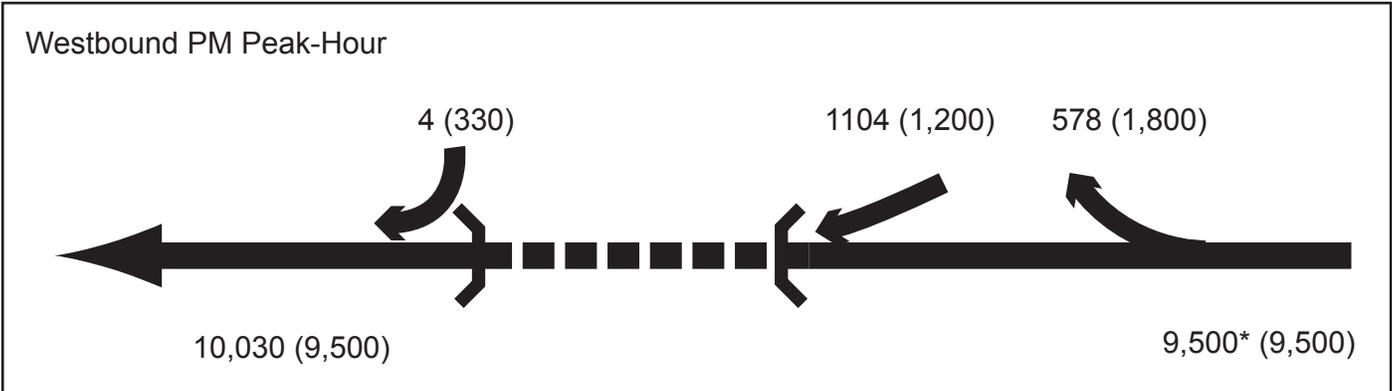
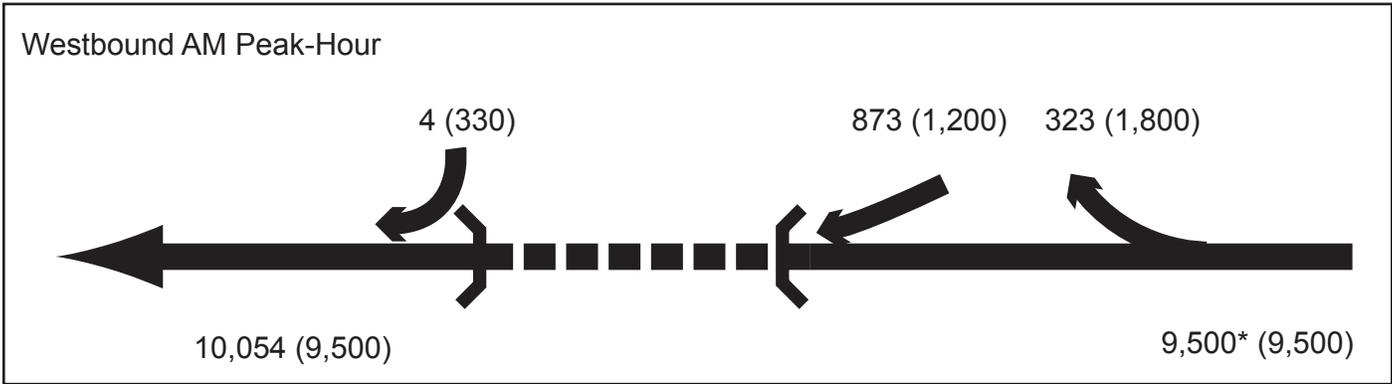
Future (2035) No Build



1. The demand volume and capacity are shown as xx (yy).
 2. In future scenario, there would be 4 bus trips to San Francisco and 9 bus trips from Oakland.
- * Constrained Volumes



Future (2035) Build



1. The demand volume and capacity are shown as xx (yy).
 2. In future scenario, there would be 4 bus trips to San Francisco and 9 bus trips from Oakland.
- * Constrained Volumes



APPENDIX I
VISUAL IMPACT ASSESSMENT

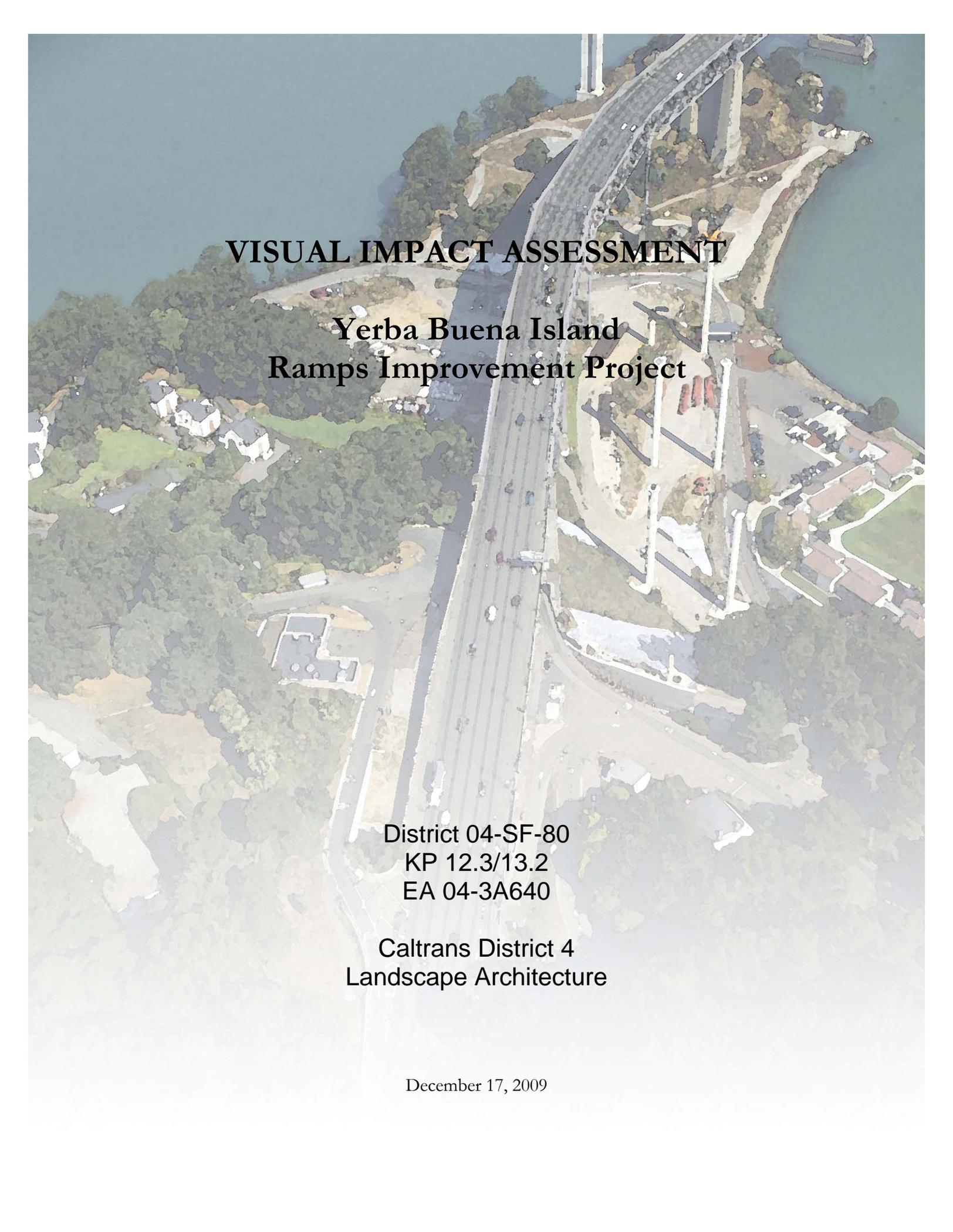
Memorandum

To	Valerie Shearer	Page	1
CC			
Subject	Yerba Buena Island Ramps Improvement Project EIR/EIS Visual Impact Assessment Addendum Memorandum		
From	Rudy Calderon		
Date	July 26, 2011		

The YBI Ramps Improvement PDT, which is comprised of the lead (Caltrans and SFCTA), cooperating, and responsible agencies, held a meeting on April 12, 2011 to consider and identify the preferred alternative. The unanimous decision was that Alternative 2b would best meet the purpose and need of the YBI Ramps Improvement Project. The relocation site for Quarters 10/Building 267 was determined following the identification of the preferred alternative.

The purpose of this memorandum is to confirm that preparation of the relocation of Quarters 10/Building 267 site and relocation of the buildings would not result in new issues. After the buildings are relocated, any future use of the site will be evaluated through a separate environmental process initiated by the City and County of San Francisco and/or TIDA.

The relocation site, which is located on the northwest quadrant of YBI before the Treasure Island causeway, is currently open space with trees, grass, vegetation, and a small picnic area with two tables. The site is bounded by Treasure Island Road and Macalla Road to the west and south, respectively. The relocation site slopes downward from Treasure Island Road and Macalla Road to the shoreline of Treasure Island. Quarters 10/Building 267 would be reconstructed on the slope of the southeastern portion of the relocation site. Views from the relocation site would include Clipper Cove in the foreground, Treasure Island to the north, and the San Francisco Bay and the SAS Structure of the new SFOBB East Span to the northeast. Views towards the relocation site from Treasure Island Road and Macalla Road would be obscured by trees lining the roadways and existing trees at the site, as well as by the site's topography. Therefore, views of Quarters 10, which is approximately 6.1 meters tall (20 feet tall), and Building 267, which is approximately 3 meters tall (10 feet tall) would be obscured from viewers in vehicles traveling along Treasure Island Road and Macalla Road. Pedestrians and bicyclists would have views of Quarters 10/Building 267 from certain points along Treasure Island Road, but their viewing experience would be consistent with and similar to views of existing buildings in other areas of TI. Quarters 10/Building 267 would be visible from the north and northeast, but would not have a substantial adverse impact on views from distant off-site locations, including from waterborne approaches to the island. The relocated buildings would not be visually prominent within the context of other structures on TI when viewed from distant vantage points. Thus, no adverse impacts would occur and no avoidance, minimization, or mitigation measures would be required.



VISUAL IMPACT ASSESSMENT

**Yerba Buena Island
Ramps Improvement Project**

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

Caltrans District 4
Landscape Architecture

December 17, 2009

Visual Impact Assessment
Yerba Buena Island Ramps Improvement Project

December 17, 2009

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

Caltrans District 4

Landscape Architecture

TABLE OF CONTENTS

I.	PURPOSE OF VISUAL IMPACT ASSESSMENT.....	1
II.	PROJECT DESCRIPTION	1
III.	ASSESSMENT METHOD.....	7
IV.	VISUAL ENVIRONMENT OF THE PROJECT.....	7
	A. Project Setting.....	7
	B. Project Viewshed.....	8
	C. Landscape Units.....	8
V.	EXISTING VISUAL RESOURCES AND VIEWER RESPONSE.....	9
	A. FHWA Method of Visual Resource Analysis.....	9
	B. Existing Visual Resources	9
	C. Methods of Predicting Viewer Response.....	12
	D. Existing Viewer Groups, Viewer Exposure, and Viewer Awareness	13
VI.	VISUAL IMPACT ASSESSMENT.....	13
	A. Method of Assessing Project Impacts	13
	B. Visual Impact Types and Assessment Criteria	14
	C. Analysis of Key Viewpoints	17
	D. Consistency with Local Plans and Policies	71
	E. Summary of Project Impacts	73
	F. Cumulative Impacts.....	74
VII.	VISUAL MITIGATION.....	74
VIII.	REFERENCES.....	76

TABLES

Table 1: Project Consistency with Local Plans & Policies.....	71
Table 2: Summary of Project Impacts – Alternative 2B.....	74
Table 3: Summary of Project Impacts – Alternative 4.....	74

FIGURES

Figure 1: Project Location Map.....	2
Figure 2: Alternative 2B Ramps Alignment	4
Figure 3: Alternative 4 Ramps Alignment.....	6
Figure 4: Yerba Buena Island Image Types	11
Figure 5: Key Viewpoint Locations Map	18
Figure 6: Alternative 2B, Key Viewpoint 1: Macalla Rd. at North Gate Rd. Intersection.....	21
Figure 7: Alternative 2B, Key Viewpoint 3: Nimitz House.....	25
Figure 8: Alternative 2B, Key Viewpoint 3: Officers Quarters Open Space	27
Figure 9: Alternative 2B, Key Viewpoint 4: North Gate Road Staging Area	31
Figure 10: Alternative 2B, Key Viewpoint 5: Treasure Island.....	33
Figure 11: Alternative 2B, Key Viewpoint 6: Eastern YBI Waterborne Approach.....	37

TABLE OF CONTENTS - *continued*

FIGURES - *continued*

Figure 12: Alternative 2B, Key Viewpoint 7: Oakland Touchdown	39
Figure 13: Alternative 2B, Key Viewpoint 8: SFOBB Transition Structure	43
Figure 14: Alternative 4, Key Viewpoint 1: Macalla Rd. at North Gate Rd. Intersection	47
Figure 15: Alternative 4, Key Viewpoint 2: Nimitz House.....	49
Figure 16: Alternative 4, Key Viewpoint 3: Officers Quarters Open Space	53
Figure 17: Alternative 4, Key Viewpoint 4: North Gate Road Staging Area	57
Figure 18: Alternative 4, Key Viewpoint 5: Treasure Island	59
Figure 19: Alternative 4, Key Viewpoint 6: Eastern YBI Waterborne Approach.....	63
Figure 20: Alternative 4, Key Viewpoint 7: Oakland Touchdown.....	67
Figure 21: Alternative 4, Key Viewpoint 8: SFOBB Transition Structure	69

I. PURPOSE OF VISUAL IMPACT ASSESSMENT

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

II. PROJECT DESCRIPTION

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

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

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

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

Three alternatives are currently under consideration,² including:

¹ Kilometer Post (KP) 12.3 and 13.2

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

**Figure 1:
Regional Location**

**Yerba Buena Island
Ramps Improvement Project**



Source: ESRI, USGS, DMJM Harris, EDAA

No Build Alternative

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

Alternative 2B

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

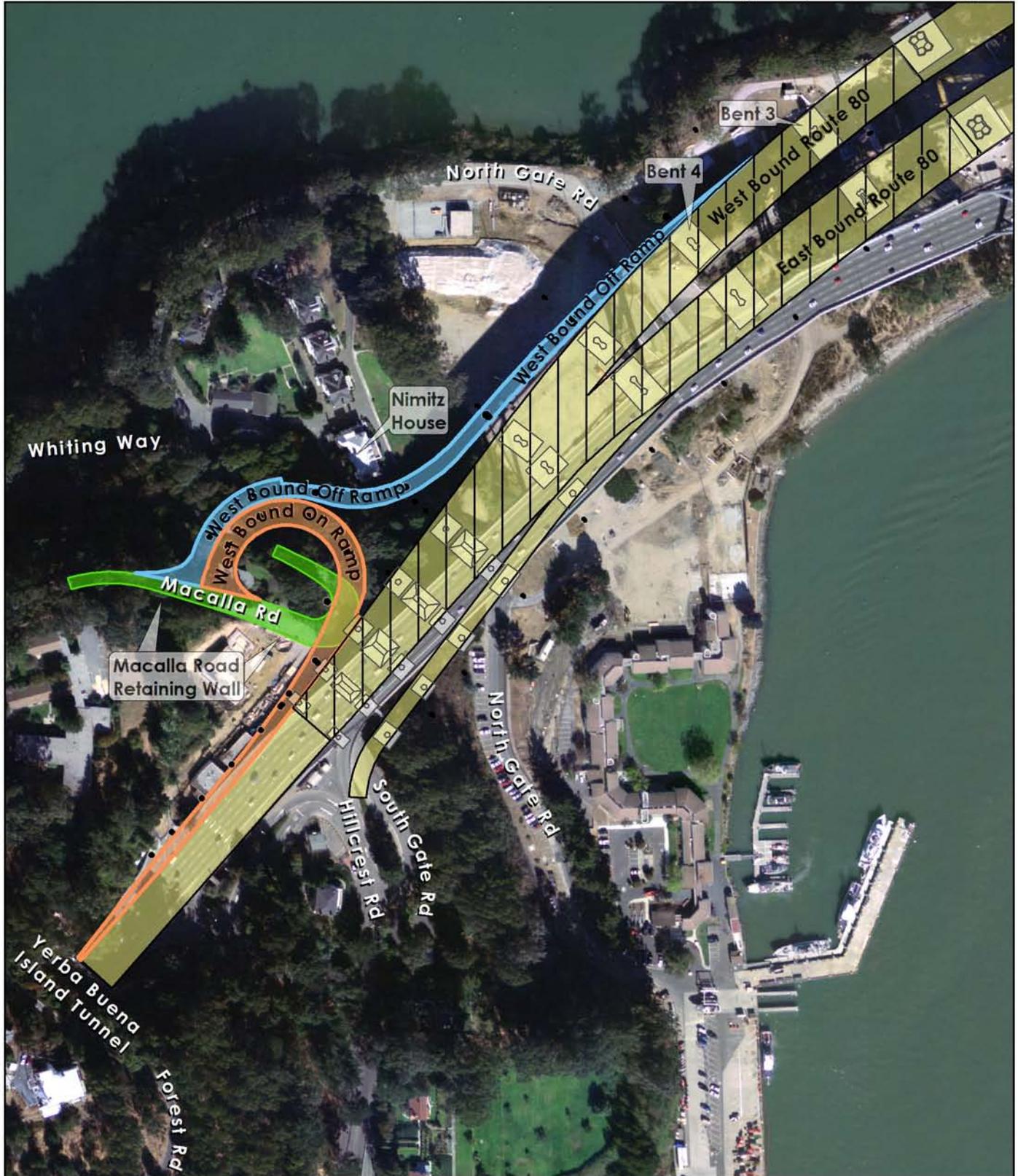
This alternative proposes to reconstruct two of the existing six on- and off-ramps at the I-80/YBI interchange. The proposed on- and off-ramps would provide standard 8-foot shoulder widths, and would include the following features:

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

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

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

**Figure 2:
Alternative 2b**



Alternative 2b Proposed Ramps

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

Separate Project Currently Under Construction

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

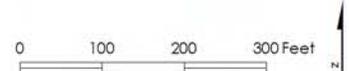
Other Features

- Bent
- Column

7/09

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

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



Yerba Buena Island Ramps Improvement Project
Visual Impact Assessment

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

Alternative 4

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

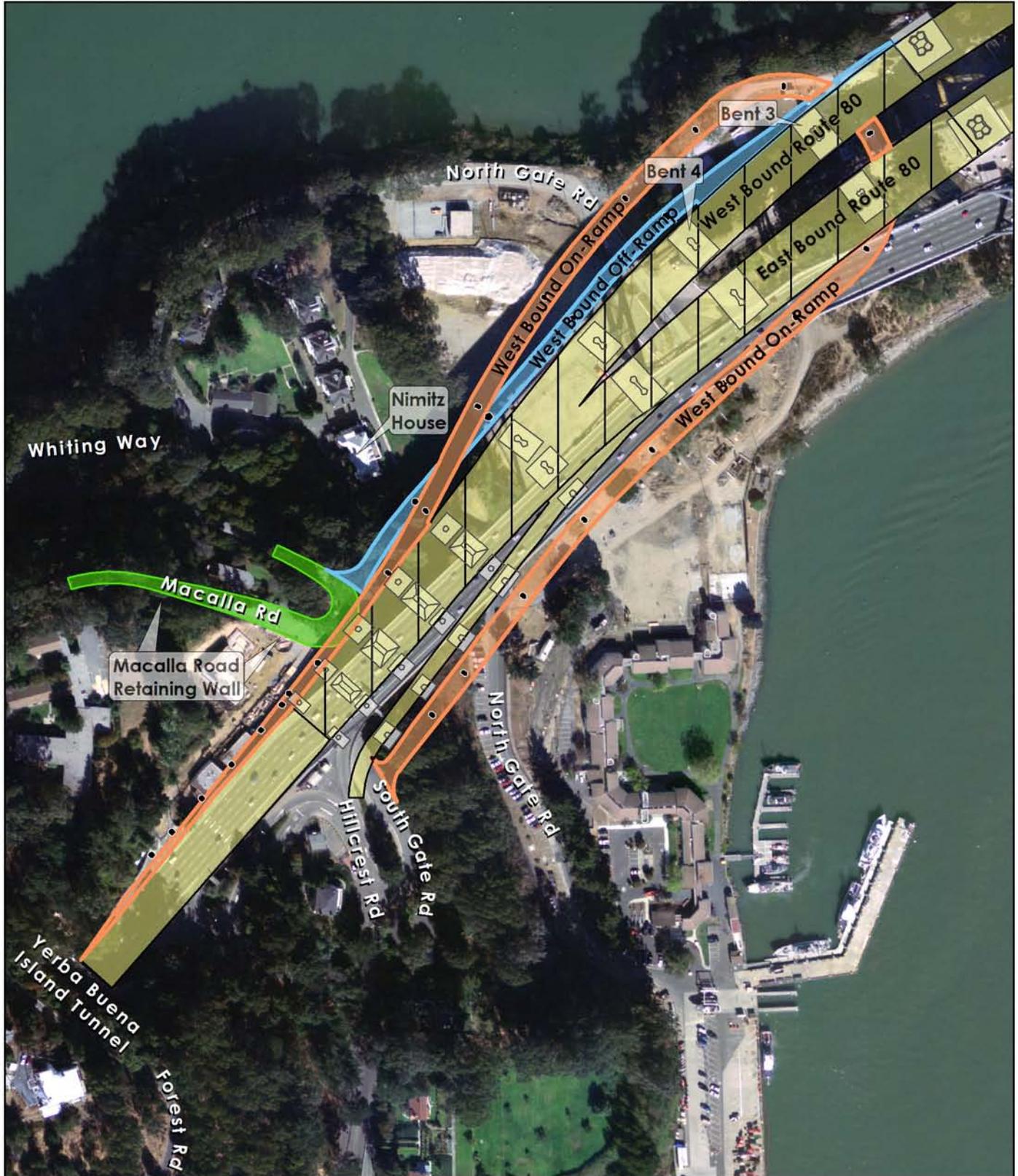
This alternative proposes to reconstruct two of the existing six on- and off-ramps at the I-80/YBI interchange. The proposed on- and off-ramps would provide standard 8-foot shoulder widths, and would include the following features:

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

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

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

**Figure 3:
Alternative 4**



Alternative 4 Proposed Ramps

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

Separate Project Currently Under Construction

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

Other Features

- ◆ Bent
- Column

III. ASSESSMENT METHOD

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

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

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

IV. VISUAL ENVIRONMENT OF THE PROJECT

A. Project Setting

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

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

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

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

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

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

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

B. Project Viewshed

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

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

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

C. Landscape Units

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

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

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

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

V. EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

A. FHWA Method of Visual Resource Analysis

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

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

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

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

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

B. Existing Visual Resources

1. Existing Visual Character

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

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

Residential

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

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

Woodland/Open Space

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

Infrastructure

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

Institutional

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

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

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

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

Figure 4:
Yerba Buena Island Image Types



A



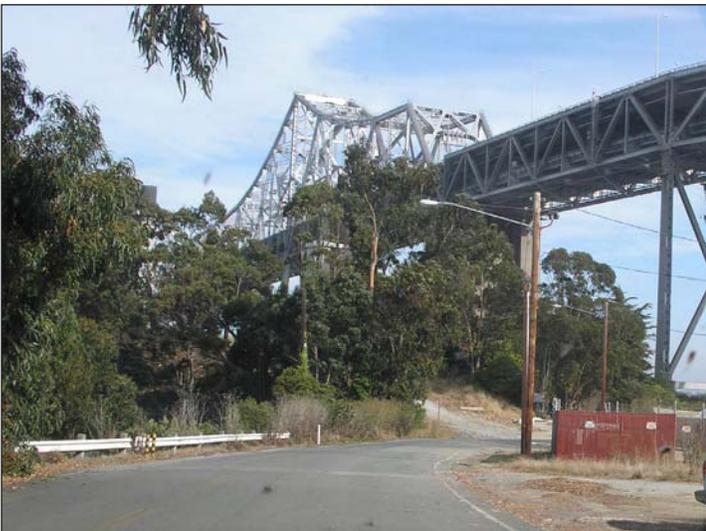
B



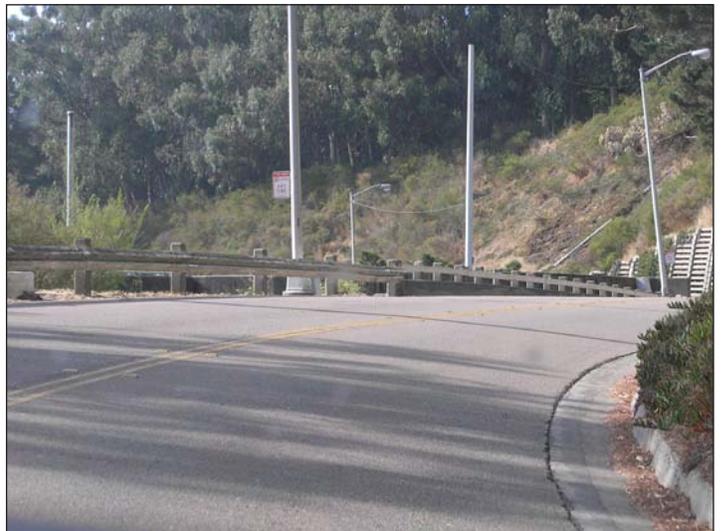
C



D



E



F

2. Existing Visual Quality

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

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

C. Methods of Predicting Viewer Response

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

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

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

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

Freeway Travelers

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

YBI Residents (including USCG personnel stationed on island)

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

Recreational Users and Event Attendees

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

VI. VISUAL IMPACT ASSESSMENT

A. Method of Assessing Project Impacts

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

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

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

B. Visual Impact Types and Assessment Criteria

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

Criteria Specific Effects on Viewers

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

Visual Dominance

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

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

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

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

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

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

View Obstruction or Expansion

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

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

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

Community Disruption, Orientation and Privacy

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

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

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

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

Overall Effects on Viewers

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

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

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

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

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

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

Change in Visual Quality

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

Conformance with Applicable Policies

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

C. Analysis of Key Viewpoints

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

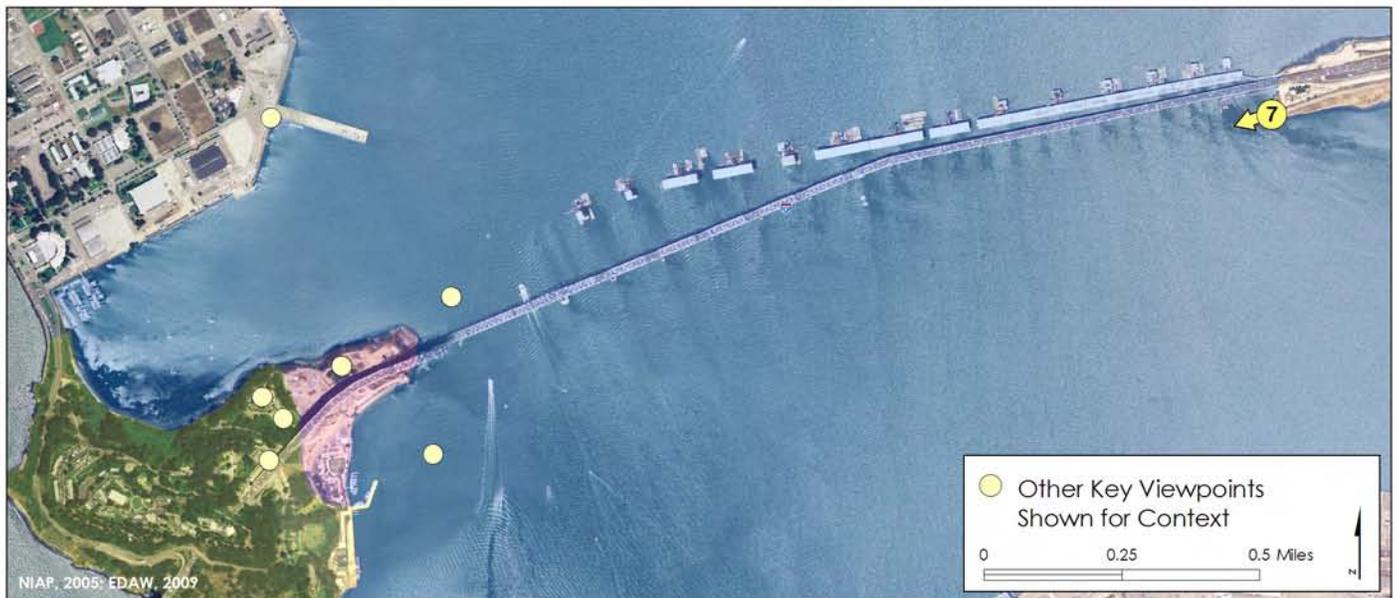
A total of eight key viewpoint locations were identified for analysis in this VIA. The viewpoints are identified in this document as the following:

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

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

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

**Figure 5:
Key Viewpoint Locations**



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

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

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

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

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

Alternative 2B

Key Viewpoint 1 – Macalla at North Gate Intersection

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

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents.

Existing Visual Quality/Character

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

Proposed Project Features

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

Change to Visual Quality/Character

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

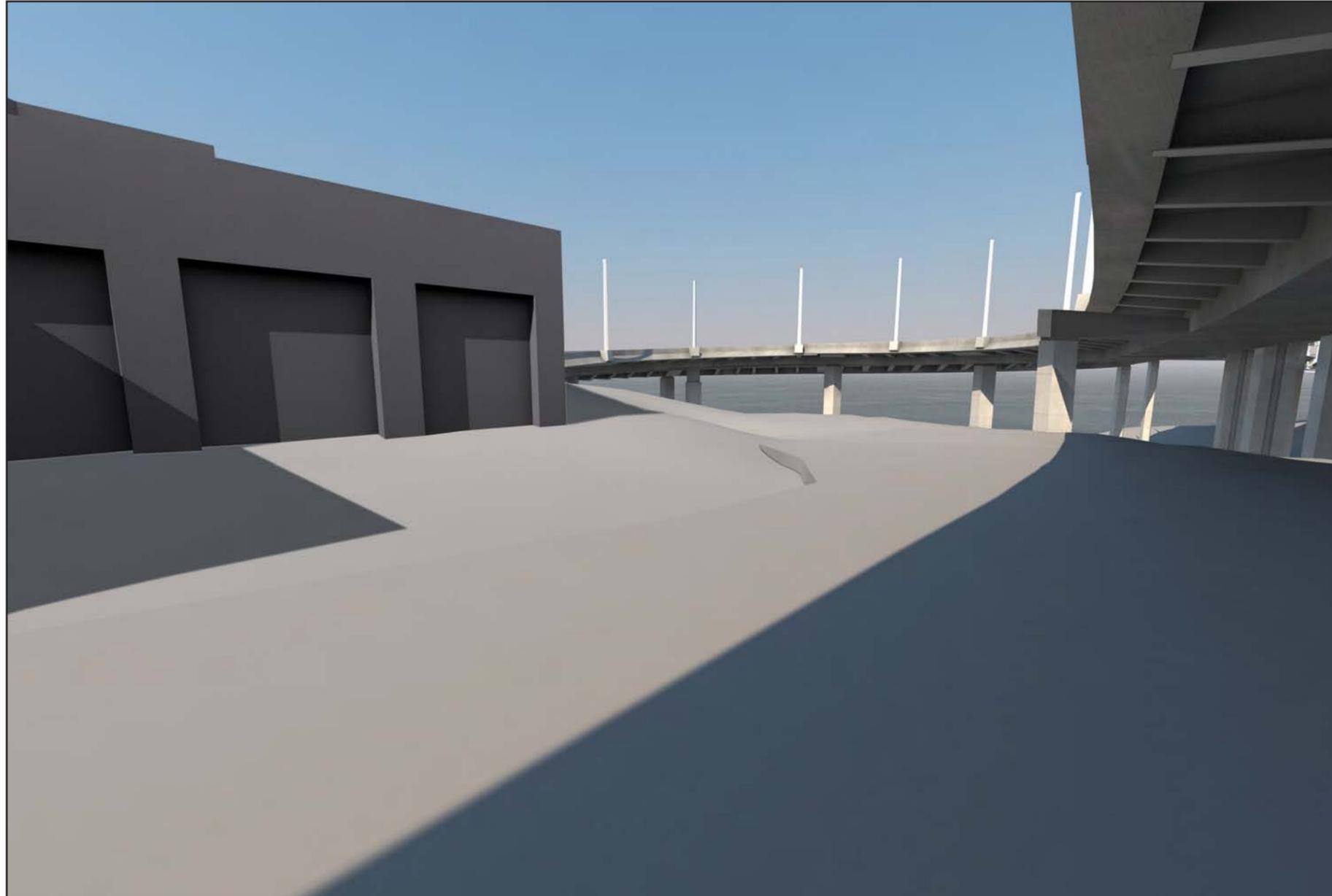
View Obstruction: Construction of the ramps would involve clearing of some vegetation from the area, which would open up partial views of San Francisco Bay. Though this clearing would provide new views of the Bay, the ramps would also partially obstruct these views.

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

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

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

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



Rendered View

Yerba Buena Island
Ramps Improvement Project



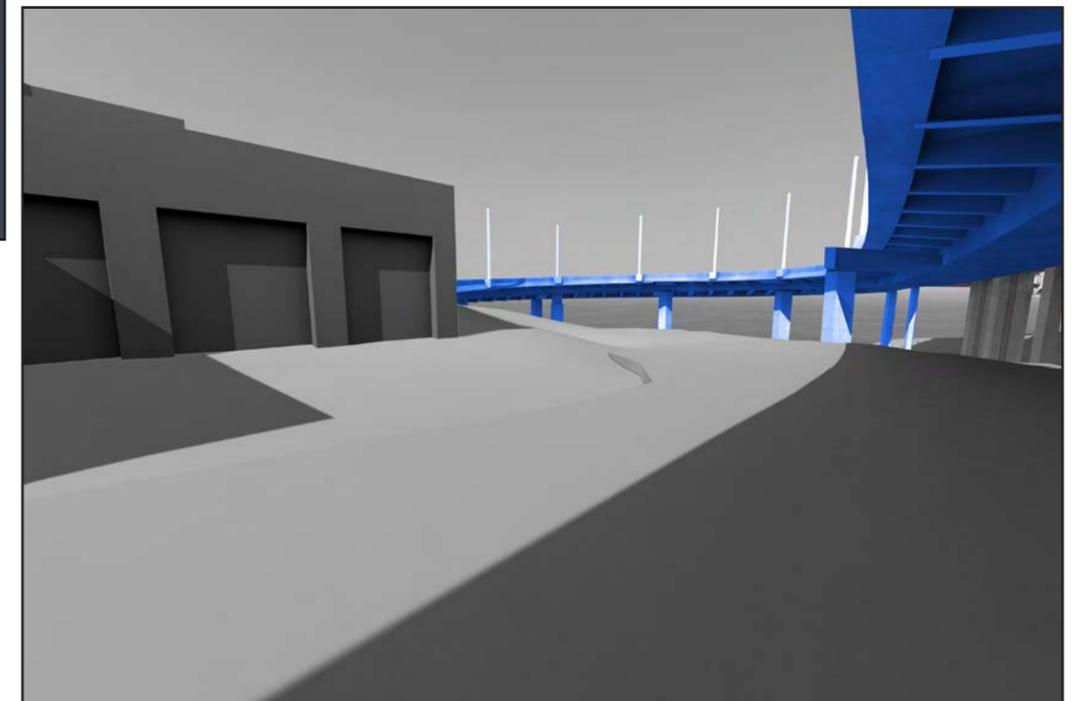
Quarters 10
to be relocated as part of Alt. 2B



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



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



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

Key Viewpoint 2 – Nimitz House

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

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

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

Key Viewpoint 3 – Officers Quarters Open Space

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

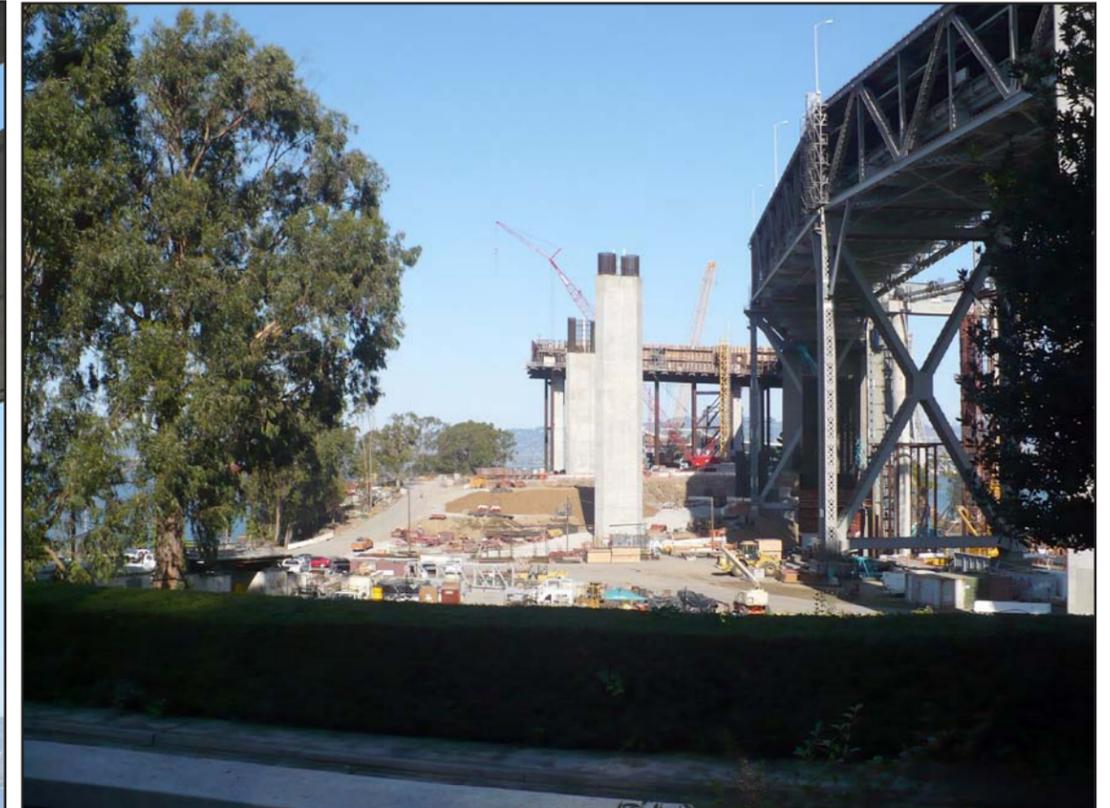
Change to Visual Quality/Character

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

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



Simulated View



Existing View



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



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

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



Simulated View



Existing View



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



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

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

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

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

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

Key Viewpoint 4 – North Gate Road Staging Area

Orientation

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

Landscape Unit

Northeast YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

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

Key Viewpoint 5 – Treasure Island

Orientation

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

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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



Simulated View



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



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

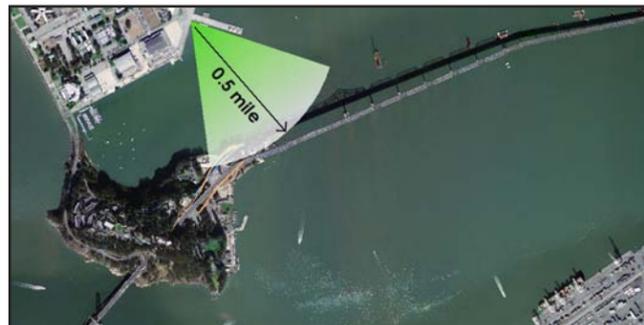


Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components

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



Simulated View



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



Existing View



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

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 6 – Eastern YBI Waterborne Approach

Orientation

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

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

Key Viewpoint 7 – SFOBB Oakland Touchdown

Orientation

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

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



Simulated View



Existing View



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



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

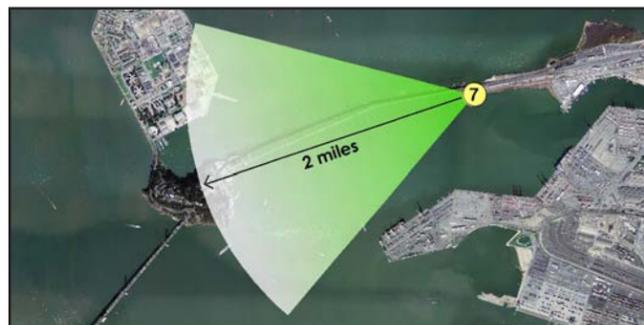
Figure 12: Alternative 2B
Key Viewpoint 7: Oakland Touchdown



Simulated View



View prior to SFOBB east span and Alternative 2B construction



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



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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users.

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 8 – SFOBB Transition Structure

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

Orientation

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by freeway travelers.

Existing Visual Quality/Character

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

Proposed Project Features

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

Expected Visual Quality/Character

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

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

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

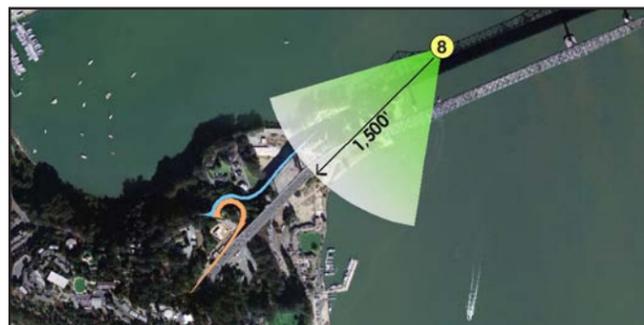
Overall Visual Quality: This is a view illustrating the perspective of a motorist crossing the SFOBB East Span Transition Structure and approaching the YBI Tunnel. From this location, the off-ramp would not be a prominent element of the view seen by motorists. The off-ramp would be a subordinate element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

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



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

Rendered View



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

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

Alternative 4

Key Viewpoint 1 – Macalla at North Gate Intersection

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

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

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents.

Existing Visual Quality/Character

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 2 – Nimitz House

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

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



Rendered View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

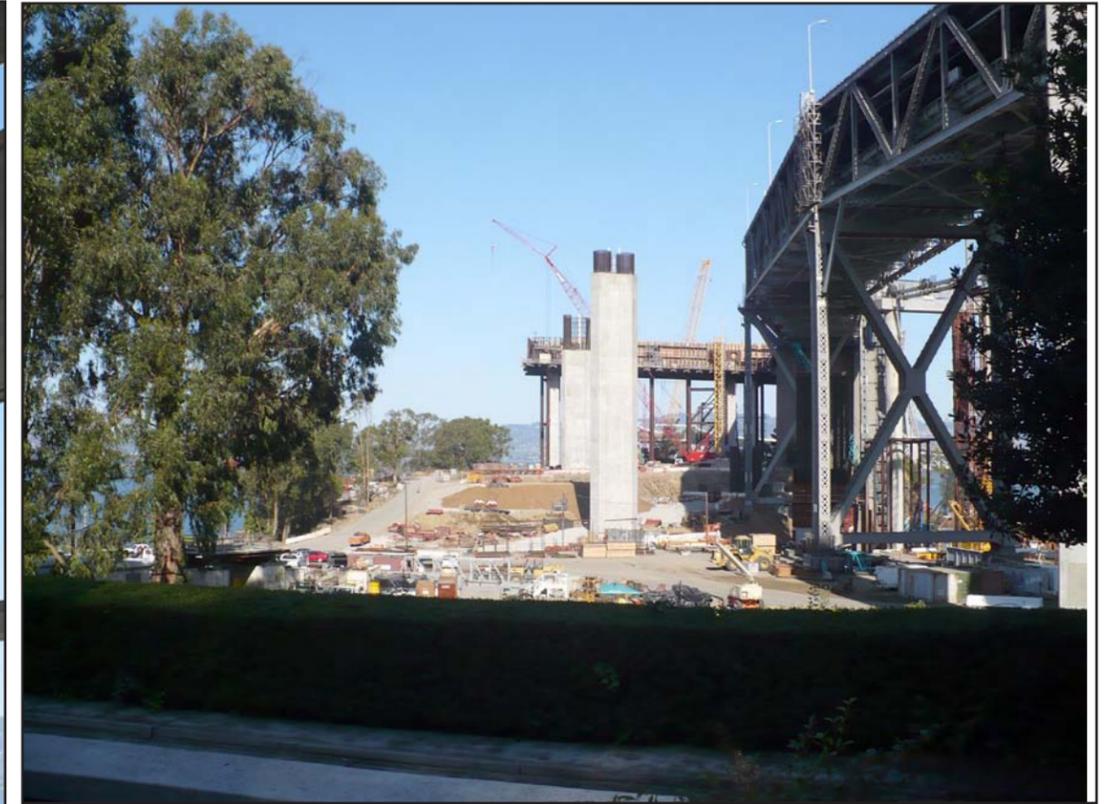


Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

Figure 15: Alternative 4
Key Viewpoint 2: Nimitz House



Simulated View



Existing View



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 3 – Officers Quarters Open Space

Orientation

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

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



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

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

Key Viewpoint 4 – North Gate Road Staging Area

Orientation

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

Landscape Unit

Northeast YBI landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

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

Key Viewpoint 5 – Treasure Island

Orientation

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

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

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



Simulated View



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



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

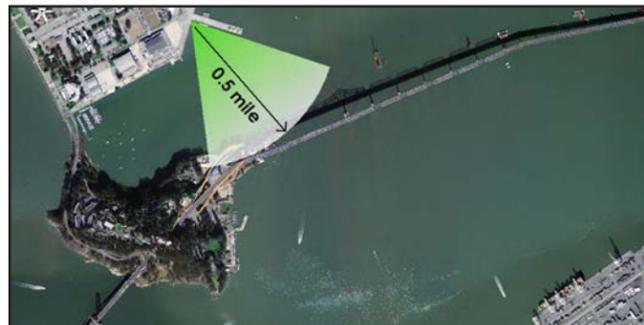


Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Figure 18: Alternative 4
Key Viewpoint 5: Treasure Island



Simulated View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



Existing View



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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 6 – Eastern YBI Waterborne Approach

Orientation

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

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

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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



Simulated View



Existing View



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

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

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

Key Viewpoint 7 – SFOBB Oakland Touchdown

Orientation

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users.

Existing Visual Quality/Character

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

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

Proposed Project Features

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

Change to Visual Quality/Character

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

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

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

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

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

Key Viewpoint 8 – SFOBB Transition Structure

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

Orientation

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

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by freeway travelers.

Existing Visual Quality/Character

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

Proposed Project Features

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

Expected Visual Quality/Character

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

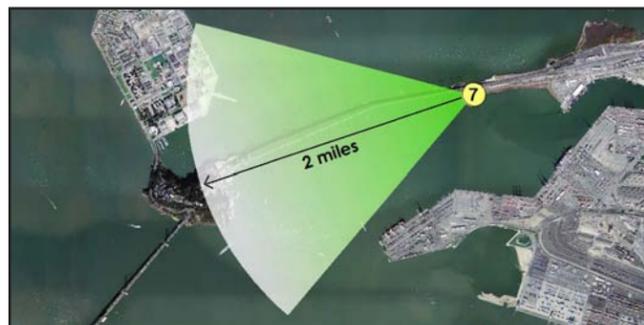
Figure 20: Alternative 4
Key Viewpoint 7: Oakland Touchdown



Simulated View



View prior to SFOBB east span and Alternative 4 construction



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



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

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



Rendered View



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Yerba Buena Island Ramps Improvement Project
 Visual Impact Assessment

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

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

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

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

D. Consistency with Local Plans and Policies

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

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

Yerba Buena Island Ramps Improvement Project
 Visual Impact Assessment

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

Table 1: Project Consistency with Local Plans & Policies	
San Francisco Bay Conservation and Development Commission: San Francisco Bay Plan	
The Bay Conservation and Development Commission (BCDC), a state agency, adopted the San Francisco Bay Plan in 1968 and has subsequently amended its content. The Bay Plan was reviewed for policies that might affect the proposed project. The section concerning "Appearance, Design, and Scenic Views of Development around the Bay" is most relevant to the Visual Analysis of the project.	
<p>Policy 4: Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline.</p>	<p>Alternative 2B: This alternative would be inconsistent with Policy 4, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain waterfront locations in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 4, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain locations in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.</p>
<p>Policy 7: Access routes to Bay crossings should be designed so as to orient the traveler to the Bay (as in the main approaches to the Golden Gate Bridge). Similar consideration should be given to the design of highway and mass transit routes paralleling the Bay (by providing frequent views of the Bay, if possible, so the traveler knows which way he or she is moving in relation to the Bay). Guardrails, fences, landscaping, and other structures related to such routes should be designed and located so as to maintain and to take advantage of Bay views. New or rebuilt roads in the hills above the Bay and in areas along the shores of the Bay should be constructed as scenic parkways in order to take full advantage of the commanding views of the Bay.</p>	<p>Alternative 2B: This alternative would be consistent with Policy 7. The ramps associated with this alternative would provide motorists good, though fleeting views of the Bay.</p> <p>Alternative 4: This Alternative would be consistent with Policy 7. The ramps associated with this alternative would provide motorists good views of the Bay. These views would be observable for longer periods of time under this alternative, compared to views under Alternative 2B.</p>
<p>Policy 14: Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view" of the Bay (shown in Bay Plan Map No. 8, Natural Resources of the Bay).</p>	<p>Alternative 2B: This alternative would be inconsistent with Policy 14, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain waterfront locations in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 14, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain locations in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.</p>

E. Summary of Project Impacts

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

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

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

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

F. Cumulative Impacts

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

VII. VISUAL MITIGATION

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

Yerba Buena Island Ramps Improvement Project
Visual Impact Assessment

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

Alternative 2B

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

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

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

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

Alternative 4

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

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

VIII. LIST OF PREPARERS

California Department of Transportation - District 4
111 Grand Avenue
Oakland, California 94612

Clive Endress, Landscape Architect

EDAW AECOM
150 Chestnut Street
San Francisco, California 94111

Bill Graham, Principal
Tammy Chan, Project Manager
Susan Yogi, Assistant Project Manager
Rudy Calderon, Environmental Planner
Shawn Jackson, Visual Simulations
Lynn Frederico, GIS Specialist
Jeffrey Barr, Landscape Architect
Garrett Avery, Landscape Designer
Amber Giffin, Word Processing
Debbie Jew, Word Processing

IX. REFERENCES

United States Department of Transportation, Federal Highway Administration, Office of Environmental Policy, Visual Impact Assessment for Highway Projects, U. S. Department of Transportation Washington D. C. March 1981.

California Department of Transportation, District 4, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project: Visual Impact Assessment, Revision 1, September 18, 1998.

California Department of Transportation, District 4, Toll Bridge Seismic Retrofit Program Report: Finding and Recommendation for Completion of the Main Span of the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, p. iii, December 8, 2004.

California Department of Transportation, District 11, Visual Impact Assessment: Interstate 15 Managed Lanes, Final Draft, March 26, 2002, revised October 25, 2002.

City of San Francisco, City of San Francisco General Plan, 1996. Available at:
http://www.sfgov.org/site/planning_index.asp?id=41423. Accessed November 2008.

City of San Francisco, Development Plan & Term Sheet for Redevelopment of Naval Station Treasure Island, 2007. Available at:
http://www.sfgov.org/site/uploadedfiles/treasureisland/Treasure_Island_Development_Plan/FinalDevPlanDec06.pdf. Accessed November 2008.

Yerba Buena Island Ramps Improvement Project
Visual Impact Assessment

San Francisco Bay Conservation and Development Commission, San Francisco Bay Plan, adopted 1968, and continually updated. Available at:
<http://www.bcdc.ca.gov/pdf/planning/plans/bayplan/bayplan.pdf>. Accessed November 2008.

San Francisco County Transportation Authority, Final Visual Impact Assessment: Doyle Drive South Access to the Golden Gate Bridge, September 2004.

APPENDIX J

YBI HPSR, HRER, and FOE and SUPPLEMENTAL HPSR

FIRST SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT
YERBA BUENA ISLAND RAMPS IMPROVEMENT PROJECT
YERBA BUENA ISLAND, SAN FRANCISCO COUNTY, CALIFORNIA
04-SF-80-PM 7.6/8.1

EA 04-3A640K

Prepared by:

AECOM
2020 L Street, Suite 400
Sacramento, California 95811
(916) 414-5800
February 4, 2011

Prepared By: 

Mark Bowen, Senior Historian/Architectural Historian

Date

Prepared For:

Eric Cordoba, Project Manager
SFCTA
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Approved By: 

Janet Pape, Branch Chief, SFOBB Archaeology
PQS Prehistoric Archaeology, Lead; Historical Archaeology, Co-PI
Office of Cultural Resources Studies
Caltrans District 4
111 Grand Avenue, P.O. Box 23660
Oakland, California, 94623

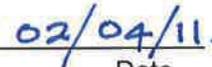
Date


February 4, 2011

Approved By: 

 for: Elizabeth Krase Greene
Branch Chief, South Counties
Office of Cultural Resources Studies
Caltrans District 4
111 Grand Avenue, P. O. Box 23660
Oakland, CA 94623

Date


02/04/11.

February 2011

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT**1. UNDERTAKING DESCRIPTION AND LOCATION**

District	County	Route	Post Miles	Unit	E-FIS Project Number	Phase
04	SF	I-80	7.8-8.1 (KP)	L1C0	04-0002-0507 EA 3A640	0
<i>District</i>	<i>County</i>	<i>Funding Source</i>	<i>Federal-Aid Proj. No.</i>	<i>Location</i>	<i>E-FIS Proj. No</i>	<i>Phase</i>

For Local Assistance projects off the highway system, use headers in italics)

Project Description:

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

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

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

Build alternatives have been proposed to address the geometric and operational deficiencies of the existing on- and off-ramps and their effects on the SFOBB (I 80) mainline without degrading the mainline operation as compared to no action. The proposed project is located between post-mile (PM) 7.6 and 8.1 beginning at the east portal of the YBI tunnel and ending at the east end of the Transition Structure portion of the new SFOBB. The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span.¹

In 2009, AECOM prepared an HPSR for the project described above. The 2009 HPSR assessed cultural resources in the project area for NRHP and CRHR eligibility. Five properties were identified as eligible or listed in the NRHP or the CRHR. These included:

- CA-SFr-04/H DOE 8/13/1998
- Quarters 8 DOE September 1998
- Quarters 10 (and contributing Building 267) Listed 2/26/08
- The Senior Officers Historic District Listed 2/26/2008
- San Francisco Oakland Bay Bridge Listed 8/13/01

¹ The SFOBB Transition Structure is the section of the new bridge located between the west end of the Self-Anchored Suspension (SAS) span and the east end of the SFOBB viaduct on Yerba Buena Island. It allows bridge traffic to transition between the single-deck SAS span and the double-deck viaduct prior to entering, or after exiting the YBI tunnel.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT

The proposed project was also found to adversely affect historic resources. The State Historic Preservation Officer (SHPO) concurred with the report findings of eligibility and effects in a letter dated February 8, 2010 (Attachment D). A draft MOA has been prepared that contains mitigation stipulations to address the adverse effect caused by the project. The proposed mitigation includes relocation of Quarters 10 and Building 267 (under Alternative 2b) to either of two possible sites on Yerba Buena Island. As a result, two discontinuous APEs were established and this supplemental HPSR has been prepared to address any properties or resources that may be present.

Three alternatives are currently under consideration for the proposed project and presented in the DEIR/DEIS, Alternatives 2b, Alternative 4, and the No Action Alternative. However, only one alternative (Alternative 2b) would require the removal of Quarters 10 and Building 267. Information on the alternatives and their effects on historic properties can be found in the HPSR (2009) and FOE (2009). This HPSR addresses only the supplemental APEs.

- **Alternative 2b**

Alternative 2b would include removal of the existing westbound on- and off-ramps on the east side of YBI, construction of a westbound loop on-ramp from Macalla Road on the east side of YBI, and construction of a westbound off-ramp to Macalla Road on the east side of YBI.

Under Alternative 2B, the westbound on- and off-ramps would terminate at Macalla Road where Quarters 10 and Building 267 are currently located.² Per MOA Quarters 10 and Building 267 would be relocated prior to construction of the ramps at Macalla Road.

Two building relocation sites on YBI (Building Move Site #1 and Building Move Site #2) have been proposed as potential locations for Quarters 10 and Building 267.

The California Department of Transportation (Caltrans), acting as the lead agency under the delegated authority of the Federal Highway Administration, is providing the project oversight as federal funds are involved. Caltrans' oversight is intended to ensure that this undertaking is carried out in a manner consistent with Caltrans' responsibilities under the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California*.

² Quarters 10 and Building 267 (a contributing garage) are listed in the National Register of Historic Places and significant at the local level under Criterion C, as a significant example of mid-twentieth century residential architecture.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT**2. AREA OF POTENTIAL EFFECTS**

The initial Area of Potential Effects (APE) for the project was established in consultation with Janet Pape, Caltrans District 4 Archaeologist, Mary K. Smith, Caltrans District 4 Architectural Historian, and Jack Siau, Project Manager/Local Assistance Engineer, on 10/21/08, 10/23/08, and 10/24/08. These maps are appended to the 2008 Historic Property Survey Report. The Supplemental APE maps are described below.

The Supplemental APE was established based upon information provided by AECOM project engineers regarding: 1) the anticipated location of the buildings on the two potential relocation sites; and 2) the process for relocating the buildings from their current location to either relocation site. The existing paved roads would be used to transport the buildings. For the purposes of this analysis, it is assumed that relocation would require partial dismantling of the structures. This approach would allow relocation without the need to create new paths of travel or otherwise cause ground disturbance beyond the areas where reconstruction would occur. Project engineers were asked to define the area within which construction activities would occur for each of the relocation sites. The boundaries shown on the APE map correspond to the area defined by the project engineers, inclusive of staging areas.

The revised discontinuous APE consists of two separate parcels (each less than 1 acre). These consist of Building Move Site #1 located near the south end of the isthmus that connects Treasure Island and Yerba Buena Island and Building Move Site #2 located on the upper elevation of Yerba Buena Island on Yerba Buena Drive. These two parcels are intended for the relocation of two related historic buildings associated with the U.S. Naval Station Treasure Island that would be adversely affected under an Alternative of the Project. In order to mitigate the adverse effects, it has been proposed that Quarters 10 and associated Building 267 (garage) be moved to one of the two potential sites

The supplemental archaeological APE (Map 2a) was established as generally following the maximum possible area of direct impact resulting from the relocation of Quarters 10 and Building 267, including all necessary construction, easements, and staging areas.

Consistent with Caltrans policies and general cultural resource practices, the area for potential effect for the built environment encompassed areas that might be either directly or indirectly affected by construction; i.e., those areas within which the project could cause a change in character or use of historic properties. In setting the APE for this supplemental study, consideration was given to the potential for visual effects by placing Quarters 10/267 at either Building Move Site. The only historic properties in the viewshed of Building Move Site #1 are Exposition Buildings 1, 2, and 3 on Treasure Island, which are at least 1,300 feet away from this site. The principal view from Expo Building 1 is to the west toward San Francisco, and views from the front courtyard, entry driveway and main entrance toward Building Move Site #1 are all blocked by the curving south wing of the building. Expo Buildings 2 and 3 were built as airplane hangars facing west toward San Francisco. Views to the south toward Building Move Site #1 would be similar to the current condition, with the site screened by shrubbery and trees. There are no historic properties in the vicinity of Building Move Site #2. Only those resources located within the architectural APE were included in the survey.

The supplemental APE for historic architectural resources includes two areas building relocation sites, including all necessary construction, easements, and staging areas (Map 2b).

3. CONSULTING PARTIES / PUBLIC PARTICIPATION**X** Local Government (*Head of local government, Preservation Office / Planning Department*)

On January 18, 2011, AECOM sent letters to the local government agencies listed below. As of the date of this supplemental report no responses were received. Copies of the letters are provided in Appendix B of the ASR.

- San Francisco Historic Preservation Commission
- San Francisco Planning Department
- San Francisco County Transportation Authority

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT

X Native American Tribes, Groups and Individuals

On January 20, 2011, AECOM sent updated letters to the tribes, groups and individuals listed below. Phone calls were made on February 2, 2011. As of the date of this report no responses were received. Copies of the letters are provided in Appendix B of the ASR.

- Jakki Kehl
- Amah/Matsun Tribal Band
- Indian Canyon Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- The Ohlone Indian Tribe
- Trina Marine Ruano Family

On February 3, 2011, AECOM received the updated NAHC response which included two additional contacts from that of the 2008 response:

- Linda G. Yamane
- Jean-Marie Feyling

Emails were sent to both contacts and supplemented with hardcopy letters. Copies of the emails/letters are provided in Appendix B of the ASR.

X Native American Heritage Commission

- Updated request for search of files: January 18, 2011. Response received February 3, 2011.

X Local Historical Society / Historic Preservation Group *(also if applicable, city archives, etc.)*

On January 18, 2011, AECOM sent letters to the organizations listed below. As of the date of this supplemental report one response has been received via email from BRAC PMO West with a request to receive a draft of this HPSR.

Copies of the letters are provided in Appendix B of the ASR.

- Alameda County Historical Society.
- Alameda County Parks, Recreation, and Historical Commission
- BRAC PMO West
- California Heritage Council
- California Historical Society
- California Preservation Foundation
- National Park Service, Pacific West Region Office
- National Trust for Historic Preservation Western Office
- Oakland Cultural Heritage Survey
- Oakland Heritage Alliance
- Oakland Landmarks Preservation Advisory Board
- San Francisco Architectural Heritage
- San Francisco Beautiful
- San Francisco History Association
- San Francisco Museum and Historical Society
- USCG Sector San Francisco, Engineering Department

X Public Information Meetings *(list locations, dates below and attach copies of notices)*

- Public Scoping Meeting. Location: Port of San Francisco office, Bayside Conference Room. Pier 1, The Embarcadero, San Francisco, CA 94111. Date: September 24, 2008 from 6:30 to 8:00 p.m.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT

- Coordination plan letters sent out on September 18, 2008.
- Public hearing (anticipated) March 2011.

– Other

4. SUMMARY OF IDENTIFICATION EFFORTS

- | | |
|--|---|
| <ul style="list-style-type: none"> <input checked="" type="checkbox"/> National Register of Historic Places <input checked="" type="checkbox"/> California Register of Historical Resources <input checked="" type="checkbox"/> California Inventory of Historic Resources <input checked="" type="checkbox"/> California Historical Landmarks <input checked="" type="checkbox"/> California Points of Historical Interest – State Historic Resources Commission – <input checked="" type="checkbox"/> Caltrans Historic Highway Bridge Inventory <input checked="" type="checkbox"/> Archaeological Site Records [<i>List names of Institutions & date below</i>] • Northwest Information Center, records search on November 24, 2008. • An update to the existing records search conducted at the Northwest Information Center on January 18, 2011. – Other sources consulted [<i>e.g., historical societies, city archives, etc. List names and dates below</i>] • <input checked="" type="checkbox"/> Results: (<i>provide a brief summary of records search and research results, as well as inventory findings</i>) | <p>Month & Year: 1979-2002 & supplements</p> <p>Year: 1992 & supplemental information to date</p> <p>Year: 1976</p> <p>Year: 1995 & supplemental information to date</p> <p>Year: 1992 & supplemental information to date</p> <p>Year: 1980-present, minutes from quarterly meetings</p> <p>Year: 2006 & supplemental information to date</p> <p>[<i>List names of Institutions & date below</i>]</p> |
|--|---|

This HPSR is focused upon two supplemental sites that have been added to the project APE since 2008. In 2008, the NWIC record search demonstrated that a total of 23 cultural resources investigations have been conducted within and in the vicinity (approximately 1 mile radius) of the initial project APE. Prior to the efforts outlined in the supplemental Historic Property Survey Report, there were at least 8 studies that have occurred directly within the Yerba Buena Island Ramps Improvement Project APE; the earliest documented investigations conducted within the vicinity of the initial project area APE consist of Rudo (1982) and Roop (1984). With the exception of Rudo's thesis, each of these prior studies was related to Caltrans' seismic retrofit of the Bay Bridge and the Navy's privatization efforts regarding Yerba Buena Island.

The majority of the 8 studies conducted within the Yerba Buena Island Ramps Improvement Project Initial APE consisted primarily of archaeological investigations and treatment plans. Almost the entire initial APE was subjected to complete survey coverage by PAR in 1996. A large portion of the initial APE was also previously surveyed in 1995 by Glenn Gmoser. These previous studies revealed that one archaeological site, CA-SFR-04/H, had been recorded within the initial YBI APE. One historical archaeological resource, P-38-004322, which consists of sections of a retaining wall and weir with inscriptions by prisoners-of-war who built it in the 1940s, is located outside the initial APE. This resource was evaluated to be ineligible for inclusion in the National Register (Supernowicz 2003). See 2009 ASR for Archaeological site record citations.

With regards to the two supplemental APE sites that are the subject of this HPSR, at least two previous cultural studies provided full coverage. These included the aforementioned 1996 PAR analysis and a research design conducted in 2003 by Southwest Division, Naval Facilities Engineering. No prehistoric or historic-era sites, features, artifacts, buildings, or structures were identified within or in the immediate vicinity of the Building Move sites by either the PAR investigation or the Southwest Division, Naval Facilities Engineering report. The 2011 records search yielded no additional no additional prehistoric or

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT

historic-era sites, features, artifacts, buildings, or structures within or in the immediate vicinity of the Building Move Sites. A third architectural study was completed by JRP in 1997 and covered the two supplemental APE sites. The results of which are described in the next section.

A supplemental archaeological field survey was conducted in January 2011 as part of the supplemental ASR (2011).

5. PROPERTIES IDENTIFIED

Properties **previously determined not eligible** for inclusion in the National Register of Historic Places are present within the Project APE. *(Include date of determination):*

- Building 60
- Building 61

JRP Historical Consulting, LLC (JRP) previously identified and evaluated these resources in 1997 as part of the report entitled "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." That report, completed as part of the U.S. Navy's Base Realignment and Closure (BRAC) Section 106 requirements, concluded that neither of these two buildings met eligibility criteria. SHPO concurred with the findings of the JRP report, as it pertained to Buildings 60 and 61, on October 15, 1997 (SHPO Reference USN 970708A). On January 19, 2011 AECOM architectural historian Mark Bowen examined Buildings 60 and 61 and found that the conditions of the previous analysis remained valid.

6. LIST OF ATTACHED DOCUMENTATION

- Project Vicinity, Location, and APE Maps (Attachment A)
- First Supplemental Archaeological Survey Report (ASR)
- AECOM, February 2011, prepared by Brian Ludwig and Charlane Gross; peer reviewed by Janet Pape, Caltrans, PQS Prehistoric Archaeology, Lead; Historical Archaeology, Co PI (Attachment C)
- DPR recordation Forms for Building 60 and Building 61 and Table 3.2 from 1997 JRP report. (Attachment B)
- SHPO Correspondence. (Attachment D)

7. HPSR to File

- No properties requiring evaluation** are present within the Supplemental Project APE.

8. HPSR to SHPO

- Not applicable.

9. Findings for State-Owned Properties

- Caltrans has determined that there are **no State-owned cultural resources** within the Supplemental Project APE.

10. CEQA IMPACT FINDINGS

- Not applicable; Caltrans is not the lead agency under CEQA.

SUPPLEMENTAL HISTORIC PROPERTY SURVEY REPORT

11. SUPPLEMENTAL HPSR PREPARATION AND DEPARTMENT APPROVAL

Prepared by: *(sign on line)*

Mark Bowen

2/04/2011

Consultant / discipline:

Mark Bowen, Architectural Historian

Date

Affiliation

AECOM, Sacramento, CA

Reviewed for approval by: *(sign on line)*

Janet Pape

2/4/11

District 4 Caltrans PQS
discipline/level:

Janet Pape, Branch Chief, SFOBB
Archaeology

Date

PQS Prehistoric Archaeology, Lead; Historical
Archaeology, Co-PI
Office of Cultural Resource Studies
Caltrans District 4

Approved by: *(sign on line)*

Mary K. Smith
for:

02/04/11.

District 4 EBC:

Elizabeth Kruse Greene Branch Chief, South
Counties

Date

PQS Principal Architectural Historian
Office of Cultural Resource Studies
Caltrans District 4

ATTACHMENT A

Maps

**Map 1:
Project Vicinity and Location**

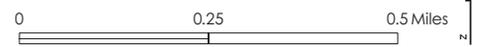
**Yerba Buena Island
Ramps Improvement Project**



Portion of USGS topographic quadrangles
Oakland West and San Francisco North

1/11

Project Location Supplemental Project Area Transition Structure Portion of SFOBB



Map 2a: Supplemental Archeological APE (Alternative 2b)



	2/1/11
Caltrans Project Manager	Date
	1/31/11
Caltrans Archaeologist	Date
	2/2/11
AECOM Project Manager	Date

Alternative 2b Proposed Ramps

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

 Area of Potential Effect Signed October 24, 2008

 Supplemental Area of Potential Effect

Separate Project Currently Under Construction

-  San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
-  Transition Structure Portion of SF0BB



Map 2b: Supplemental Architectural APE (Alternative 2b)



	2/1/11
Caltrans Project Manager	Date
	1/31/11
Caltrans Architecture Historian	Date
	2/2/11
AECOM Project Manager	Date

- Alternative 2b Proposed Ramps**
- █ Proposed West Bound Off-Ramp
 - █ Proposed West Bound On-Ramp
 - █ Proposed Macalla Road Improvements

- Area of Potential Effect Signed October 24, 2008
- Supplemental Area of Potential Effect

- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
 - Transition Structure Portion of SFOBB

ATTACHMENT B

Forms

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4 *Resource Name or #: (Assigned by recorder) Building 60

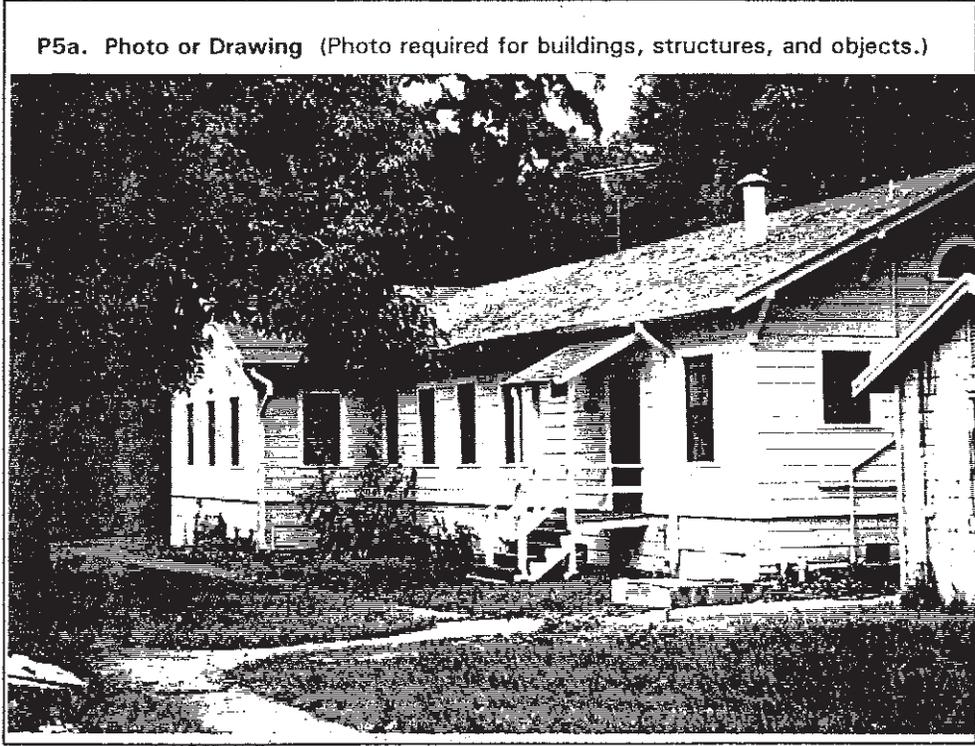
P1. Other Identifier: Officer's Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)
*b. USGS 7.5' Quad Oakland West Date 1980 T____; R____: ____ ¼ of ____ ¼ of Sec ____; ____ B.M.
c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100
d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN
*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
Building 60 is a woodframe duplex residence, with a side gabled roof and front gable ells. The cross gable roofs that extend with the short ell wings add some variation to the main long side gable body of the building. Some additional projecting elements are seen in the form of the house: A small gabled porch at the east end, a small shed-roofed stairway on the side near the west end, and an enclosed solarium at the center of the rear (south) side. See **Photograph 2**. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP3 Multiple Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo:
(View, date, accession #) _____
East side, camera facing
southwest.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1917

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96
*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Building 60

B1. Historic Name: Isolation Ward
B2. Common Name: Building 61, Officer's Quarters
B3. Original Use: Isolation Ward B4. Present Use: Officer's Quarters
*B5. Architectural Style: Bungalow
*B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1917. 1917-1929 -- Isolation ward. 1929-1945 -- Quarters. 1945-1952 -- Civilian quarters. 1952-Present -- Officer's quarters.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____
*B8. Related Features: _____

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
*B10. Significance: Theme Naval Station Area Yerba Buena Island, San Francisco
Period of Significance 1917-1947 Property Type Building Applicable Criteria n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Building 60 does not appear to be eligible for listing in the National Register because it is not significant. While it retains a fair degree of integrity, the building is not significant architecturally and does not appear to be associated with events or persons important within the context of the Navy operations at Yerba Buena Island.

Buildings 60, along with nearby Buildings 61 and 62 were built on the western slope of Yerba Buena Island in 1917 as isolation wards. While little is known about the history of the buildings, it is presumed they were used to house enlisted personnel with communicable diseases. All hospital-related functions were clustered in this area, and were built in the period, 1917-1919, when the Naval Training Station on Yerba Buena Island experienced a massive build-up as part of the general naval preparedness program. The hospital, or dispensary, was situated on Yerba Buena Road, in a site that is now vacant. Buildings 60, 61, and 62 were used for their intended purposes only for a brief time. (See continuation sheet.)

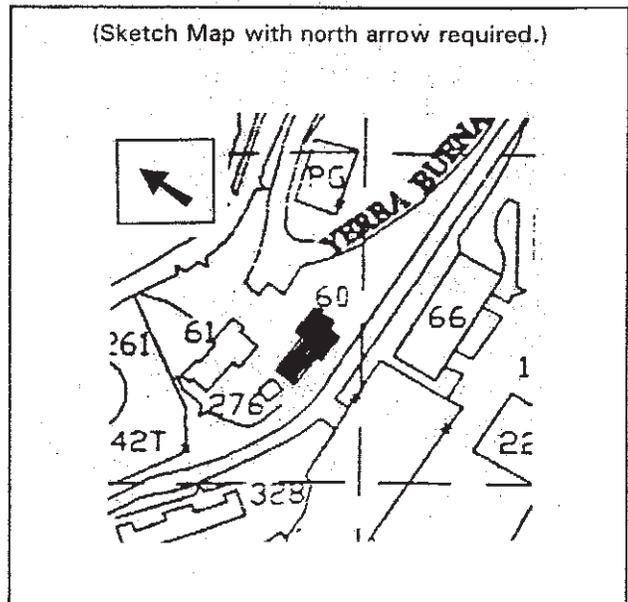
B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks: _____

*B14. Evaluator: Stephen D. Mikesell
*Date of Evaluation: January 1997

(This space reserved for official comments.) ;



DESCRIPTION (continued)

A boxed bay with hipped roof extends from the south side cross gable end. A small gabled room extends out from the west end of the house. Details can be found to place the house in the Craftsman era during which it was built: Knee braces are placed under the gable end eaves and a post and beam style bracing supports the east end porch gable.

The house is sheathed in drop siding and roofed in composition shingles. Vertical window openings contain aluminum sash 1/1 double hung windows that are the same size replacement for original 1/1 double hung wooden sash windows. Original doors have six-light fixed window panes. A small woodframe workshop, coordinated with the house in roof pitch and siding, sits just to the north of the house across a pathway. See **Photo 3**. The workshop has six-pane fixed windows.

SIGNIFICANCE (continued)

The Naval Training Station program on the island was reduced dramatically in 1919 and the station was closed in 1923. In 1920, the three buildings were re-used as quarters, initially for civilian employees of the base. The re-use required a relatively minor rehabilitation of the buildings. Although no historic photographs were found for Building 60, historic views of Building 61 (which is very similar) indicate that the re-use was accomplished with few structural or architectural changes. In the years since 1920, the building has been upgraded on several occasions; these more recent upgrade account for the notable changes to the building, including installation of aluminum windows and installation of a glazed bay at the rear.

Building 60 does not appear to be significant within the context of the history of the island. It was used as an isolation ward for a very short period of time. It has since been used as quarters for civilian employees and later as officers' quarters. It does not appear to be important in any of its three uses (isolation ward, civilian quarters, or officers' quarters). In the first respect, the use was too brief to constitute significance. In terms of civilian quarters, that context is far better represented by Quarters 9, an architecturally significant building that was actually constructed for that purpose. Within the context of officers' quarters, the building is far less important than Quarters 1-8, all of which are architecturally significant and which were built for that purpose. Lacking significance, Building 60 does not meet the criteria for listing in the National Register.



Photo 2. Rear of Building 60.



Photo 3. Utility building at north end of building 60.

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 4

*Resource Name or #: (Assigned by recorder) Building 61

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T____; R____; _____ ¼ of _____ ¼ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
Building 61 is a woodframe, gable-roofed residence built at this site in 1917. It and nearby Buildings 60 and 62 were built as "isolation wards" on the western slope of Yerba Buena Island, near the location of the 1917 dispensary building (the early dispensary building was demolished in the mid-1930s). These three buildings were built as "isolation wards," presumably to house enlisted personnel with communicable diseases. The three buildings were very similar upon construction but have very different appearances today, owing to modifications associated with their re-use as single family residences. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
View, date, accession #) _____
West elevation.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1917

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet
 Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI# _____

Page 2 of 4

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Building 61

- B1. Historic Name: Isolation Ward
B2. Common Name: Building 61. Officers' Quarters
B3. Original Use: Isolation ward B4. Present Use: Officers' quarters
*B5. Architectural Style: Bungalow
*B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1917. 1917-1929 -- Isolation ward. 1929-1945 -- Quarters. 1945-1952 -- Civilian quarters. 1952-present -- Officers' quarters.
B7. Moved? No Yes Unknown. Date: _____ Original Location: _____
*B8. Related Features: _____

- B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
*B10. Significance: Theme Naval Station Area Yerba Buena Island, San Francisco

Period of Significance 1917--1947 Property Type Building Applicable Criteria n/a
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
Building 61 does not appear to be eligible for listing in the National Register because it is not significant. While it retains a fair degree of integrity, the building is not significant architecturally and does not appear to be associated with events or persons important within the context of the Navy operations at Yerba Buena Island.

Buildings 61, along with nearby Buildings 60 and 62 were built on the western slope of Yerba Buena Island in 1917 as isolation wards. While little is known about the history of the buildings, it is presumed they were used to house enlisted personnel with communicable diseases. All hospital-related functions were clustered in this area, and were built in the period, 1917-1919, when the Naval Training Station on Yerba Buena Island experienced a massive build-up as part of the general naval preparedness program. (See continuation sheet.)

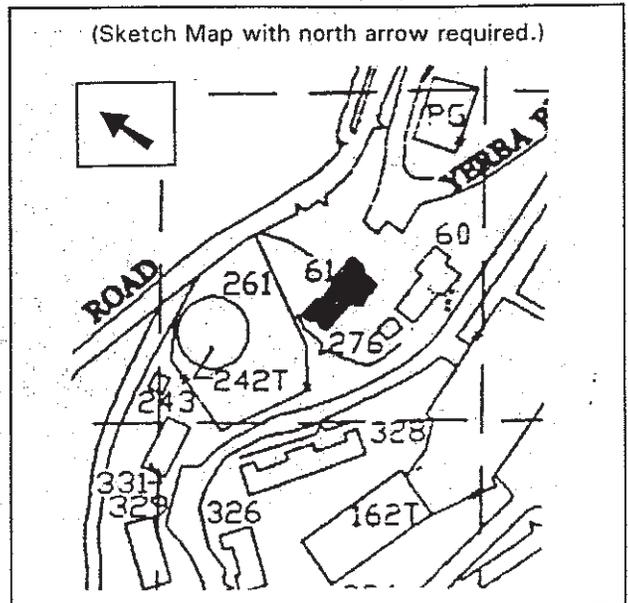
- B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

- *B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

- *B14. Evaluator: Stephen D. Mikesell
*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

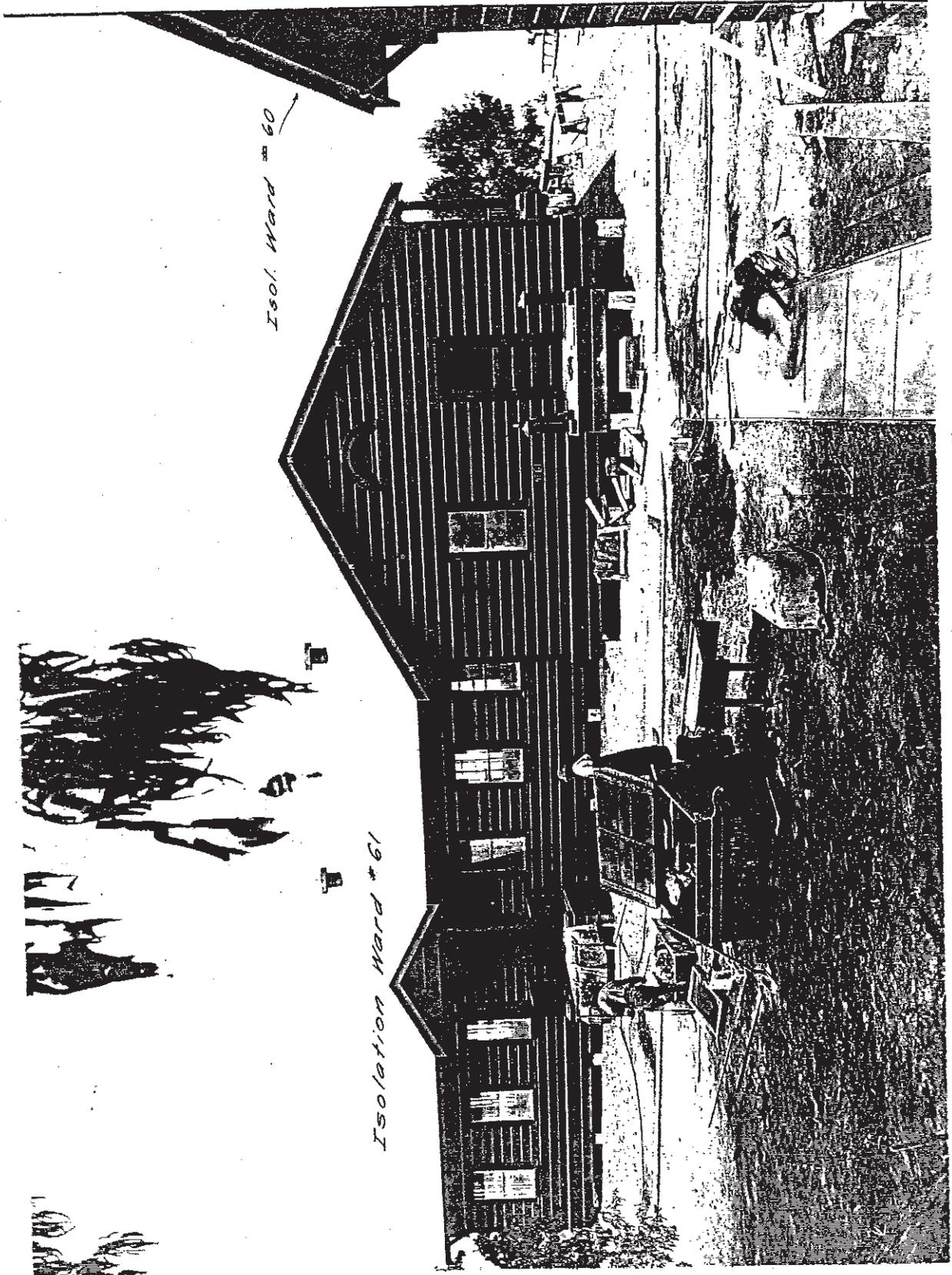
DESCRIPTION (continued)

Building 61 is the least modified of the three buildings. It is sided in its original horizontal board, "drop" siding. The building is side gabled with a front gabled ell at the facade and two ells at the rear. Circle and half-circle vents are found in the gable ends. Eaves are moderate with knee brace brackets placed under them at the gable ends. The front facade facing east has at right an enclosed solarium with multiple pane small fixed lights. The main entry has a small stairway with solid railing leading to the recessed front door with transom and sidelights. The center of the south side features a small gabled portico covering a small stairway and porch. The north side, with an ell at each end, has three -part windows in each ell and at the center. Other windows on the house are predominantly 1/1 double hung aluminum sash, replacements to the original 1/1 double hung wooden sash.

SIGNIFICANCE (continued)

The hospital, or dispensary, was situated on Yerba Buena Road, in a site that is now vacant. Buildings 60, 61, and 62 were used for their intended purposes only for a brief time. The Naval Training Station program on the island was reduced dramatically in 1919 and the station was closed in 1923. In 1920, the three buildings were re-used as quarters, initially for civilian employees of the base. An historic photograph of this building, reproduced here as **Photograph 2**, shows the building while still under construction in August, 1917. The re-use of this building for quarters necessitated relatively minor rehabilitation work to the building itself. In the years since 1920, the building has been upgraded on several occasions; these more recent upgrades account for the notable changes to the building, including installation of aluminum windows and installation of a glazed bay at the rear.

Building 61 does not appear to be significant within the context of the history of the island. It was used as an isolation ward for a very short period of time. It has since been used as quarters for civilian employees and later as officers' quarters. It does not appear to be important in any of its three uses (isolation ward, civilian quarters, or officers' quarters). In the first respect, the use was too brief to constitute significance. In terms of civilian quarters, that context is far better represented by Quarters 9, an architecturally significant building that was actually constructed for that purpose. Within the context of officers' quarters, the building is far less important than Quarters 1-8, all of which are architecturally significant and which were built for that purpose. Lacking significance, Building 61 does not meet the criteria for listing in the National Register.



Isol. Ward #60

Isolation Ward #61

Photo 2. Historic view of Building 61.

*Required Information

3.2. Buildings That Do Not Qualify for Listing in the National Register of Historic Places

Yerba Buena Island

Building #	Function	Date
57	Motel	1929
60	Officers' quarters	1917
61	Officers' quarters	1917
62	Officers' quarters	1917
66	Officers' quarters	1917
75	Storage	1918
77	Transformer	1918
105	Officers' quarters	1934
106	Officers' quarters	1934
107	Power house	1917
109	Officers' quarters	1934
111	Officers' quarters	1921
112	Officers' quarters	1921
113	Officers' quarters	1921
114	Officers' quarters	1921
115	Officers' quarters	1921
162	Water tank	1919
168	Water tank	1919
169	Oil tank	1916
170	Oil tank	1916
206	Garage & apartment	1944
207	Garage for Qtr. 9	1936
213	Unknown	1940
221	Prisoners' work shop	1943
225	Pump house	1938
227	Water tank	1938
229	Tower annex	1944
240	Officers' quarters	1944
242	Water tank	1944
243	Pump house	1944
253	Storage for qtr. 62	1945
254	Storage for qtr. 8	1945

ATTACHMENT C

Archaeological Survey Report

FIRST SUPPLEMENTAL ARCHAEOLOGICAL SURVEY REPORT
YERBA BUENA ISLAND RAMPS IMPROVEMENT PROJECT
YERBA BUENA ISLAND, SAN FRANCISCO COUNTY, CALIFORNIA
04-SF-80-PM 67.8/8.1

EA 04-3A640K

Prepared by:

AECOM
2020 L Street, Suite 400
Sacramento, California 95811
(916) 414-5800
January 27, 2010


Prepared by: _____ February 4, 2011
Brian Ludwig, Ph.D., Senior Archaeologist Date


Reviewed by: _____ February 4, 2011
Charlane Gross, M.A., Senior Archaeologist Date

Prepared for:

Eric Cordoba, Project Manager
SFCTA
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102


Approved by: _____ February 4, 2011
Janet Pape, Branch Chief, SFOBB Archaeology Date
PQS Prehistoric Archaeology, Lead; Historical Archaeology, Co-PI
Office of Cultural Resources Studies
Caltrans District 4
111 Grand Avenue, P.O. Box 23660
Oakland, California, 94623

February 2011

TABLE OF CONTENTS

List of Abbreviated Terms	ii
Summary of Findings	iii
Proposed Undertaking	iii
Purpose and Scope of the Survey	iii
Chapter 1 Introduction	1
1.1 Archaeological Study Team	1
Chapter 2 Project Location and Description	2
2.1 Project Location	2
2.2 Project Description	2
Chapter 3 Sources Consulted	4
3.1 Summary of Methods and Results.....	4
3.2 Records Search.....	4
3.3 Summary of Native American Consultation	6
Chapter 4 Background	7
Chapter 5 Field Methods	8
Chapter 6 Study Findings and Conclusions	9
6.1 Unidentified Cultural Materials.....	9
Chapter 7 References Cited	10

TABLES

Table 1 Previous Investigations within the APE.....	6
---	---

APPENDICES

Appendix A	Project Maps
Appendix B	Consultation

LIST OF ABBREVIATED TERMS

APE	Area of Potential Effects
Authority	San Francisco County Transportation Authority
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
CRHR	California Register of Historical Resources
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
PM	Post Mile
Project	Yerba Buena Island Ramps Improvement Project
SAS	Self-Anchored Suspension
SFOBB	San Francisco/Oakland Bay Bridge
TI/YBI	Treasure Island and Yerba Buena Island
YBI	Yerba Buena Island

SUMMARY OF FINDINGS

This supplemental report documents efforts to comply with state and federal cultural resource regulations for the revised Yerba Buena Island Ramps Improvement Project within Yerba Buena Island (YBI), California (Appendix A, Maps 1 and 2). The additional work was made necessary by changes in the Area of Potential Effects (APE) for the project; the revision consisted of the inclusion of two proposed Building Move Site locations intended for the possible relocation of two significant historic-era buildings. AECOM conducted an archaeological survey of the project APE on January 19, 2011 (Appendix A, Map 3). Prior to the survey, AECOM conducted a records search at the Northwest Information Center of the California Historical Resources Information System and sent consultation request letters to Native Americans identified by the Native American Heritage Commission. One historical archaeological resource (P-38-004322) is located within ¼ mile of the revised APE. The AECOM survey did not identify any additional cultural resources within the revised APE.

PROPOSED UNDERTAKING

The San Francisco County Transportation Authority (Authority) proposes to implement the Yerba Buena Island Ramps Improvement Project (Project) within Yerba Buena Island, San Francisco County, California (Appendix A, maps 1, 2). The overall Project APE is generally located in the eastern end of YBI where it facilitates the midpoint of the San Francisco/Oakland Bay Bridge. This bridge spans the San Francisco Bay, provides a connection between the City of Oakland and the City of San Francisco, and provides access to facilities on YBI and Treasure Island (Appendix A, Map 2). The Authority is planning to replace the existing westbound on- and off-ramps located on the eastern side of YBI with new ramps that replicate the functional role of the current ramps. The replacement ramps are needed to address seismic, traffic safety, and design standards.

The revised discontinuous APE consists of two separate parcels (each less than 1 acre). These consist of Building Move Site #1 located near the south end of the isthmus that connects Treasure Island and Yerba Buena Island and Building Move Site #2 located on the upper elevation of Yerba Buena Island on Yerba Buena Drive. These two parcels are intended for the relocation of two related historic buildings associated with the U.S. Naval Station Treasure Island that would be adversely affected under an Alternative of the Project. In order to mitigate the adverse effects, it has been proposed that Quarters 10 and associated Building 267 (garage) be moved to one of the two potential sites (Appendix A, Map 2).

The California Department of Transportation (Caltrans), acting as the lead agency under the delegated authority of the Federal Highway Administration, is providing the project oversight as federal funds are involved. Caltrans' oversight is intended to ensure that this undertaking is carried out in a manner consistent with Caltrans' responsibilities under the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California*.

PURPOSE AND SCOPE OF THE SURVEY

The proposed Project would be subject to the cultural resources requirements of the California Environmental Quality Act (CEQA). In addition, because of the use of Metropolitan Transportation Commission funding (federal funds administered by Caltrans), provisions of Section 106 of the National Historic Preservation Act are applicable to the cultural resources study. In accordance with both CEQA and Section 106 standards, AECOM cultural resources specialists conducted archival research and Native American consultation as well as field investigations. AECOM architectural historians and an archaeologist conducted an intensive field survey of the revised APE on January 19, 2011. All work was completed following the guidance in the Environmental Handbook, Volume 2, Cultural Resources of the Standard Environmental Reference (2008). Additional survey will be required if the project changes to include areas not previously surveyed.

It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site(s) cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.

This document contains information on the nature and location of cultural resources. In accordance with Section 9 of the Archaeological Resources Protection Act of 1979 (16 USC §470hh) and Section 304 of the National Historic Preservation Act of 1966 (16 USC §470w-3), this information is privileged and is intended for limited distribution only.

CHAPTER 1 INTRODUCTION

One of the San Francisco County Transportation Authority (Authority) proposed alternatives is Alternative 2b of the Yerba Buena Island Ramps Improvement Project (Project) within Yerba Buena Island (YBI), San Francisco County, California (Appendix A, Maps 1 and 2). The overall Project Area of Potential Effects (APE) is generally located in the eastern end of YBI where it facilitates the midpoint of the San Francisco/Oakland Bay Bridge (SFOBB). This bridge spans the San Francisco Bay, provides a connection between the City of Oakland and the City of San Francisco, and provides access to facilities on YBI and Treasure Island. The proposed ramps will be elevated structures with precise pier locations to be determined at a later date. AECOM archaeologists conducted an intensive archaeological inventory of the initial APE on January 12, 2009. Subsequent revisions to the APE consisted of the addition of two proposed building move sites to accommodate the relocation of two historic-era buildings (Quarters 10 and Building 167) associated with the U.S. Naval Station Treasure Island. AECOM cultural resources specialists conducted archival research, Native American consultation, and an intensive field survey for the revised APE. The field survey intended to document the presence of previously-unrecorded cultural resources was conducted on January 19, 2011.

1.1 ARCHAEOLOGICAL STUDY TEAM

AECOM conducted this study according to current professional and legal standards for archaeological investigations. The study team consisted of professionally trained archaeologists and historians meeting the Secretary of the Interior's Professional Qualification Standards 36 Code of Federal Regulations (CFR) Part 61; 48 FR 44716 and technical support staff. The following individuals were key participants in this effort:

Person	Position	Qualifications
Brian Ludwig, Ph.D.	Senior Archaeologist	27 yrs. professional and academic experience, 9 yrs. California/Nevada specialist in survey, data recovery, lithic analysis, human interments, Native American consultation.
Charlane Gross, M.A.	Senior Review	24 yrs. professional and academic experience, 13 years California, regulatory compliance, Native American consultation, federal and state agency coordination.
Mark Bowen, M.A	Senior Historian/Architectural Historian	14 yrs. professional experience in California history and architectural history. Specialist in architectural history, primary/secondary document research and context preparation.

CHAPTER 2 PROJECT LOCATION AND DESCRIPTION

2.1 PROJECT LOCATION

The San Francisco County Transportation Authority proposes to implement the Yerba Buena Island Ramps Improvement Project in Yerba Buena Island, San Francisco County, California (Appendix A, Map 1), in Caltrans District 4. The overall project APE is generally located in the eastern end of YBI where it facilitates the midpoint of the SFOBB. This bridge spans the San Francisco Bay, provides a connection between the City of Oakland and the City of San Francisco, and provides access to facilities on YBI and Treasure Island. The proposed project is located between Post Mile (PM) 7.8 and 8.1 starting at the east portal of the YBI tunnel and ending before the SFOBB Transition Structure, and is depicted on the U.S. Geological Survey Oakland West, CA topographic quadrangle map. The revised discontinuous APE consists of two separate proposed building move sites (Building Move Site #1 and Building Move Site #2). Building Move Site #1 is located near the south end of the isthmus that connects Treasure Island and Yerba Buena Island. Building Site #2 is located at a higher point of Yerba Buena Island's elevation along Yerba Buena Drive (Appendix A, Maps 1 and 2).

2.2 PROJECT DESCRIPTION

This YBI Ramps Improvement Project is separate and independent of the SFOBB East Span Seismic Safety Project, which is currently under construction and the Treasure Island and Yerba Buena Island (TI/YBI) Redevelopment Plan, which is currently undergoing its own environmental review process.

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

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

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

Alternatives have been proposed to address the geometric deficiencies of the existing on- and off-ramps. In addition to the no-build alternative, the proposed build alternatives would analyze the effects to the SFOBB (I-80) mainline structure and YBI. The proposed project is located between post-mile (PM) 7.6 and 8.1¹ beginning at the east portal of the YBI tunnel and ending at the east side of the Transition Structure portion of the new SFOBB.

¹ Kilometer Post (KP) 12.3 and 13.2.

The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span.²

The previous reports including: Historic Property Survey Report Yerba Buena Island Ramps Improvement Project Yerba Buena Island, San Francisco County, California 04-SF-80-PM 7.6/8.1 (2009); Archaeological Survey Report Yerba Buena Island Ramps Improvement Project Yerba Buena Island, San Francisco County, California 04-SF-80-PM 7.6/8.1 (2009); and Finding of Effect Yerba Buena Island Ramps Improvement Project Yerba Buena Island, San Francisco County, California 04-SF-80-PM 7.6/8.1 (2009), identified historic properties within the original APEs and assessed the potential effects of each alternative on the historic properties. This supplemental ASR addresses the potential for historic properties within the supplemental APEs only.

Three alternatives are currently under consideration for the proposed project. However, only one alternative would require the relocation of Quarters 10 and Building 267 to one of the two proposed supplemental parcels:

2.2.1 ALTERNATIVE 2B

Alternative 2b would include removal of the existing westbound on- and off-ramps on the east side of YBI, construction of a westbound loop on-ramp from Macalla Road on the east side of YBI, and construction of a westbound off-ramp to Macalla Road on the east side of YBI (see Appendix A, Map 2).

Two building move sites (Building Move Site #1 and Building Move Site #2) have been proposed as potential locations for Quarters 10 and Building 267. One of these sites would be chosen under this alternative. Additional information regarding the No Build Alternative and Alternative 4 is described in the previous Archaeological Survey Report (ASR) document (Caltrans 2009).

² The SFOBB Transition Structure is the name of a section of the new Bay Bridge. The Transition Structure will connect the Self-Anchored Suspension (SAS) span to Yerba Buena Island, and will transition the East Span's side-by-side road decks to the upper and lower decks of the YBI tunnel and West Span.

CHAPTER 3 SOURCES CONSULTED

3.1 SUMMARY OF METHODS AND RESULTS

This supplemental study included pre-field research consisting of a records search conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System, Native American consultation, an intensive field survey of the project APE, and documentation of the investigation.

3.2 RECORDS SEARCH

The research into cultural resources issues for the project began with a records search of pertinent cultural resource information for the overall APE (which included the revised APE) conducted by Lisa Hagel of the NWIC on 24 November, 2008. Given that the initial records search request was conducted in November 2008, an updated records search was requested for the purposes of this supplemental study. The supplemental request was made on January 18, 2011.

The 2008 search was conducted at the NWIC which is located at Sonoma State University, Department of Anthropology, in Rohnert Park, California. The records search included review of properties listed in the National Register of Historic Places (NRHP) (National Park Service 1996) and the California Register of Historical Resources (CRHR) (State of California 1976), numerous other state and county historic resource listings, and historic plat maps and USGS maps. The records search included, but was not necessarily restricted to, a review of select publications, maps, and properties listed in the following sources:

- ▶ *National Register of Historic Places* (National Park Service 1996 and updates),
- ▶ *California Register of Historical Resources* (State of California 1976 and updates),
- ▶ *California Points of Historical Interest* (State of California 1992 and updates),
- ▶ *California Historical Landmarks* (State of California 1990),
- ▶ *Directory of Properties in the Historical Resources Inventory* (State of California 2008),
- ▶ *California Inventory of Historic Resources* (State of California March 1976).

One historical archaeological resource, P-38-004322, which consists of sections of a retaining wall and weir with inscriptions by prisoners-of-war who built it in the 1940s, is located in the general vicinity of the revised APE. This resource was discovered and recorded in 2003 (Erghman and Lee 2003) during hillside vegetation removal near Clipper Cove east of the YBI Ramps project for the SFOBB New East Span Seismic Safety Project. This resource was evaluated to be ineligible for inclusion on the National Register (Supernowicz 2003).

The NWIC record search demonstrated that a total of 23 cultural resources investigations have been conducted within and in the vicinity (approximately 1 mile radius) of the revised Project APE. Before the efforts outlined in this current Supplemental Archaeological Survey Report, there were at least eight studies that have occurred directly within the overall Yerba Buena Island Ramps Improvement Project APE (Table 1); the earliest documented investigations conducted within the vicinity of the overall Project area APE consist of Rudo (1982) and Roop (1984). With the exception of Rudo's thesis, each of these prior studies was related to Caltans' seismic retrofit of the Bay Bridge and the Navy's privatization efforts regarding Yerba Buena Island.

Of the eight above-mentioned studies, two - PAR (1997) and the Southwest Division, Naval Facilities Engineering (2003), included the two proposed Building Move sites. The PAR study identified a total of 21 isolated historic-era features related to naval base construction and operations. The 2003 Southwest Division, Naval Facilities Engineering report consisted of a research design. No prehistoric or historic-era sites, features, artifacts, buildings, or structures were identified within or in the immediate vicinity of the Building Move sites by either the PAR investigation or the Southwest Division, Naval Facilities Engineering report.

**Table 1
Previous Investigations within the Revised APE and Vicinity**

NWIC Study Nr.	Author	Date	Title
6160	Mark Ogden Rudo - San Francisco State University	1982	The Prehistory of San Francisco (Thesis)
18218	Glenn J.Gmoser – Caltrans	1995	Archaeological Survey Report, San Francisco – Oakland Bay Bridge Seismic Retrofit
19317	Blossom Hamusek-McGann, Mary Maniery, and Cindy Baker – PAR Environmental Services	1997	Archaeological Inventory and Assessment of Naval Station Treasure Island Disposal and Reuse Project, San Francisco County, California
24600	John Nelson, Stephen Mikesell, Dan Peterson, and Mark Ketchum	1999	HAER, San Francisco Oakland Bay Bridge, HAER NO. CA-32 (Volumes 1-3)
25242	Sally Salzman Morgan and Sean Dexter – URS Corporation	2002	Research Design and Treatment Plan for Archaeological Site CA-SFR-04/H, Yerba Buena Island, San Francisco, California.
33644	Southwest Division, Naval Facilities Engineering	2003	Draft Archaeological Research Design and Discovery Plan for the Disposal of Former Naval Station Treasure Island, San Francisco, California.
33893	Caltrans	2006	Historic Structure Report, Torpedo Building (Navy Building 262), Yerba Buena Island, San Francisco, California.
36020	Sally Morgan, Sean Dexter, Pat Mikkelsen, Brian F. Byrd, Jeff Rosenthal, and Sharon Waechter – URS, Caltrans, and Far Western Anthropological Research Group, Inc.	2008	San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, Archaeological Analysis of CA-SFR-4/H, Yerba Buena Island, San Francisco & Alameda Counties, California.
Source: NWIC, compiled by AECOM 2009; Updated 2011			

Several of the investigations documented by the NWIC within the revised APE vicinity included architectural surveys. These were: Goldenberg (1995), Windmiller (2002), Bay Area Rapid Transit (2005), Stone and Foster (2005), and Caltrans (2006). Additional studies conducted within the vicinity of the Yerba Buena Island Ramps Improvement Project APE (1-mile) included a thesis for San Francisco State University regarding the prehistory of San Francisco (Rudo 1982). Lastly, one study consisted at least in part of a cultural resources records/literature search in response to the need for four candidate sites for Navy family housing in Alameda, Contra Costa, San Francisco, and Marin Counties. At least one archaeological study conducted within the APE and was not included with the NWIC materials. This additional report was the June 1998 Final ASR for the San Francisco-Oakland Bay Bridge Seismic Safety Project. This 1998 ASR also included an Extended Phase I for CA-SFr-04/H, an evaluation of historic archaeological resources on Yerba Buena Island, and a request for determination of eligibility for the prehistoric component of CA-SFr-04/H (Caltrans 1998).

Previous studies that have been conducted outside the overall and revised APE demonstrate the general sensitivity of the area for exhibiting prehistoric and historic-era cultural sites, features, and artifacts. A single prehistoric archaeological site, CA-SFr-04/H, a shell mound containing habitation debris and human interments, has been identified in the general vicinity of the revised APE. The prehistoric component of this site has been determined eligible to the NRHP by the SHPO. Other cultural resources identified in the vicinity of the revised APE consist of built-environment resources such as military and Caltrans buildings identified through intensive surveys and literature searches.

The January 2011 records search update confirmed that no prehistoric or historic-era cultural sites, features, or artifacts have been documented directly within the revised APE. For a comprehensive list of References, please refer to the initial ASR produced for this project (Caltrans 2009).

3.3 SUMMARY OF NATIVE AMERICAN CONSULTATION

Implementing regulations for Section 106 require that Federal agencies identify any Indian tribes that might attach religious and cultural significance to historic properties in the APE and invite them to be consulting parties (36 CFR 800.3[f][2]). AECOM consulted with the Native American Heritage Commission (NAHC) on November 7, 2008 to request a search of the NAHC's Sacred Lands Files to request a list of Native American tribes or individuals that might have concerns about properties in and near the overall APE. Responses from the NAHC did not indicate the presence of Native American cultural resources or areas of cultural sensitivity in the immediate vicinity of the project APE.

AECOM contacted each of the representatives on a list provided by the NAHC by letter and subsequent phone calls. The 2008 consultation program is considered complete and related documentation is presented in Appendix C of the initial ASR. In order to update this consultation specifically for the supplemental APE, AECOM submitted a new information request to the NAHC on January 20, 2011. However, in order to expedite the consultation process, AECOM sent new contact letters to all of those individuals and/or groups suggested by the NAHC for the overall YBI Project APE investigation effort in 2008. On February 2, 2011, AECOM cultural staff placed follow-up phone calls with each of the contacts listed in the 2008 NAHC response. The NAHC supplied a new list on February 3, 2011, which included two additional contacts to those identified in the 2008 NAHC response. On February 3, 2011, AECOM cultural staff submitted email notifications to each of these contacts as well as hardcopy letters.

CHAPTER 4 BACKGROUND

For the Background Section of this ASR, please refer to the initial ASR produced for this project (Caltrans 2009).

CHAPTER 5 FIELD METHODS

All aspects of the cultural resource study were conducted in accordance with the *Secretary of the Interior's Standards and Guidelines for Identification of Cultural Resources* (48 CFR 44720-23). Resource documentation followed the guidance outlined in *Instructions for Recording Historical Resources (California Office of Historic Preservation 1995)* and the *Environmental Handbook, Volume 2, Cultural Resources of the Standard Environmental Reference* (2011)

Because of the developed nature of Building Move Site #2 and the steep grades and dense vegetation on Building Move Site #1, an archaeological survey utilizing regularly-spaced pedestrian transects could not be conducted. However, on 19 January, 2011 AECOM archaeologist Brian Ludwig, Ph.D. intensively examined both portions of the supplemental APE (Appendix A, Map 3). Because of the developed/filled character of both building move sites, the vast majority of the APE did not include undisturbed exposed ground surface. No archaeological materials or soils indicative of prehistoric or historic-era occupation/ activity were noted.

CHAPTER 6 STUDY FINDINGS AND CONCLUSIONS

6.1 UNIDENTIFIED CULTURAL MATERIALS

Previous cultural analysis within the revised APE and vicinity as well as current archival and field research indicates extensive historic-era grading, land filling, and previously disturbed site conditions from construction activities. In addition, steep slopes noted within both proposed Building Move sites are not likely to contain significant traces of prehistoric or undocumented historic-era activities. Several of these areas around the APE were therefore not included. Although there is always a possibility that traces of previously undocumented prehistoric and historic-era materials could be encountered within the revised APE as a result of project-related ground-disturbing activities, given the level of previous disturbances and the nature of the topography, such an occurrence is considered highly unlikely.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey may be needed if project limits are extended beyond the present survey limits.

CHAPTER 7 REFERENCES CITED

California, State of

- 2000 Directory of Properties in the Historical Resources Inventory. On file, Northwest Information Center of the California Historical Resources Information System, Sonoma State University. Rohnert Park, CA.
- 1999 Office of Historic Preservation. Technical Assistance Series #10. California State Law and Historic Preservation: Statues, Regulations, and Administrative Policies regarding Historic Preservation of Cultural and Historical Resources, Sacramento, CA.
- 1995 Instructions for Recording Historical Resources. Department of Parks and Recreation, Office of Historic Preservation. Sacramento, CA.
- 1992 California Points of Historical Interest. Department of Parks and Recreation, Office of Historic Preservation. On file, Northwest Information Center of the California Historical Resources Information System, Sonoma State University. Rohnert Park, CA.
- 1990 California Historical Landmarks. Department of Parks and Recreation, Office of Historic Preservation, Sacramento, CA.
- 1976 California Register of Historic Resources, Data base on file at the Northwest Information Center, California State University, Sonoma, Rohnert Park, CA.

California Department of Transportation (Caltrans)

- 2009 Archaeological Survey Report Yerba Buena Island Ramps Improvement Project , Yerba Buena Island, San Francisco County, California 04-SF-80-PM 67.8/8.1. On file, Caltrans District 04, Oakland, California.
- 1995 Archeological Survey Report. San Francisco-Oakland Bay Bridge Seismic Retrofit 04-SF-80-P.M. 4.80/8.85, 04-ALA-80-P.M. 0.0/1.15. G. Gmoser, author. On file, Caltrans District 04, Oakland, California.
- 1998 Final San Francisco- Oakland Bay Bridge East Span Seismic Safety Project EA# 04-251-012000, SF/Ala 80, P.M. 7.6/8.9, 0.0/1.3. Positive Archaeological Survey Report with: Extended Phase I Report for Investigations at CA-SFR-04/H; Evaluation for Historic Archaeological Resources, Yerba Buena Island; Request for Determination of Eligibility for Prehistoric Component of CA-SFR-04/H. Sean Dexter and Vance Benté authors. Environmental Planning South. On file, Caltrans District 04, Oakland, California.

Egherman, R. and C. Lee

- 2003 YI POW Wall (P-38-004322 [CA-SFr-149H]). California Department of Parks and Recreation Primary Record. On file at the Northwest Information Center, Sonoma State University, Rohnert Park, CA

Heizer, R.F.

- 1949 *The Archaeology of Central California I: The Early Horizon*. University of California Anthropological Records 12 (1).

JRP

- 1997 Historic Context for Evaluation Building and Structures at Treasure Island and Yerba Buena Island, Naval Station, Treasure Island, California. On file, Environmental Department, Naval Station, Treasure Island, San Francisco, California.

Langley, H. G and S.A. Morison

1859 *The State Register and Year Book of Facts for the Year 1859*. Henry G. Langley and Samuel A. Morison, ed. San Francisco, CA.

PAR Environmental Services, Inc.

1997 Archaeological Inventory and Assessment of Naval Station Treasure Island Disposal and Reuse Project, San Francisco County, California. Authored by: Hamusek-McGann, B., M. Maniery, and C. Baker., PAR Environmental Services, Inc., Sacramento, CA.

Salzman-Morgan, S. and S. Dexter

2002 Research Design and Treatment Plan for Archaeological Site CA-SFr-04/H, Yerba Buena Island, San Francisco, California.

Southwest Division, Naval Facilities Engineering

2003 Draft Archaeological Research Design and Discovery Plan for the Disposal of Former Naval Station Treasure Island, San Francisco, California.

Supernowicz, Dana

2003 Historic Resources Evaluation Report (HRER) for a Concrete Wall and Form being part of the San Francisco Bay Bridge East Span Project, U.S. Coast Guard Utility Relocation EA 04-0120Q3/ PM 12.6/13.9. Report prepared by Caltrans, Sacramento, CA for Caltrans District 4, San Francisco, CA.

United States Senate

1871 41st Congress, 3rd session, Miscellaneous document No. 48. Memorial of Thomas H. Dowling and accompanying papers in regard to his claim to the Island of Yerba Buena in the Harbor of San Francisco, California. Govt. Printing Office. Washington, D.C.

Walker, D.

1870 Yerba Buena Island, California: Report of Acting Assistant Surgeon David Walker, United States Army. Contained in: Circular No. 4., War Department Surgeon General's Office, Washington December 5, 1970, A Report on Barracks and Hospitals with Descriptions of Military Posts. Washington Government Printing Office 1870.

APPENDIX A

Project Maps

**Map 1:
Project Vicinity and Location**

**Yerba Buena Island
Ramps Improvement Project**



Portion of USGS topographic quadrangles
Oakland West and San Francisco North

1/11

Map 2: Supplemental Archeological APE (Alternative 2b)



	2/1/11
Caltrans Project Manager	Date
	1/31/11
Caltrans Archaeologist	Date
	2/2/11
AECOM Project Manager	Date

Alternative 2b Proposed Ramps

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

Area of Potential Effect Signed October 24, 2008

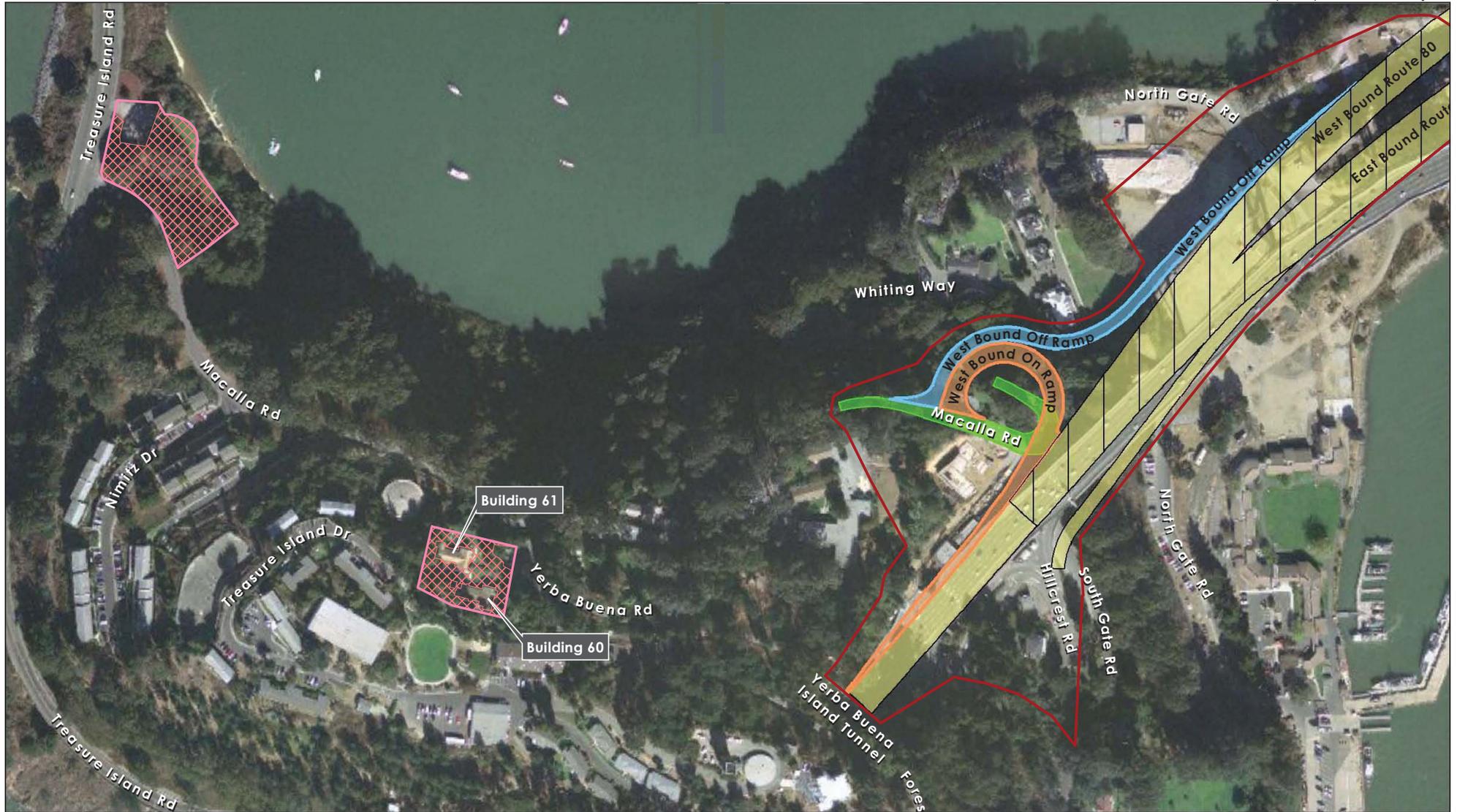
Supplemental Area of Potential Effect

Separate Project Currently Under Construction

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



Map 3: Supplemental Archeological Survey Coverage (Alternative 2b)



Alternative 2b Proposed Ramps

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

- Area of Potential Effect Signed October 24, 2008
- Supplemental Area of Potential Effect
- Supplemental Survey Coverage

Separate Project Currently Under Construction

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

Image: Nima/ USGS 2004

Data: DJJM Harris, AECOM

1/11

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



APPENDIX B

Consultation



AECOM
2020 L Street, Suite 400
Sacramento, CA 95811
www.aecom.com

916.414.5800 tel
916.414.5850 fax

January 18, 2011

Debbie Pilas-Treadway
California Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 9514

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Pilas-Treadway:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County, and is shown on the enclosed portion of *Oakland West* USGS topographic quadrangle map. The proposed project consists of constructing interchange ramps to be located at the east side of Yerba Buena Island and will connect with the separate East Bay Bridge Project.

We previously brought this project to the NAHC's attention in November 2008, and as part of the supplemental studies we would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American values that may be present near or within our project area. We would like to request a search of the NAHC Sacred Lands files.

Please send via email or facsimile a listing of local Native American groups or representatives at your earliest convenience, so that we may contact appropriate individuals and account for their potential concerns in the planning process.

If you have any questions or comments please contact Mark Bowen at 916.414.5800 or mark.bowen@aecom.com. Thank you in advance for your assistance.

Sincerely,

Patricia E. Ambacher
Architectural Historian

Enclosure

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

915 Capitol Mall, RM 364

Sacramento, CA 95814

(916) 653-4082

(916) 657-5390 – Fax

nahc@pacbell.net

Information Below is Required for a Sacred Lands File Search

Project: Yerba Buena Island Interchange Project – Supplemental Information

County San Francisco

USGS Quadrangle Oakland West

Name _____

Township _____ Range _____ Section(s) _____

Company/Firm/Agency:

AECOM

Contact Person: Mark Bowen

Street Address: 2020 L Street, Suite 400

City: Sacramento Zip: 95811

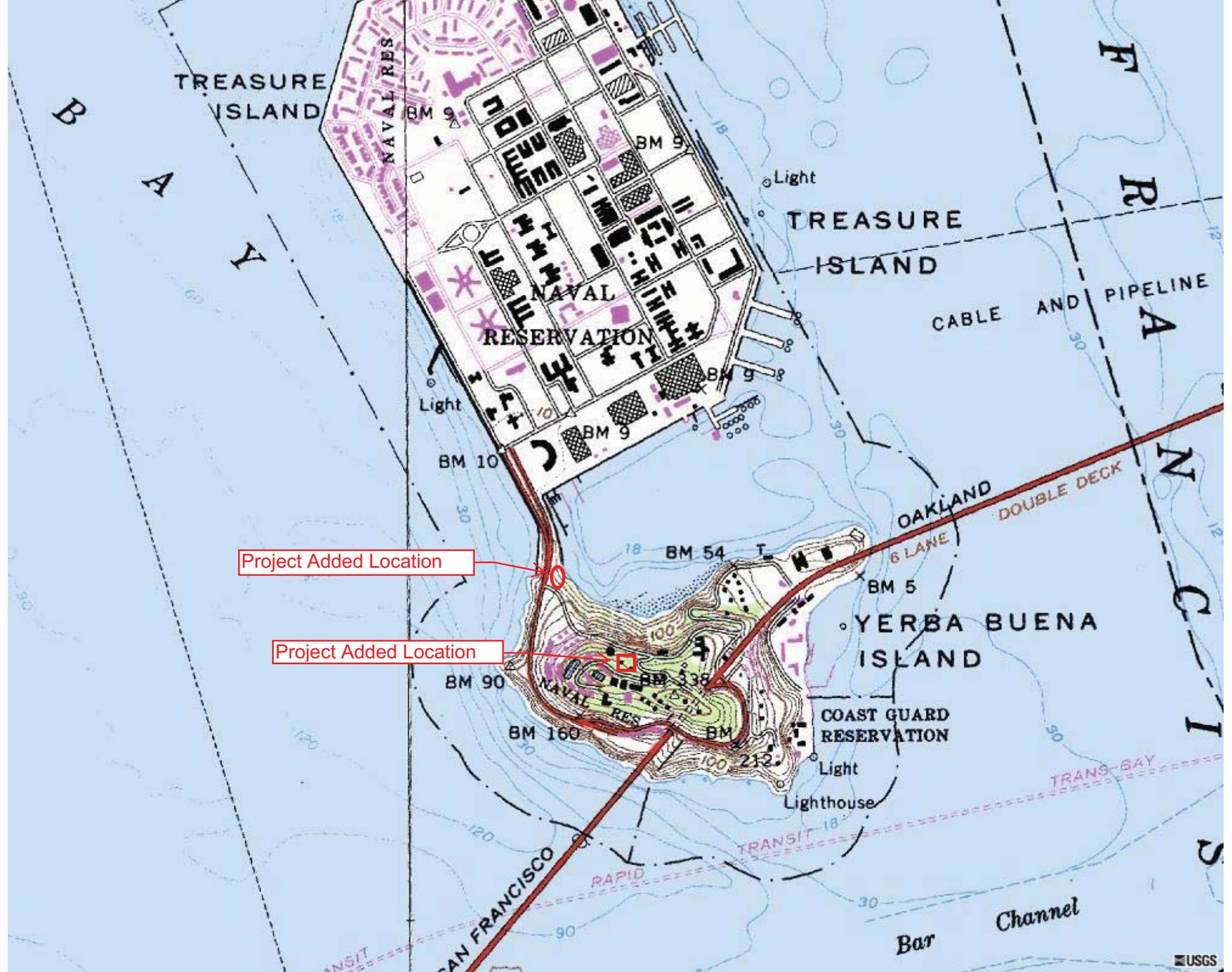
Phone: 916-414-5800

Fax: 916-414-5850

Email: mark.bowen@aecom.com

Project Description:

The above referenced project is located on Yerba Buena Island, San Francisco County, and is shown on the enclosed portion of *Oakland West* USGS topographic quadrangle map. The proposed project consists of constructing interchange ramps to be located at the east side of Yerba Buena Island and will connect with the separate East Bay Bridge Project.



TREASURE ISLAND

NAVAL RES

NAVAL RESERVATION

TREASURE ISLAND

CABLE AND PIPELINE

OAKLAND

DOUBLE DECK

YERBA BUENA ISLAND

COAST GUARD RESERVATION

SAN FRANCISCO

Bar Channel

Project Added Location

Project Added Location

January 20, 2011

Ann Marie Sayers
Chairperson
Indian Canyon Mutsun Band of Costanoan
P.O. Box 28
Hollister, CA 95024

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Sayers:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 20, 2011

Jakki Kehl
1307 Horizon Lane
Patterson, CA 95363

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Kehl:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 20, 2011

Ramona Garibay
Representative
Trina Marine Ruano Family
16010 Halmar Lane
Lathrop, CA 95330

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Gariby:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 20, 2011

Andrew Galvan
The Ohlone Indian Tribe
PO Box 3152
Fremont, CA 94539

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Mr. Galvan:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 20, 2011

Rosemary Cambria
Chairperson
Muwekma Ohlone Indian Tribe of the
San Francisco Bay Area
PO Box 360791
Milpitas, CA 95036

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Cambria:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 20, 2011

Irene Zwierlein
Chairperson
Amah/Mutsun Tribal Band
789 Canada Road
Woodside, CA 94062

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Zwierlein:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Eric Cordoba
Project Manager
San Francisco County Transportation Authority
SFCTA
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Cordoba:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Angela Robinson
Alameda County Parks, Recreation and Historical Commission
224 West Winton Avenue, #151
Hayward, CA 94544

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Robinson:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

The Honorable Wilton "Mac" McKibben
President
Alameda Historical Society
PMB 307
484 Lake Park Avenue
Oakland, CA 94610-2730

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Judge McKibben:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Betty Marvin
Planner
Oakland Cultural Heritage Survey
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Marvin:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Joan Pavlinec
Secretary & Historic Preservation Planner
Oakland Landmarks Preservation Advisory Board
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Pavlinec:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Dea Bacchetti
President
Oakland Heritage Alliance
446 17th Street, Suite 301
Oakland, CA 94612

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Bacchetti:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Christine S. Lehnertz
Regional Director
National Park Service, Pacific West Region Office
One Jackson Center
1111 Jackson Street, Suite 700
Oakland, CA 94607

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Lehnertz:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Anthea Hartig, Ph.D.
Director
National Trust for Historic Preservation Western Office
5 Third Street, Suite 707
San Francisco, CA 94103

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Dr. Hartig:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Cindy Heitzman
Executive Director
California Preservation Foundation
5 Third Street, Suite 424
San Francisco, CA 94103

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Heitzman:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Christopher Layton
President
California Heritage Council
P. O. Box 475046
San Francisco, CA 94147

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Layton:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Leigh Ann Baughman
Executive Director
San Francisco Beautiful
564 Market Street, Suite 709
San Francisco, CA 94104

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Ms. Baughman:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

David Crosson
Executive Director
California Historical Society
678 Mission Street
San Francisco, CA 94105

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Crosson:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Erik Christoffersen
Executive Director
San Francisco Museum and Historical Society
P.O. Box 420470
San Francisco, CA 94142-0470

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Christoffersen:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Ron Ross
President
San Francisco History Association
P. O. Box 31907
San Francisco, CA 94131

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Ross:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Tim Frye
Acting Preservation Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Frye:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Charles Chase
President
San Francisco Historic Preservation Commission
1650 Mission Street, Suite 400
San Francisco, CA 94103

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Chase:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

CWO Greg Ressio
Engineering Department
USCG Sector San Francisco
1 Yerba Buena Island
San Francisco, CA 94130

Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Ressio:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

An Bui
BRAC PMO West
1455 Frazee Road, Suite 900
San Diego, CA 92108

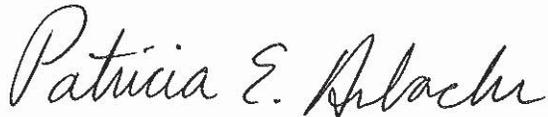
Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Bui:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

January 18, 2011

Mike Buhler
Executive Director
San Francisco Architectural Heritage
2007 Franklin Street
San Francisco, CA 94109

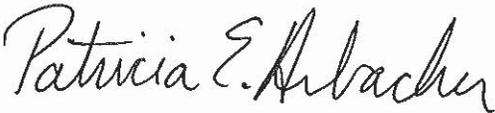
Subject: Yerba Buena Westbound On- and Off-Ramps, San Francisco-Oakland Bay Bridge

Dear Mr. Buhler:

AECOM is conducting supplemental cultural resources studies for the above referenced project located on Yerba Buena Island, San Francisco County. Additional acreage of Yerba Buena Island has been added to the proposed project area. Please see the attached map for the general areas that have been added to the proposed project. These two sites have been added to the study area as they are needed to mitigate project effects including relocation of historic properties Quarters 10 and Building 267.

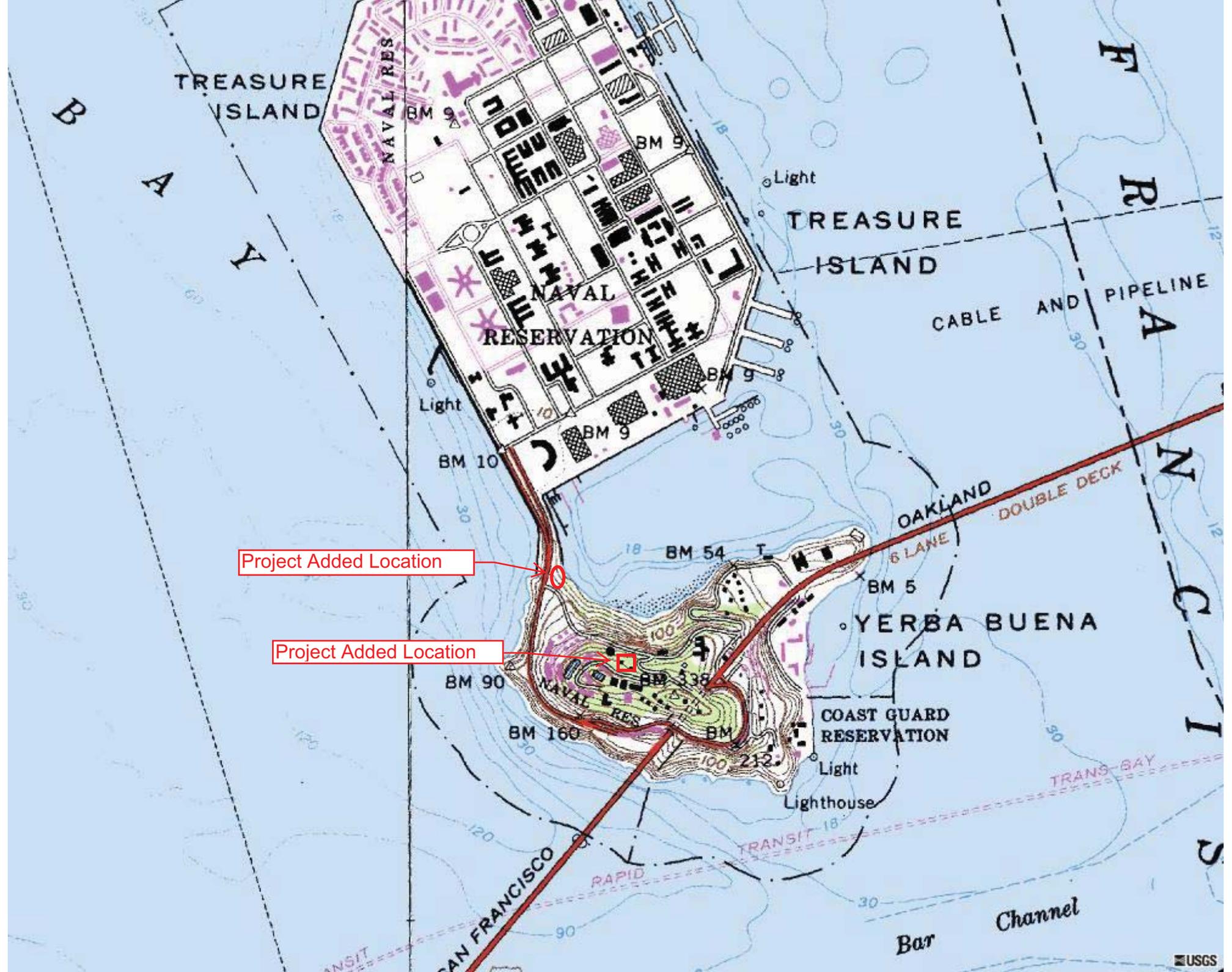
If you or your organization has any concerns regarding specific historical resources within these added project locations please contact me at my office. I can be reached by email at patricia.ambacher@aecom.com or telephone at 916.414.5805.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure



TREASURE ISLAND

NAVAL RES

NAVAL RESERVATION

TREASURE ISLAND

CABLE AND PIPELINE

OAKLAND DOUBLE DECK

YERBA BUENA ISLAND

COAST GUARD RESERVATION

Bar Channel

Project Added Location

Project Added Location

STATE OF CALIFORNIAEdmund G. Brown Jr., Governor**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 384
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5380
Web Site www.nahc.ca.gov



February 3, 2011

Patricia E. Ambacher
AECOM
2020 L St., suite 400
Sacramento, CA 95811

Sent by Fax: 916-414-5850
Number of Pages: 2

Re: Proposed Yerba Buena Island Interchange project, San Francisco County

Dear Ms. Ambacher:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

A handwritten signature in cursive script, appearing to read "Debbie Pilas-Treadway".

Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
San Francisco County
February 3, 2011

<p>Jakki Köhl 720 North 2nd Street Patterson, CA 95363 jakki@bigvalley.net (209) 892-1060</p>	Ohlone/Costanoan	<p>Muwekma Ohlone Indian Tribe of the SF Bay Area Rosemary Cambra, Chairperson PO Box 360791 Milpitas, CA 95036 muwekma@muwekma.org 408-434-1668 408-434-1673</p>	Ohlone / Costanoan
<p>Linda G. Yamane 1585 Mira Mar Ave Seaside, CA 93955 rumsien123@yahoo.com 831-394-5915</p>	Ohlone/Costanoan	<p>The Ohlone Indian Tribe Andrew Galvan PO Box 3152 Fremont, CA 94539 chochenyo@AOL.com (510) 882-0527 - Cell (510) 687-9393 - Fax</p>	Ohlone/Costanoan Bay Miwok Plains Miwok Patwin
<p>Amah/Mutsun Tribal Band Irene Zwierlein, Chairperson 789 Canada Road Woodside, CA 94062 amah_mutsun@yahoo.com (650) 851-7747 - Home (650) 851-7489 - Fax</p>	Ohlone/Costanoan	<p>Trina Marine Ruano Family Ramona Garibay, Representative 30940 Watkins Street Union City, CA 94587 soaprootmo@msn.com 510-972-0645-home 209-688-4753-cell</p>	Ohlone/Costanoan Bay Miwok Plains Miwok Patwin
<p>Amah/Mutsun Tribal Band Jean-Marie Feyling 19350 Hunter Court Redding, CA 96003 jmfgmc@sbcglobal.net 530-243-1633</p>	Ohlone/Costanoan		
<p>Indian Canyon Mutsun Band of Costanoan Ann Marie Sayers, Chairperson P.O. Box 28 Hollister, CA 95024 ams@indiancanyon.org 831-637-4238</p>	Ohlone/Costanoan		

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Yerba Buena Island Interchange project, San Francisco County

Ambacher, Patricia

From: Ambacher, Patricia
Sent: Thursday, February 03, 2011 4:26 PM
To: 'rumsien123@yahoo.com'
Subject: Yerba Buena Island Interchange Project – Supplemental Information

February 3, 2011

Linda G. Yamane
1585 Mira Mar Ave.
Seaside, CA 93955

Dear Ms. Yamane:

Subject: Yerba Buena Island Interchange Project – Supplemental Information

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,

Patricia Ambacher
Architectural Historian

Hard Copy to Follow

February 3, 2011

Linda G. Yamane
1585 Mira Mar Ave.
Seaside, CA 93955

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Yamane:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

Ambacher, Patricia

From: Ambacher, Patricia
Sent: Thursday, February 03, 2011 4:29 PM
To: 'jmfgmc@sbcglobal.net'
Subject: Yerba Buena Island Interchange Project – Supplemental Information

February 3, 2011

Jean-Marie Feyling
19350 Hunter Court
Redding, CA 96003

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Feyling:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,

Patricia Ambacher
Architectural Historian

Hard Copy To Follow

February 3, 2011

Jean-Marie Feyling
Amah/Mutsun Tribal Band
19350 Hunter Court
Redding, CA 96003

Subject: Yerba Buena Island Interchange Project – Supplemental Information

Dear Ms. Feyling:

AECOM is conducting cultural resources studies for the above-referenced project located on Yerba Buena Island, San Francisco County and is shown on the attached portion of the USGS topographic quadrangle map.

We are pleased to bring this activity to your attention, and would appreciate any information you can provide regarding prehistoric, historic, or ethnographic Native American land use. We are also interested in any contemporary Native American values that may be present near or within the project area.

If you have any questions or comments feel free to contact Mark Bowen by email at Mark.Bowen@aecom.com, or by phone at 916.414.5800. You may also contact Senior Archaeologist Brian Ludwig at Brian.Ludwig@aecom.com or by phone at 916.414.5886. We look forward to hearing from you soon and hope we will have the opportunity to work together on this project.

Sincerely,



Patricia E. Ambacher
Architectural Historian

Enclosure

ATTACHMENT D

SHPO Correspondence

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov



February 8, 2010

Reply To: FHWA080922E

Anmarie Medin, Chief
Cultural and Community Studies Office
Caltrans Division of Environmental Analysis
PO Box 942874
Sacramento, CA 94274-0001

Re: Findings of Effect for the Proposed Yerba Buena Island Ramps Improvement Project, San Francisco County, CA

Dear Ms. Medin:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*.

The Federal Highway Administration (FHWA) has determined that the proposed project will have an adverse effect on historic properties. Based on my review of the proposed documentation, I concur.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov.

Sincerely,

A handwritten signature in cursive script that reads "Susan K. Stratton for".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

BECAUSE OF CALTRANS'S OBLIGATION TO PROTECT ARCHAEOLOGICAL SITES, THE ARCHAEOLOGICAL SURVEY REPORT IS NOT AVAILABLE FOR PUBLIC DISTRIBUTION.

Confidentiality of Archaeological Information

The following codes provide justification for not releasing information regarding archaeological sites to the public.

- Government Code section 6254.10; rationale set forth in section 6254 r
- Rationale set forth in cases such as Johnson v. Winter (App.1 Dist1982) 179 Cal.Rptr.585, 127 Cal. App.3d 435 and Black Panther party v. Kehoe (App. 3 Dist.1974)117Cal.Rptr. 106, 42 Cal. App. 3d 645.

HISTORIC PROPERTY SURVEY REPORT
YERBA BUENA ISLAND RAMPS IMPROVEMENT PROJECT
YERBA BUENA ISLAND, SAN FRANCISCO COUNTY, CALIFORNIA
04-SF-80-PM 7.6/8.1

EA 04-3A640K

Prepared by:

EDAW
2022 J Street
Sacramento, California 95814
(916) 414-5800
February 26, 2009

Prepared by:  9/23/09
Mark Bowen, Senior Historian/ Architectural Historian Date

Prepared for:

Eric Cordoba, Project Manager
SFCTA
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Approved by:  10/22/09
Janet Pape, Branch Chief, SFOBB Archaeology Date
PQS Prehistoric Archaeology, Lead; Historical Archaeology, Co-PI
Office of Cultural Resources Studies
Caltrans District 4
111 Grand Avenue, P.O. Box 23660
Oakland, California, 94623

Approved by:  10/22/09
Elizabeth Kruse Date
Branch Chief, South Counties
Office of Cultural Resources Studies
Caltrans District 4
111 Grand Avenue, P.O. Box 23660
Oakland, California, 94623

September, 2009

HISTORIC PROPERTY SURVEY REPORT**1. UNDERTAKING DESCRIPTION AND LOCATION**

District	County	Route <i>(Local Agency)</i>	<i>Local Assistance Project Prefix</i>	Post Miles <i>(Project No.)</i>	Charge Unit <i>(Agreement)</i>	Expenditure Authorization <i>(Location)</i>
04	SF	I-80		7.6 - 8.1	L1C0	04-3A640K

(For Local Assistance projects off the highway system, use headers in italics)

Project Description:

(Insert project description here; refer reader to location and vicinity maps in HPSR)

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

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

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

Alternatives have been proposed to address the geometric deficiencies of the existing on- and off-ramps. In addition to the no-build alternative, the proposed build alternatives would analyze the effects to the SFOBB (I-80) mainline structure and YBI. The proposed project is located between post-mile (PM) 7.6 and 8.1¹ beginning at the east portal of the YBI tunnel and ending at the east side of the Transition Structure portion of the new SFOBB. The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span.²

Three alternatives are currently under consideration, including:

- **No Build Alternative**

This Alternative assumes that the existing on- and off-ramps would remain in place and no further action or improvements would occur.

¹ Kilometer Post (KP) 12.3 and 13.2

² The SFOBB Transition Structure is the name of a section of the new Bay Bridge. The Transition Structure will connect the Self-Anchored Suspension (SAS) span to Yerba Buena Island, and will transition the East Span’s side-by-side road decks to the upper and lower decks of the YBI tunnel and West Span.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

HISTORIC PROPERTY SURVEY REPORT

- **Alternative 2b**

Alternative 2b would include removal of the existing westbound on- and off-ramps on the east side of YBI, construction of a westbound loop on-ramp from Macalla Road on the east side of YBI, and construction of a westbound off-ramp to Macalla Road on the east side of YBI.

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

- Westbound on-ramp on the east side of YBI- This ramp would begin at a “T” intersection at Macalla Road, loop right with a tight radius, and merge on to the north side of the Bay Bridge. The length of this ramp would be approximately 876 feet (267 meters). This ramp would have two traffic lanes, merging into one as it connects to the SFOBB. One lane would be a high occupancy vehicle (HOV) lane and the other a mixed-flow lane.
- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W3 and W4 curving around the Nimitz House and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,115 feet (340 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on- and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The stairway adjacent to the Caltrans Substation would be relocated to the west side of the building to make room for the new retaining wall. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.
- Under Alternative 2B, the westbound on- and off-ramps would terminate at Macalla Road where Quarters 10 and Building 267 are currently located.³ Quarters 10 and Building 267 would be relocated prior to construction of the ramps at Macalla Road. The relocation site for these buildings would be on YBI and would be determined under the Section 106 mitigation development process.

- **Alternative 4**

Alternative 4 would include the removal of the existing westbound on- and off-ramps on the east side of YBI, construction of westbound on-ramp from South Gate Road, and construction of westbound off-ramp to Macalla Road on the east side of YBI.

This alternative proposes to reconstruct two of the existing six on- and off-ramps at the I-80/YBI

³ Quarters 10 and Building 267 (a contributing garage) are listed in the National Register of Historic Places and significant at the local level under Criterion C, as a significant example of mid-twentieth century residential architecture.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

HISTORIC PROPERTY SURVEY REPORT

interchange. The proposed on- and off-ramps would provide standard shoulder widths, and would include the following features:

- Westbound on-ramp on the east side of YBI - This ramp would begin at South Gate Road, proceed east paralleling the eastbound on-ramp, loop under the new SFOBB Transition Structure near its eastern end to provide adequate merging distances, cross over the westbound off-ramp along the north side of the Bay Bridge. The length of this ramp would be approximately 2,883 feet (879 meters). HOV lane would not be provided under Alternative 4.
- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W2 and W3, parallel the Transition Structure, cross under the westbound on-ramp and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,168 feet (356 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on-and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.
- Under Alternative 4, Quarters 10 and Building 267 and its associated landscaping would remain in place.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the project was established in consultation with Janet Pape, Caltrans District 4 Archaeologist, Mary K. Smith, Caltrans District 4 Architectural Historian, and Jack Siau, Project Manager/Local Assistance Engineer, on 10/21/08, 10/23/08, and 10/24/08. The APE maps (Maps 2, 3, and 4) are located in Attachment A in this Historic Property Survey Report.

The archaeological APE (Map 3) was established as generally following the maximum possible area of direct impact resulting from the proposed project, including all new construction, easements, and staging areas.

Consistent with Caltrans policies and general cultural resource practices, the area for potential effect for the built environment (Map 4) encompassed areas that might be either directly or indirectly affected by construction; i.e., those areas within which the project could cause a change in character or use of historic properties. Only those resources located within the architectural APE were included in the survey.

The APE for historic architectural resources includes two areas: a General APE (Map 2) and Focused APE (Map 4). The General APE was developed to encompass both the project area, and the contributing elements of the large, multi-component SFOBB historic property that extend outside of the project area. The Focused APE encompasses only the project area; therefore, those portions of the SFOBB property that may be potentially affected by the Project are included. A small segment of the westernmost portion of the East Span is extant within the Focused APE.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

HISTORIC PROPERTY SURVEY REPORT**3. CONSULTING PARTIES / PUBLIC PARTICIPATION****x** Local Government

- San Francisco Planning Department. Mark Luellen, Preservation Coordinator. Letter Sent December 11, 2008
- San Francisco County Transportation Authority. Eric Cordoba, Project Manager.

x Native American Tribes, Groups and Individuals

- Letters sent on December 17, 2008. No response received as of February 18, 2009. See ASR Appendix C.
- Jakki Kehl
- Amah/Matsun Tribal Band
- Indian Canyon Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- The Ohlone Indian Tribe
- Trina Marine Ruano Family

x Native American Heritage Commission

- Request for search of files: November 7, 2008. Response November 13, 2008.

x Local Historical Society / Historic Preservation Group

- San Francisco Architectural Heritage. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- San Francisco Landmark Preservation Advisory Board. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- San Francisco History Association. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- San Francisco Museum and Historical Society. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- California Historical Society. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- San Francisco Beautiful. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- California Heritage Council. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- California Preservation Foundation. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- National Trust for Historic Preservation Western Office. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- National Park Service, Pacific West Region Office. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- Oakland Heritage Alliance. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- Oakland Landmarks Preservation Advisory Board. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- Oakland Cultural Heritage Survey. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- Alameda County Historical Society. Letter Sent December 11, 2008. No response as of Feb 16, 2009
- Alameda County Parks, Recreation, and Historical Commission. Letter Sent December 11, 2008. No response as of Feb 16, 2009

x Public Information Meetings

- Public Scoping Meeting. Location: Port of San Francisco office, Bayside Conference Room. Pier 1, The Embarcadero, San Francisco, CA 94111. Date: September 24, 2008 from 6:30 to

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

HISTORIC PROPERTY SURVEY REPORT

8:00 p.m.

- Coordination plan letters sent out on September 18, 2008.

4. SUMMARY OF IDENTIFICATION EFFORTS

- | | | |
|-------------------------------------|---|---|
| <input checked="" type="checkbox"/> | National Register of Historic Places | Month & Year: 1979-2002 & supplements |
| <input checked="" type="checkbox"/> | California Register of Historical Resources | Year: 1992 & supplemental information to date |
| <input checked="" type="checkbox"/> | California Inventory of Historic Resources | Year: 1976 |
| <input checked="" type="checkbox"/> | California Historical Landmarks | Year: 1995 & supplemental information to date |
| <input checked="" type="checkbox"/> | California Points of Historical Interest | Year: 1992 & supplemental information to date |
| <input type="checkbox"/> | State Historic Resources Commission | Not Applicable |
| <input checked="" type="checkbox"/> | Caltrans Historic Highway Bridge Inventory | Year: 2006 & supplemental information to date |
| <input checked="" type="checkbox"/> | Archaeological Site Records | |
- Northwest Information Center, records search on November 24, 2008.
- Other sources consulted
-
- Results:

The NWIC record search demonstrated that a total of 23 cultural resources investigations have been conducted within and in the vicinity (approximately 1 mile radius) of the project APE. Prior to the efforts outlined in this current Archaeological Survey Report, there were at least 8 studies that have occurred directly within the Yerba Buena Island Ramps Improvement Project APE; the earliest documented investigations conducted within the vicinity of the project area APE consist of Rudo (1982) and Roop (1984). With the exception of Rudo's thesis, each of these prior studies was related to Caltrans' seismic retrofit of the Bay Bridge and the Navy's privatization efforts regarding Yerba Buena Island.

The majority of the 8 studies conducted within the Yerba Buena Island Ramps Improvement Project APE consisted primarily of archaeological investigations and treatment plans. Almost the entire APE was subjected to complete survey coverage by PAR in 1996. A large portion of the APE was also previously surveyed in 1995 by Glenn Gmoser. These previous studies revealed that one archaeological site, CA-SFR-04/H, had been recorded within the YBI APE. One historical archaeological resource, P-38-004322, which consists of sections of a retaining wall and weir with inscriptions by prisoners-of-war who built it in the 1940s, is located outside the APE. This resource was evaluated to be ineligible for inclusion in the National Register (Supernowicz 2003). See ASR for Archaeological site record citations.

5. PROPERTIES IDENTIFIED

- Caltrans Architectural Historian, Mary K. Smith, who meets the Professionally Qualified Staff Standards in Section 106 Programmatic Agreement Attachment 1 as an Architectural Historian, has determined that the only/only other properties present within the APE meet the criteria for Section 106 PA Attachment 4 (**Properties Exempt from Evaluation**).
- Caltrans, as assigned by FHWA, has determined that the following **archaeological sites** within the Project APE shall be considered eligible for inclusion in the National Register without conducting subsurface testing or surface collection within the APE, for which the **establishment of an ESA** will protect the sites from any potential effects, in accordance with Section 106 PA Stipulation VIII.C. See attached documentation.

For the federal undertaking described in Part 1: To minimize redundancy and paperwork for the California Department of Transportation and the State Historic Preservation Officer, and in the spirit intended under the federal Paperwork Reduction Act (U.S.C. 44 Chapter 35), this document also satisfies consideration under California Environmental Quality Act Guidelines Section §15064.5(a) and, as appropriate, Public Resources Code §5024 (a)(b) and (d).

HISTORIC PROPERTY SURVEY REPORT

- CA-SFr-04/H DOE 8/13/1998
- Properties **previously listed or determined eligible** for inclusion in the National Register of Historic Places are present within the Project APE. *(Include date of listing or determination):*
 - CA-SFr-04/H DOE 8/13/1998
 - Quarters 8 DOE September 1998
 - Quarters 10 (and contributing Building 267) Listed 2/26/08
 - The Senior Officers Historic District Listed 2/26/2008
 - San Francisco Oakland Bay Bridge Listed 8/13/01

6. LIST OF ATTACHED DOCUMENTATION

- Project Vicinity, Location, and APE Maps (Attachment A)
- California Historic Bridge Inventory sheet (Attachment B)
- Historical Resources Evaluation Report (HRER)
 - JRP Historical Consulting, LLC, May 2009, prepared by Toni Webb; peer reviewed by Mary K. Smith, Caltrans PQS Principal Architectural Historian (Attachment C)
- Archaeological Survey Report (ASR)
 - EDaw, June 2009, prepared by Brian Ludwig and Charlane Gross; peer reviewed by Janet Pape, Caltrans, PQS Prehistoric Archaeology, Lead; Historical Archaeology, Co PI (Attachment D)
- Archaeological Evaluation Report (CARIDAP, XPI, PII, PIII)
 - Not Applicable

7. HPSR to File

- No properties requiring evaluation** are present within the Project APE.

8. HPSR to SHPO

- Not applicable.

9. Findings for State-Owned Properties

- Caltrans has determined that the following **State-owned buildings and structures previously included in the Master List of Historical Resources** are within the Project APE.
 - East Span San Francisco – Oakland Bay Bridge 33-0025
- Caltrans has determined that this project will have **no effect** on **state-owned buildings and structures** within the Project APE that meet National Register and/or California Historical Landmarks eligibility criteria and is providing notice and summary to SHPO pursuant to PRC §5024(f). [Bridge 33-0025 will not be present when subject project is undertaken: See HRER]

10. CEQA IMPACT FINDINGS

(Check all that apply. Consultation with SHPO is not required under CEQA. This instruction line and findings that are not applicable may be deleted)

- Not applicable; Caltrans is not the lead agency under CEQA.

HISTORIC PROPERTY SURVEY REPORT

11. HPSR PREPARATION AND DEPARTMENT APPROVAL

Prepared by: *(sign on line)*


9/17/09

Consultant / discipline: Mark Bowen, Architectural Historian

Date

Affiliation: EDAW, Sacramento, CA

Reviewed for approval by:

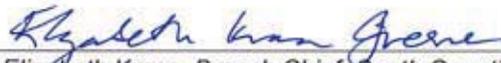


10/22/09

District 4 Caltrans PQS
discipline/level:

Janet Pape, Branch Chief, SFOBB Archaeology
PQS Prehistoric Archaeology, Lead; Historical
Archaeology, Co-PI
Office of Cultural Resource Studies
Caltrans District 4

Date



10/22/09

Elizabeth Kruse, Branch Chief, South Counties
PQS Principal Architectural Historian
Office of Cultural Resource Studies
Caltrans District 4

Date

ATTACHMENT A

Maps

**Map 1:
Project Vicinity and Location**

**Yerba Buena Island
Ramps Improvement Project**



Portion of USGS topographic quadrangles
Oakland West and San Francisco North

 Project Location

 Transition Structure Portion of SFOBB

0 0.25 0.5 Miles



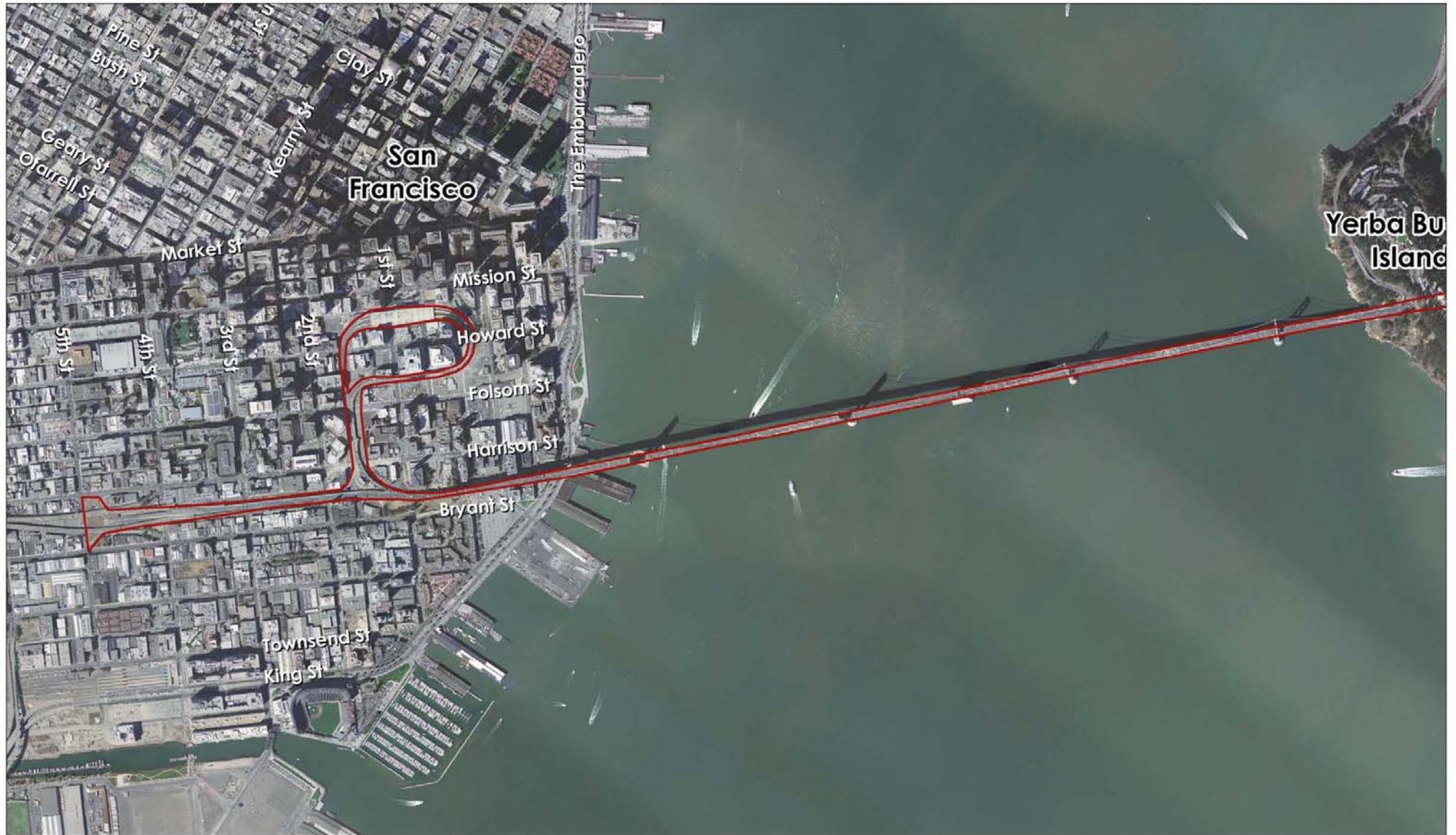
Map 2:
General Architectural Area of Potential Effects



□ Area of Potential Effects ▨ Transition Structure Portion of SFOBB



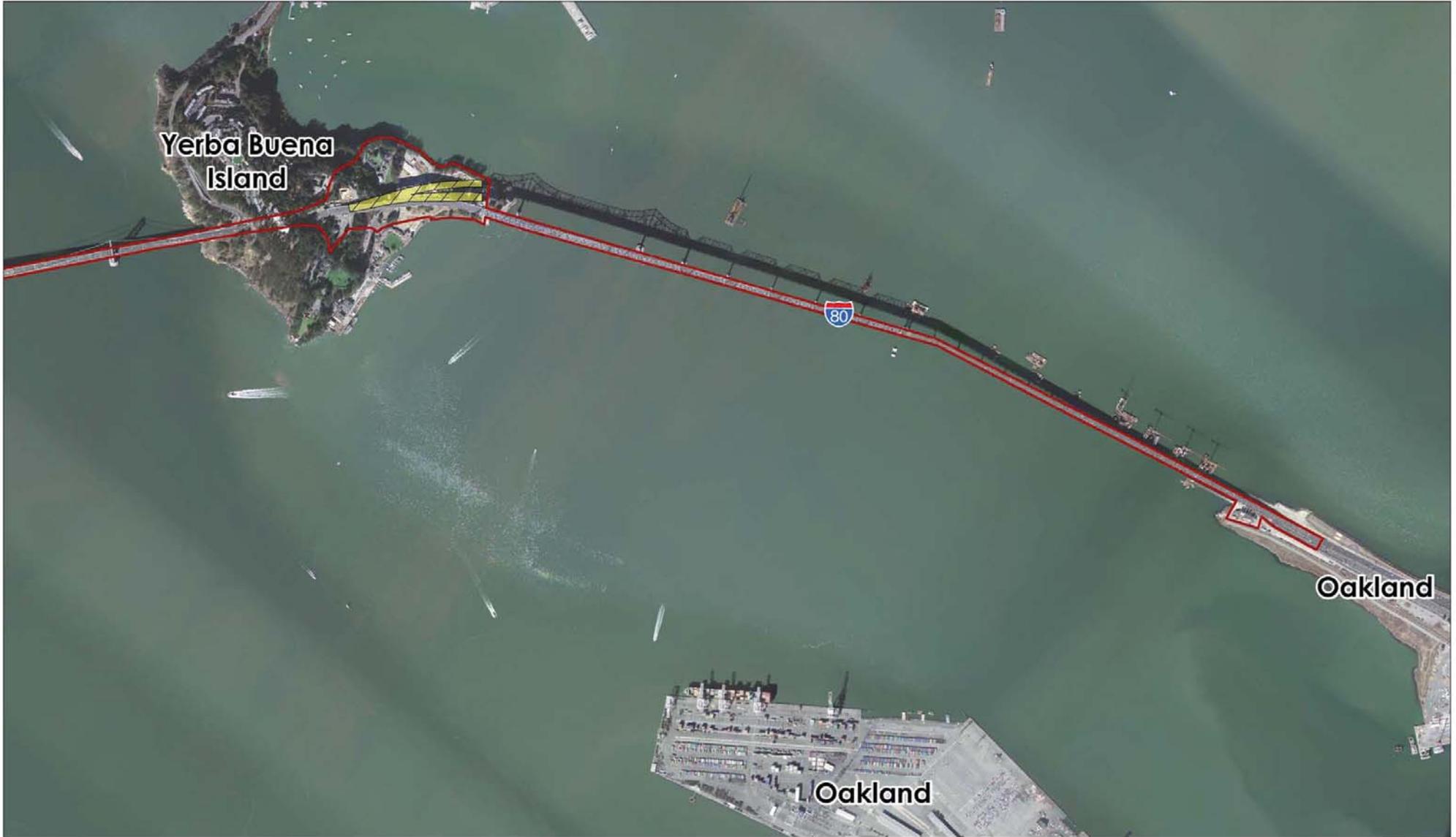
Map 2a:
General Architectural Area of Potential Effects



□ Area of Potential Effects ▨ Transition Structure Portion of SFOBB

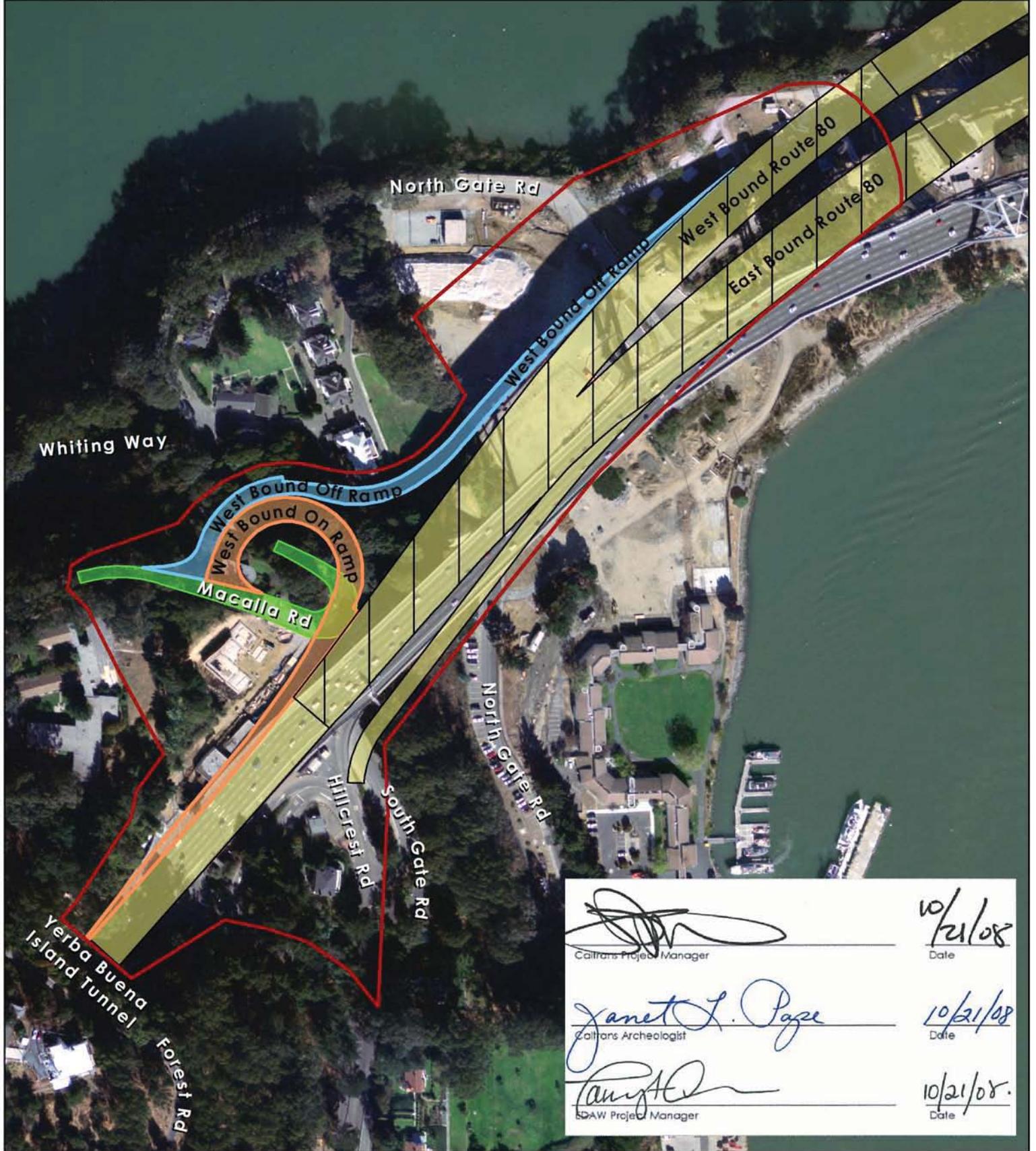


Map 2b:
General Architectural Area of Potential Effects



□ Area of Potential Effects ▨ Transition Structure Portion of SFOBB





- Alternative 2b Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

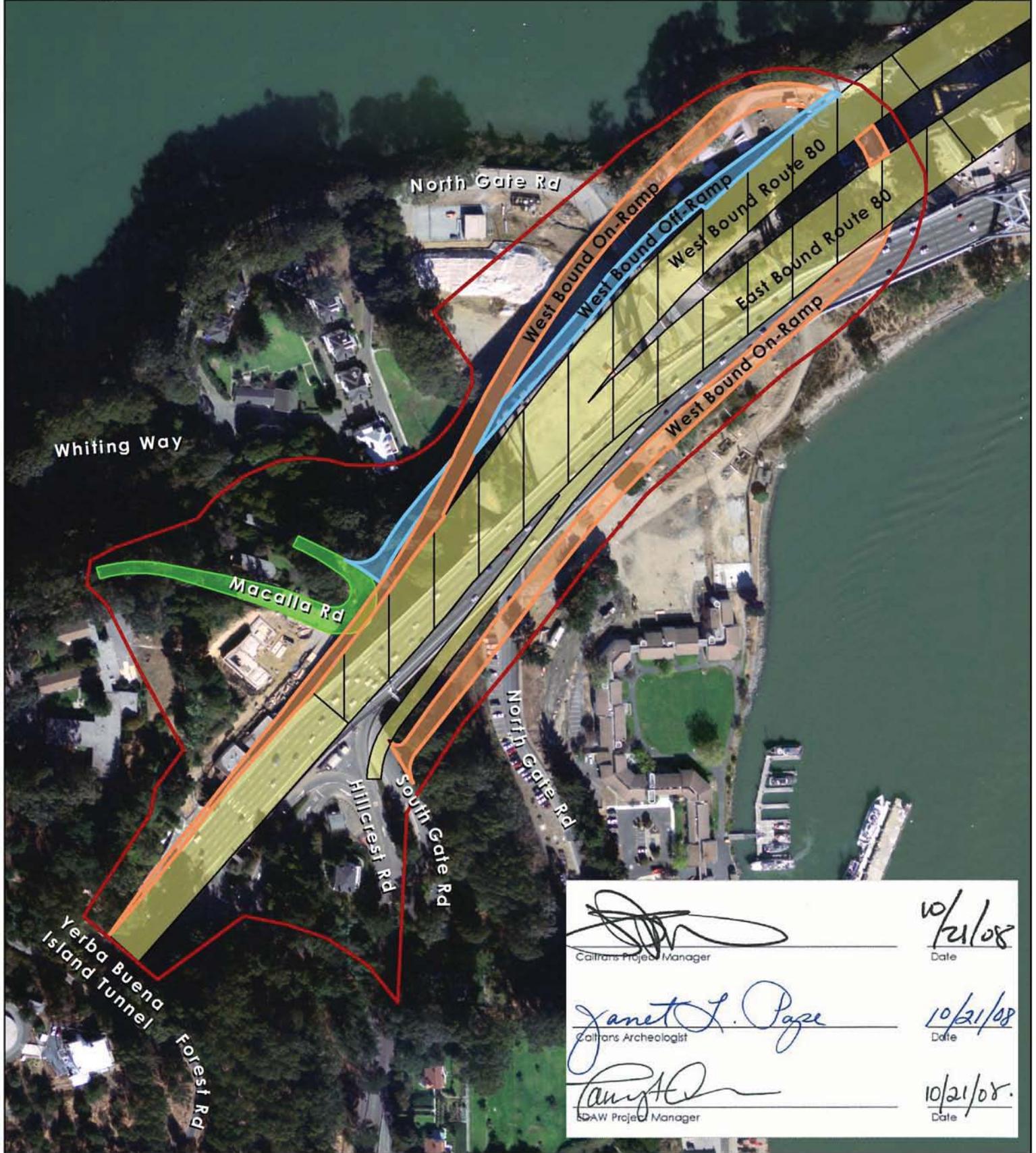
- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

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

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

0 100 200 300 Feet

9/09



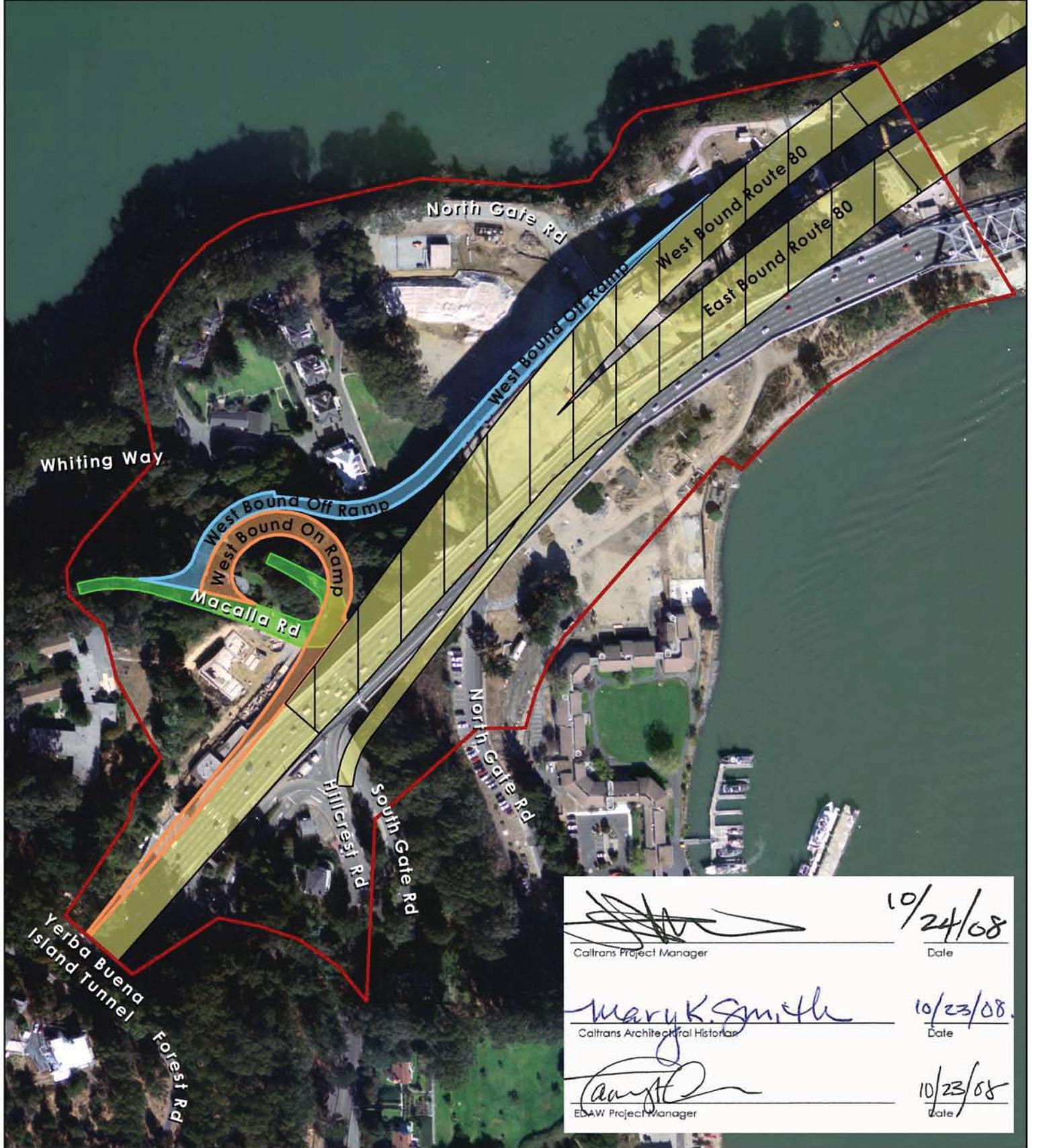
- Alternative 4 Proposed Ramps**
- █ Proposed West Bound Off-Ramp
 - █ Proposed West Bound On-Ramp
 - █ Proposed Macalla Road Improvements

- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

Image: Nima/ USGS 2004
 Data: DMJM Harris, EDAW
 9/09

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

0 100 200 300 Feet



- Alternative 2b Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

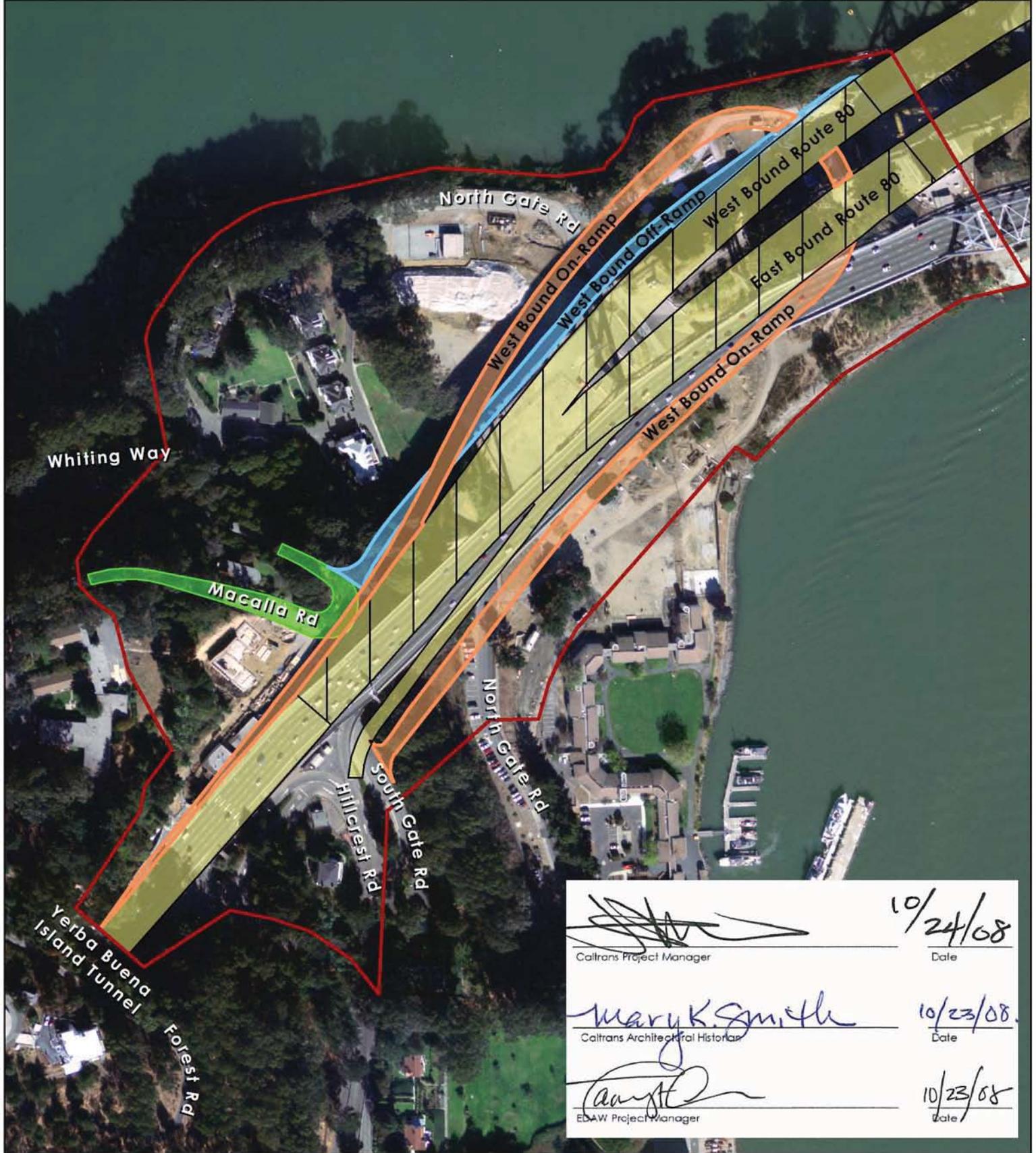
- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

 Caltrans Project Manager	10/24/08 Date
 Caltrans Architectural Historian	10/23/08 Date
 EDAW Project Manager	10/23/08 Date

Image: Nima/ USGS 2004
 Data: DMJM Harris, EDAW
 6/09

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

0 100 200 300 Feet



- Alternative 4 Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

Image: Nima/ USGS 2004
 Data: DMJM Harris, EDAW
 6/09

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

0 100 200 300 Feet

ATTACHMENT B

Bridge Sheet



Structure Maintenance & Investigations



Historical Significance - State Agency Bridges

District 04

Alameda County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
33 0002	EDENVALE UNDERPASS	04-ALA-238-2.19-FMT	4. Historical Significance not determined	1921	1937
33 0003	ALAMEDA CREEK	04-ALA-238-3.46-FMT	5. Bridge not eligible for NRHP	1937	2006
33 0005	DRY CREEK	04-ALA-238-7.19-UNC	5. Bridge not eligible for NRHP	1929	1969
33 0006	SAN LORENZO CREEK	04-ALA-238-13.21-HAY	5. Bridge not eligible for NRHP	1909	1957
33 0007	SAN LEANDRO CREEK	04-ALA-580-R34.55-SLN	5. Bridge not eligible for NRHP	1964	
33 0009Z	LANDVALE SIDEHILL VIADUCT	04-ALA-013-R9.55-OAK	5. Bridge not eligible for NRHP	1934	1970
33 0012	ARROYO POSITAS	04-ALA-580-13.82	5. Bridge not eligible for NRHP	1972	
33 0013	COTTONWOOD CREEK	04-ALA-580-15.63	5. Bridge not eligible for NRHP	1972	
33 0014	RANCHO DRAIN	04-ALA-580-17.57-PLE	5. Bridge not eligible for NRHP	1970	
33 0015L	TASSAJARA CREEK	04-ALA-580-18.32-PLE	5. Bridge not eligible for NRHP	1965	1995
33 0015R	TASSAJARA CREEK	04-ALA-580-18.32-PLE	5. Bridge not eligible for NRHP	1965	
33 0015Y	TASSAJARA CREEK	04-ALA-580-18.32-PLE	5. Bridge not eligible for NRHP	1965	
33 0016G	W580-N&S680 CONNECTOR	04-ALA-580-20.56-PLE	5. Bridge not eligible for NRHP	1965	1989
33 0016L	ALAMO CANAL	04-ALA-580-20.56-PLE	5. Bridge not eligible for NRHP	1952	1996
33 0016R	ALAMO CANAL	04-ALA-580-20.56-PLE	5. Bridge not eligible for NRHP	1952	1965
33 0020	POWELL STREET UC	04-ALA-080-3.79-EMV	5. Bridge not eligible for NRHP	1954	1968
33 0023	UNIVERSITY AVENUE OC	04-ALA-080-5.82-BER	5. Bridge not eligible for NRHP	1939	1956
33 0025	SFOBB EAST BAY	04-ALA-080-1.15-OAK	1. Bridge is on NRHP	1936	1962
33 0026L	GREENVILLE ROAD UC	04-ALA-580-R8.29	5. Bridge not eligible for NRHP	1969	
33 0026R	GREENVILLE ROAD UC	04-ALA-580-R8.29	5. Bridge not eligible for NRHP	1969	
33 0027	FIFTH AVENUE OVERHEAD	04-ALA-880-30.38-OAK	5. Bridge not eligible for NRHP	1948	1963
33 0028M	FIBREBOARD UC	04-ALA-080-3.96-EMV	5. Bridge not eligible for NRHP	1954	1968
33 0030	EAST NILES UNDERPASS	04-ALA-084-10.71-FMT	4. Historical Significance not determined	1937	
33 0034	ROSEWARNES UNDERPASS	04-ALA-084-12.1-FMT	5. Bridge not eligible for NRHP	1906	
33 0035	FARWELL UNDERPASS	04-ALA-084-13.03	5. Bridge not eligible for NRHP	1932	
33 0036	ALAMEDA CREEK	04-ALA-084-13.33	5. Bridge not eligible for NRHP	1928	
33 0039	ALAMEDA CREEK BOH	04-ALA-084-14.32	3. Bridge is possibly eligible for NRHP	1947	
33 0040L	HIGH STREET SEPARATION & OH	04-ALA-880-27.63-OAK	5. Bridge not eligible for NRHP	1950	1963
33 0040R	HIGH STREET SEPARATION & OH	04-ALA-880-27.63-OAK	5. Bridge not eligible for NRHP	1950	1963
33 0041	FRUITVALE AVENUE OH	04-ALA-880-28.24-OAK	5. Bridge not eligible for NRHP	1948	1963
33 0042	SILVER SPRINGS UP AND OFF RAMP SEPARATION	04-ALA-084-16.93	4. Historical Significance not determined	1941	
33 0043	ARROYO DE LA LAGUNA	04-ALA-084-17.22	5. Bridge not eligible for NRHP	1939	
33 0046Y	ARROYO DE LA LAGUNA	04-ALA--	5. Bridge not eligible for NRHP	1941	1983
33 0047	ALAMEDA CREEK	04-ALA-680-R10.15	5. Bridge not eligible for NRHP	1927	1990
33 0051L	EL CERRITO SEPARATION & OH	04-ALA-080-7.2-ALB	5. Bridge not eligible for NRHP	1960	1998
33 0051R	80/580 EL CERRITO SEPARATION OH	04-ALA-080-7.2-ALB	5. Bridge not eligible for NRHP	1999	
33 0053	NILES JUNCTION UNDERPASS	04-ALA-084-10.63-FMT	4. Historical Significance not determined	1937	
33 0060	FOLGER AVENUE UNDERPASS	04-ALA-013-13.69-BER	4. Historical Significance not determined	1936	
33 0061L	DISTRIBUTION STRUCTURE	04-ALA-580-46.09-OAK	5. Bridge not eligible for NRHP	1955	1962
33 0061R	DISTRIBUTION STRUCTURE	04-ALA-580-46.09-OAK	5. Bridge not eligible for NRHP	1935	2006
33 0066	ARROYO SECO	04-ALA-580-11.04-LVMR	5. Bridge not eligible for NRHP	1954	1972
33 0082	MULFORD OVERHEAD	04-ALA-112-R.06-SLN	5. Bridge not eligible for NRHP	1982	
33 0085	ARROYO LAS POSITAS	04-ALA-580-11.72	5. Bridge not eligible for NRHP	1972	

ATTACHMENT C

Historical Resources Evaluation Report

HISTORICAL RESOURCES EVALUATION REPORT

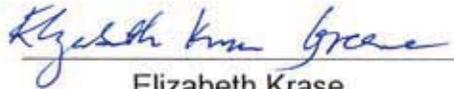
Yerba Buena Island Ramps Improvement Project

San Francisco, California

04-SF-80, PM 7.6-8.1/12.3-13.2

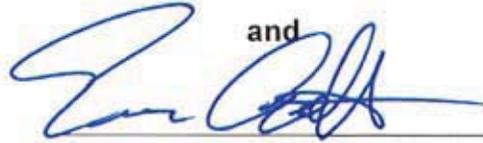
EA 04-3A64OK

Prepared For:



Elizabeth Krase,
Branch Chief, South Counties
Office of Cultural Resource Studies
Caltrans District 4
111 Grand Avenue
Oakland, California 94623

and



Eric Cordoba, Project Manager
SFCTA
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Prepared By:



Toni Webb, Architectural Historian
JRP Historical Consulting, LLC
1490 Drew Avenue, Suite 110
Davis, CA 95618

May 2009

SUMMARY OF FINDINGS

San Francisco County Transportation Authority (SCFTA) proposes the replacement of westbound on- and off-ramps on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA is the Lead Agency under CEQA while Caltrans is the lead agency under NEPA. JRP Historical Consulting, LLC (JRP) prepared this Historical Resources Evaluation Report (HRER) as part of the environmental compliance for the Project. The purpose of this document is to comply with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) as these pertain to federally funded undertakings and their impacts on historic properties. The properties have also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the California Environmental Quality Act (CEQA) Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code.

There are four historic properties within the Focused Area of Potential Effects (APE) for the built environment: Senior Officers' Quarters Historic District; Quarters 10 (which includes Building 267); Quarters 8; and a portion of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB). All four historic properties were previously evaluated and were not evaluated as part of this report. The Senior Officers' Quarters district, Quarters 10, and the SFOBB are listed in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). Quarters 8 has been determined eligible for listing in the NRHP and CRHR. All of these historic properties are also considered historical resources for the purposes of CEQA. Although a portion of the East Span of the SFOBB is located within the Focused APE, this historic property was documented as part of the SFOBB East Span Seismic Safety (Earthquake Retrofit) Project, which was completed in 2001. Because the current project proposes the construction of new ramps that will connect to the new East Bay Span currently under construction, the proposed project has no potential to affect the existing SFOBB historic property. Therefore, no further study of the SFOBB as a historic resource is required for this project.

This HRER provides updates of the previous inventory and evaluations for the three historic properties identified above: Senior Officers' Quarters Historic District, Quarters 10, and Quarters 8. This report concludes that the Senior Officers' Quarters Historic District, Quarters 10 (and Building 267), and Quarters 8 have remained relatively unchanged since they were listed or determined eligible for listing in the NRH and changes to their listing or eligibility are not warranted. All of these properties remain historical resources for the purposes of CEQA.

TABLE OF CONTENTS

SUMMARY OF FINDINGS i

1. PROJECT DESCRIPTION..... 1

2. RESEARCH AND FIELD METHODS 4

3. HISTORICAL OVERVIEW 6

4. DESCRIPTION OF RESOURCES 10

5. FINDINGS AND CONCLUSIONS 12

6. REFERENCES 15

7. PREPARERS’ QUALIFICATIONS 16

ATTACHMENTS

- Appendix A Maps
- Appendix B DPR 523 Forms
- Appendix C Letters to Interested Parties
- Appendix D Previous Historic Documentation

1. PROJECT DESCRIPTION

Yerba Buena Island (YBI) is located in the San Francisco Bay approximately halfway between Oakland and San Francisco.¹ YBI is only accessible to vehicular traffic via the San Francisco Oakland Bay Bridge (SFOBB) stretch of I-80. The SFOBB is considered a “lifeline structure” and is a critical link between the East Bay and San Francisco. It provides the only vehicle access to YBI, the active U.S. Coast Guard (USCG) facilities located on the south side of the island, and Treasure Island, located immediately north of YBI.

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

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

Alternatives have been proposed to address the geometric deficiencies of the existing on- and off-ramps. In addition to the no-build alternative, the proposed build alternatives would analyze the effects to the SFOBB (I-80) mainline structure and YBI. The proposed project is located between post-mile (PM) 7.6 and 8.1² beginning at the east portal of the YBI tunnel and ending at the east side of the Transition Structure portion of the new SFOBB. The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span.³

No Build Alternative

This Alternative assumes that the existing on- and off-ramps would remain in place and no further action or improvements would occur.

Alternative 2b

Alternative 2b would include removal of the existing westbound on- and off-ramps on the east side of YBI, construction of a westbound loop on-ramp from Macalla Road on the east side of YBI, and construction of a westbound off-ramp to Macalla Road on the east side of YBI.

¹ The project description was prepared by EDAW/AECOM.

² Kilometer Post (KP) 12.3 and 13.2.

³ The SFOBB Transition Structure is the name of a section of the new Bay Bridge. The Transition Structure will connect the Self-Anchored Suspension (SAS) span to Yerba Buena Island, and will transition the East Span’s side-by-side road decks to the upper and lower decks of the YBI tunnel and West Span.

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

- Westbound on-ramp on the east side of YBI- This ramp would begin at a “T” intersection at Macalla Road, loop right with a tight radius, and merge on to the north side of the Bay Bridge. The length of this ramp would be approximately 876 feet (267 meters). This ramp would have two traffic lanes, merging into one as it connects to the SFOBB. One lane would be a high occupancy vehicle (HOV) lane and the other a mixed-flow⁴ lane.
- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W3 and W4 curving around the Nimitz House and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,115 feet (340 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on- and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The stairway adjacent to the Caltrans Substation would be relocated to the west side of the building to make room for the new retaining wall. The roadway width would vary around the curve at Southgate Road to provide proper width for truck turning movements.
- Under Alternative 2B, the westbound on- and off-ramps would terminate at Macalla Road where Quarters 10 and Building 267 are currently located.⁵ Quarters 10 and Building 267 would be relocated prior to construction of the ramps at Macalla Road. The relocation site for these buildings would be on YBI and would be determined under the Section 106 mitigation development process.

Alternative 4

Alternative 4 would include the removal of the existing westbound on- and off-ramps on the east side of YBI, construction of westbound on-ramp from Southgate Road, and construction of westbound off-ramp to Macalla Road on the east side of YBI.

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

- Westbound on-ramp on the east side of YBI - This ramp would begin at Southgate Road, proceed east paralleling the eastbound on-ramp, loop under the new SFOBB Transition Structure near its eastern end to provide adequate merging distances, cross over the

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

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

westbound off-ramp along the north side of the Bay Bridge. The length of this ramp would be approximately 2,883 feet (879 meters). An HOV lane would not be provided under Alternative 4.

- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W2 and W3, parallel the Transition Structure, cross under the westbound on-ramp and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,168 feet (356 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on-and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The roadway width would vary around the curve at Southgate Road to provide proper width for truck turning movements.
- Under Alternative 4, Quarters 10 and Building 267 and its associated landscaping would remain in place.

2. RESEARCH AND FIELD METHODS

JRP Historical Consulting, LLC (JRP), in consultation with the California Department of Transportation (Caltrans), developed the architectural Area of Potential Effects (APE) for this project in October 2008. Caltrans signed the APE on October 23 and 24, 2008. Since that time, initial project design studies identified the need for improvements to Macalla Road. The architectural APE was revised after consultation with Caltrans and is provided in Map 3, Appendix A. Consistent with Caltrans policies and general cultural resource practices, the area for potential effect for the built environment encompassed areas that might be either directly or indirectly affected by construction; i.e., those areas within which the project could cause a change in character or use of historic properties. Only those resources located within the architectural APE were included in the survey.

The APE for historic architectural resources includes two areas: a General APE and Focused APE. The General APE was developed to encompass both the project area, and the contributing elements of the large, multi-component SFOBB historic property that extend outside of the project area. The Focused APE encompasses only the project area; therefore, those portions of the SFOBB property that may be potentially affected by the Project are included. A small segment of the westernmost portion of the East Span is extant within the Focused APE. Besides the SFOBB, there are three other resources within the Focused APE: the Senior Officers' Quarters Historic District, Quarters 10 (which includes Building 267), and Quarters 8.

All of the historic resources within Focused APE have been subject to one or more inventory and evaluation efforts over the last thirty years. JRP inventoried and evaluated the Senior Officers' Historic District, Quarters 10, and Quarters 8 for the Navy in 1997 as part of the Navy's Base Realignment and Closure program. The following year, Caltrans evaluated Quarters 10 (and Building 267) for the SFOBB East Span Seismic Safety Project. Then in 2003, JRP prepared National Register nominations and Historic American Building Survey reports for the both the Senior Officers' Historic District and Quarters 10.⁶

The earliest evaluation of the San Francisco-Oakland Bay Bridge was completed in 1977 and resulted in SHPO's determination of eligibility for listing in the National Register.⁷ The bridge was evaluated again in 1983 as part of the *I-280 Transfer Concept Program* which was followed in 1999 by a 273-page Historic American Engineering Record (HAER) report. That HAER document presents a comprehensive history of the bridge's construction, use, significance, and a detailed description of the structure, and includes over 400 contemporary and historic photographs, as well as photographic reproduction of historic plans and drawings. The HAER became the basis for the 2001 National Register nomination prepared by John J. Mascitelli, which resulted in the bridges' listing in the National Register in August 2001.⁸ In addition to survey and evaluation efforts, Caltrans studied the potential effects to the bridge from the

⁶ JRP Historical Consulting Services, "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California," prepared for Engineering Field Activity, West, Naval Facilities Engineering Command, (March 1997); HABS No. CA-1793-A through M.

⁷ California Historic Information System (CHRIS), August 8, 2005.

⁸ Caltrans District 4, "Findings of Adverse Effect: Buildings and Structures, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000," (September 1998) 3; Caltrans, "Historic Property Survey Report for the Proposed Seismic Retrofit of the San Francisco-Oakland Bay Bridge (EA 012000)" Revision 0, (1995).

proposed *San Francisco-Oakland Bay Bridge East Span Seismic Safety Project* in 1998. This project included three alternatives for a new replacement structure and including proposed temporary detour structures on the east side of Yerba Buena Island.⁹ The adverse effects were addressed by mitigation set forth in a memorandum of agreement dated May 26, 2000.

Because more than five years has passed since these resources were listed or determined eligible for the National Register, JRP updated the previous inventory and evaluations of three of the historic properties (Quarters 8, Quarters 10, and the Senior Officers' Quarters Historic District) to account for any changes or alterations to the historic properties. JRP conducted fieldwork in November 2008 to identify any alteration to historic properties. JRP prepared DPR 523 form updates to present: a summary of previous evaluation efforts and confirmation of the current historic status and character-defining features. Digitized copies of the previous historic documentation are found in Appendix D. Because the current project proposes the construction of new ramps that will connect to the new East Bay Span currently under construction, the proposed project has no potential to affect any components of the existing SFOBB historic property. Because an update for the SFOBB is not warranted, no further study of the SFOBB as a historic resource is required for this project. Please refer to Section 4 for a description of the cultural resources addressed in this HRER.

Letters informing interested parties of this project were sent to area planning agencies, local governments, historical societies, and museums on December 11, 2008. No responses have been received to date. Copies of the transmittal letters are included in Appendix C. Maps depicting the project's location and vicinity (Map 1), General APE (Map 2), as well as project's Focused APE (Maps 3), are found in Appendix A.

⁹ Caltrans District 4, "Findings of Adverse Effect: Buildings and Structures"; HAER No. CA-32

3. HISTORICAL OVERVIEW

For much of its history, Yerba Buena Island has been dominated by a military presence, first by the Army and United States Life-Saving Service (predecessor of the Coast Guard) in the nineteenth century and then by the Navy and Coast Guard during the twentieth century. The Naval Training Station at Yerba Buena Island was established in 1898 to fulfill the Navy's need for a western training station. The station became one of only four such Navy training facilities in the country. Although the small island was ill-suited for such a use, the station was a key facility during the first quarter of the twentieth century, before Navy operations were moved to San Diego.¹⁰

The station's main purpose during that time was to train new Navy recruits to serve in the rapidly modernizing US Navy. Recruits spent up to one year at the station before they were transferred to the fleet so at any given time, the station was occupied by four to five hundred trainees. With this many recruits, the Naval Station used almost all of Yerba Buena Island to some extent; however, the functional core of the Training Station was bounded by East Point (a hill at the eastern end of the island, now hidden beneath the Bay Bridge) on the east; East Cove on the south (East Cove is now used by the Coast Guard); San Francisco Bay on the north (now the harbor between Yerba Buena and Treasure Islands); and on the west by the central hillside of Yerba Buena (denoted today by the east portal to the Yerba Buena Tunnel for the Bay Bridge).



Figure 1. View of Naval Training Station, 1901, with Officers' Quarters labeled in left background. [Treasure Island Museum Collection, unnumbered, Treasure Island, San Francisco, CA]

Twenty-three buildings were constructed on Yerba Buena Island during the initial period of construction between 1900 and 1905, included the Quarters 1 through 7, which today are seven of the ten buildings within the Senior Officers' Quarters Historic District (Map Reference No. 3),

¹⁰ JRP Historical Consulting Services, "History and Historic Resources of the Military in California, 1796 to 1989," Volume II of *California Historic Military Buildings and Structures Inventory* Prepared for the US Army Corps of Engineers, Sacramento District, March 2000, 5-7; E. Hice and D. Schierling "Historical Study of Yerba Buena Island, Treasure Island, and their Buildings," Mare Island Naval Shipyard, Base Realignment and Closure, Revision 1, prepared for Environmental Department, Naval Station, March 1996, 1-14.

as well as Quarters 8 (Map Reference No. 1), a residence the Navy constructed for the commander of the Marine Corps. The majority of these buildings were designed by the Navy's Bureau of Yards and Docks (BuDocks), with the exception the Marine Corps buildings (Quarters 8 and Marine barracks), which were designed by the local architectural firm of the Reid Brothers.¹¹

Overcrowding on the island was a persistent problem for the Navy and only worsened during the preparedness build-up for the United States' entry into World War I, when up to 13,000 men were assigned there at one time. Consequently the Navy looked elsewhere to locate its major west coast training station and in 1917 a second west coast training station was established in San Diego. After the war, the Navy elected to expand the San Diego facility and closed the training station at Yerba Buena Island. The last of the training station personnel were relocated to San Diego in 1923 and the Yerba Buena facility was decommissioned, although island remained a Navy "Receiving Ship" facility, a transient station for sailors awaiting assignment for duty on ships at sea from 1923 to 1946. It appears that relatively few men were stationed at the facility in association with this function.¹²



Figure 2. Yerba Buena Island during construction of the Oakland Bay Bridge. The Training Barracks and Officers' Housing are shown center right. [Treasure Island Museum Collection, Yerba Buena Island folder, Treasure Island, San Francisco, CA]

¹¹ E. Hice and D. Schierling, "Historical Study of Yerba Buena Island, Treasure Island," 1-48; JRP, "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station," 1-5; JRP Historical Consulting Services, DPR 523 Form for Quarters 8, January 1997.

¹² E. Hice and D. Schierling, "Historical Study of Yerba Buena Island, Treasure Island," 1-39.

During the 1930s three coinciding events of substantial importance forever changed the topography and history of Yerba Buena Island. The first was the construction of the 8-mile long SFOBB, which linked the East Bay to San Francisco. Completed in 1936, the construction of anchorages, piers, abutments and the boring of the largest diameter tunnel in the world through the island, caused massive disruption to the topography of the island. Nevertheless, the bridge was hailed as an engineering feat that dramatically changed transportation in the Bay Area.¹³ The second event was the Golden Gate International Exposition (GGIE), held in 1939 and 1940 to celebrate the completion of the SFOBB and Golden Gate Bridge. The City of San Francisco hosted the GGIE on a new island - Treasure Island – built on the Yerba Buena Shoals by the Corps of Engineers between 1935 and 1937. The island was to serve two purposes: as a site for the exposition and later, as the site for the future airport for San Francisco; however, the reopening of the GGIE in 1940 coincided with the turbulence in Europe, as German forces were closing in on Paris.

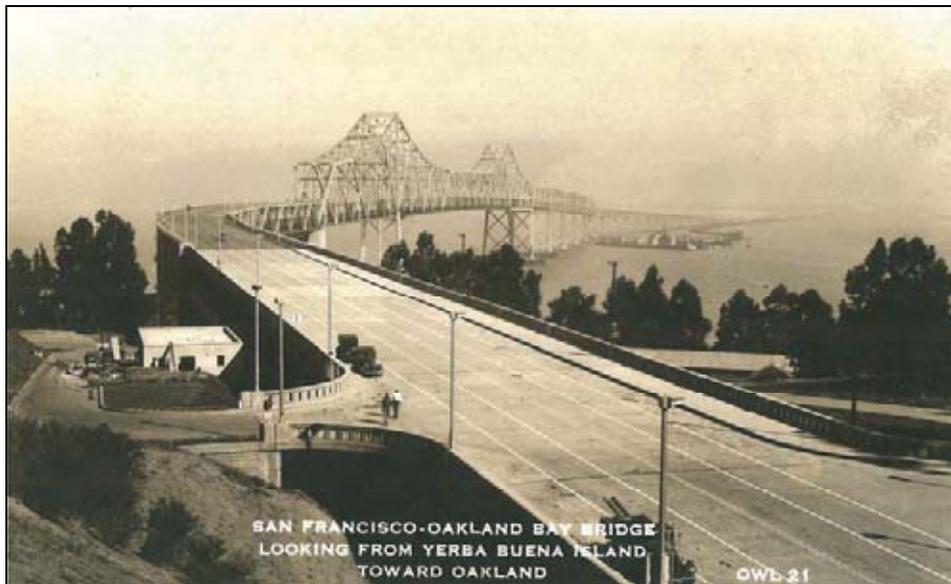


Figure 3. Early postcard view (ca. 1936) of the completed SFOBB. [JRP Historical Consulting, LLC]

With tension growing between United States and Japan, the Navy jumped at the opportunity to utilize the 400-acre island adjacent to their already established facility at Yerba Buena Island for a new Navy station. Plans for the local airport at Treasure Island were postponed and by early 1941 the Navy was temporarily making use of Treasure Island for its war planning. In lieu of Treasure Island, the Navy traded lands it owned on the San Francisco Peninsula, which would eventually be developed for the modern San Francisco International Airport.

While Yerba Buena Island continued its function as a receiving ship facility during World War II, the major build-up was at Treasure Island, where the new Naval Training and Distribution Center (TADCEN) Treasure Island began permanently occupying the former exposition site by 1943. After the attack on Pearl Harbor on December 7, 1941, the Treasure Island's main mission was to supply armed uniformed guards for merchant marine vessels sailing in the Pacific Ocean.

¹³ For a comprehensive history of the planning and construction of the SFOBB, see HAER No. CA-32.

Although the Navy assigned training units to Treasure Island, during World War II it was the temporary homeport for thousands of sailors awaiting assignment to vessels headed into battles in the Pacific.¹⁴

Despite the build-up at Treasure Island, Yerba Buena Island was functionally distinct and it retained many of the basic buildings needed to handle the men in its receiving ship capacity. However, space limitations on the island during and after the war forced the Navy to officially designate Yerba Buena Island as Receiving Station, Treasure Island in 1947.¹⁵ The Navy continued to use Yerba Buena Island, although it primarily served a residential purpose in the support of the training center at Treasure Island. During this period, the Officers' Quarters (Quarters 1-8) still served as housing for the upper level officers; however the base Commander's residence was moved from Quarters 1 to Building 62 in 1947. One additional officer's residence, Quarters 10, was constructed on the island in 1948. Many older buildings were demolished or altered for residential use and newer residences were constructed on the west side of the island in an area used little by the Navy before 1945. All enlisted personnel were transferred to housing on Treasure Island by 1966.

Over the next thirty years, the naval presence on Yerba Buena Island diminished as personnel was reassigned from the island and the Navy transferred more and more land to the US Coast Guard. The beginning of the end of the Navy's occupation of the island came in 1993, when the Defense Base Realignment and Closure Commission (BRAC) recommended the closure of NAVSTA Treasure Island. The Navy ceased naval activity at Yerba Buena in 1997 and today maintains much of both Treasure and Yerba Buena islands under caretaker status until the transfer of land to the City of San Francisco is complete.¹⁶

¹⁴ E. Hice and D. Schierling "Historical Study of Yerba Buena Island, Treasure Island," 2-26 to 2-28. The use of the island during World War II is detailed in LCRD E. A. McDevitt, USNR, *The Naval History of Treasure Island*, (Treasure Island: US Naval Training and Distribution Center, 1946).

¹⁵ E. Hice and D. Schierling, "Historical Study of Yerba Buena Island, Treasure Island," 1-41.

¹⁶ The Navy transferred Quarters 8 (parcel YB018) to the City of San Francisco prior to August 2005. SulTech and Tetra Tech EM Inc. "Final Finding of Suitability to Transfer for Property on Yerba Buena Island, Naval Station Treasure Island, San Francisco, California," March 22, 2006.

4. DESCRIPTION OF RESOURCES

The Focused APE for the built environment includes four historic properties: a portion of the SFOBB, Senior Officers' Quarters Historic District, Quarters 8, and Quarters 10 (which includes Building 267). All of the properties are located in close proximity to one another, on the east side of Yerba Buena Island. Quarters 8 is sited south of the SFOBB, while the historic district and Quarters 10 are immediate north of the bridge. The Navy constructed all of the buildings between 1900 and 1948 as part of its Yerba Buena Island installation. The completion of the SFOBB in 1936 bisected Quarters 8 from the other seven officer quarters' and today the bridge provides an accepted directional division between the north and south side of the island.

Quarters 8

Map Reference 1

Quarters 8 is a symmetrical three-story, wood-frame, Mediterranean style residence constructed in 1905. The building has a square footprint and has a recessed third story partially concealed by a second-story parapet. The building is primarily clad in stucco siding but has horizontal wood siding on the third floor. The north and south side include two exterior brick chimneys and double-hung wood windows. The building is significant under Criterion A within the context of military history, and under Criterion C, as an unusual example of Mediterranean-style architecture and as the work of the master architectural firm of the Reid Brothers.

Quarters 10 (and Building 267)

Map Reference 2

Quarters 10 was constructed in 1948 and is a mixture of three modern architectural styles: Moderne, International, and Bay Region. The two-story building is set on a hillside and has a rectangular footprint with a curved end wall and flat roof with projecting eaves with exposed rafter tails and wide frieze. The building has board formed-concrete walls, some clad with beveled wood siding and a mixture of wood fixed and casement windows. Adjacent to Quarters 10, Building 267 is similar in design and construction, with board-formed concrete and beveled wood siding, and a flat roof with projecting eave and exposed rafter tails. The property is significant at the local level under Criterion C, as significant example of mid twentieth century residential architecture.

Senior Officers' Quarters Historic District (and Quarters 1)

Map Reference 3

The Senior Officers' Quarters Historic District includes eleven contributing elements: seven residences (Quarters 1 through 7), two apartments/garages (Buildings 83 and 230), a five-car garage (Building 205), and the landscape that surrounds the district. The district is generally bounded by Northgate Road on the west and north, the greensward on the east, the SFOBB and hillside on the south, and the southern edge of the informal landscaping south of Building 230 and directly west of Quarters 1. The majority of these wood-frame buildings were constructed around the turn of the twentieth century, with the exception of Buildings 83, 230 and 205, which were built in 1918, 1936, and 1944, respectively. The three-story Classical Revival-style officers' quarters (Quarters 1-7) were built between 1901-1903 and have square or rectangular footprints, concrete or brick foundations, clapboard or weatherboard wood siding, hip roofs with dormers and double-hung wood windows. Buildings 83 and 230 are two-story, wood-frame buildings with concrete foundations, gable roofs and double-hung wood windows. Both Buildings 83 and 230 consists of garages on the first floor and a second-story residence. Building 83 has weatherboard wood siding, open eaves and triangular knee braces, while Building 230 has drop wood siding and roof dormers. Building 205, a five-bay garage, is the

only one-story building within the district. It has a rectangular footprint, sits on concrete foundation with lap wood siding and gable roof. All of the buildings are surrounded by different landscape features: greensward on the west of Quarters 1-5, formal terraced garden west of Quarters 1, and terraced central garden west of Quarters 2-5 and north of Buildings 83 and 205. The property is significant at the local level under Criterion A, for its association with the early development of military facilities on the West Coast, and under Criterion C, as significant examples of Classical Revival/Colonial Revival residential architecture.

San Francisco-Oakland Bay Bridge

Map Reference 4

The SFOBB is significant at the national level under Criterion A, for its important influence on transportation in San Francisco Bay Area and the state as a whole. The bridge is also significant for its engineering design (Criterion C). The SFOBB consists of fifteen contributing elements. The six contributing buildings include the Transbay Transit Terminal Building (San Francisco), Key System Electrical Substation (San Francisco), Key System Electrical Substation (Yerba Buena Island), SFOBB Firehouse (also known as the Caltrans Garage, Yerba Buena Island), Bay Bridge Substation (also known as the Caltrans substation, Oakland), and the Key Pier Substation (Oakland). The Firehouse and Key System Electrical Substation, which were once located within the Focused APE, have been demolished. The nine contributing structures consist of individual components of the bridge itself and include approaches, San Francisco approach on- and off-ramps, street overcrossings (bus ramps in San Francisco), the main bridge spans (West and East Bay spans) and the Yerba Buena Tunnel.¹⁷ Of these structures, only a short, westernmost section of the East Bay Span (Bridge No. 33-025) is located within the Focused APE. A new East Span of the SFOBB has been under construction since 2002 and construction activity continues within the Focused APE.

¹⁷ The nine contributing structures have individually been assigned Caltrans Bridge numbers: Bridge Nos. 34-118R, 34-118L, 34-117S, 34-116F, 34-003, 34-004, 33-025, 34-119Y, 34-120Y.

5. FINDINGS AND CONCLUSIONS

JRP prepared this HRER as part of the Yerba Buena Island Ramps Improvement Project and to comply with applicable sections of National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) as these pertain to federally funded undertakings and their impacts on historic properties. The built environment resources have also been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code. All four of the historic properties located within Focused APE were previously evaluated: Senior Officers' Quarters Historic District, Quarters 10 (which includes Building 267), Quarters 8, and a portion of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB). Mary K. Smith, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as an Architectural Historian or above, has determined that the only other properties present within the APE, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

Quarters 8 (Map Reference No. 1) has been determined eligible for the National Register at the local level of significance. The building is significant under Criterion A within the context of military history, and under Criterion C, as an unusual example of Mediterranean-style architecture and as the work of the master architectural firm of the Reid Brothers. The period of significance extends from 1905 to 1947. Character-defining features of Quarters 8 include its massing, recessed third floor, symmetrical façade, smooth stucco and wood siding, parapets, full-width front porch with square columns and solid railing, second-floor balcony, hip roof with box cornice and block modillions, and original fifteen-over-one, twelve-over-one, and eight-over-one double hung wood windows, exterior brick chimneys, and triangular-shaped property.

Quarters 10 (Map Reference No. 2) and Building 267, a contributing garage, are listed in the National Register. The property is significant at the local level under Criterion C, as significant example of mid twentieth century residential architecture. The property boundary includes Quarters 10, Building 267, the landscape immediately adjacent to these buildings including lawn and garden, driveway and the northern retaining wall. The period of significance for this property is 1948, the year of its construction. Character-defining features of Quarters 10 include its setting and landscape, and those distinctive architectural characteristics of the International, Moderne and Bay (Regional) Tradition styles: flat roof with overhanging eaves supported by slender pipe columns; exposed rafters; corner windows; casement windows with horizontal muntins; curved east wall; board formed concrete wall surface; and lap wood siding. Character-defining features of Building 267 are similar to Quarters 10 and include the lap wood siding, board formed concrete wall surface, flat roof with overhanging eaves, and exposed rafter tails.

The Senior Officers' Quarters Historic District (Map Reference No. 3) is listed in the National Register. The property is significant at the local level under Criterion A, for its association with the early development of military facilities on the West Coast, and under Criterion C, as significant examples of Classical Revival/Colonial Revival residential architecture. The period of significance for the district extends from 1900, when the first building was constructed, to 1947, when the station was decommissioned as a "Receiving Ship" facility and ceased its operations as a naval training and distribution center. The character-defining features of the district include its setting: relationship between each contributing building, size and massing of

buildings, landscaping (greensward in front of Quarters 1-3, formal terraced garden behind Quarters 1, central terraced garden behind Quarters 2-5, planting beds adjacent to each building, and hardscape, such as walkways, patios, masonry walls, and roadways); historic integrity of individual contributors (Quarters 1 through 7, Quarters 10, Buildings 267, 83, 205 and 230, and the landscape within the district boundary); the Classical Revival/Colonial Revival architecture; and view shed from Quarters 1-5. Additionally, Quarters 1, also known as the Nimitz House, is listed in the National Register as an individual property and is significant under Criterion A, for its association with the development of West Coast military facilities, and under Criterion C, as an important example of Classical Revival architecture. Its period of significance is identified as 1898-1916. Its character-defining features of this building consists of those architectural features that contribute to its Classical Revival style including, but not limited to, its size and massing, symmetrical façade, brick foundation, porch with portico, dormers, weatherboard siding with decorative cornerboards, stringcourse between first and second floors, flared eaves with box cornices and frieze, brick chimneys, and multi-light wood windows.

The SFOBB is listed in the National Register and is significant at the national level under Criterion A, for its important influence on transportation in San Francisco Bay Area and the state as a whole. The bridge is also significant for its engineering design (Criterion C). Its period of significance, as identified on the National Register nomination form, is 1936. The nomination lists six contributing buildings and nine contributing buildings within the bridge property, for a total of fifteen contributing elements.¹⁸

While some changes to setting were noted to these historic properties, all appear to retain sufficient historic integrity to convey their respective significance; therefore, no change in National Register-status is warranted for any of these properties.

The following tables summarize the conclusions of this report:

Table 1. Properties Listed in the National Register

Map Reference No.	Name	Year Built	OHP Status Code
2	Quarters 10 & Building 267	1948	1S
3	Senior Officers' Quarters Historic District	1900-1944	1S
4	San Francisco-Oakland Bay Bridge	1936	1S

Table 2. Properties Previously Determined Eligible for the National Register

Map Reference No.	Name	Year Built	OHP Status Code
1	Quarters 8	1905	2S2

Table 3. Properties Previously Determined Not Eligible for the National Register

¹⁸ California Office of Historic Preservation, "National Register of Historic Places Registration Form, San Francisco-Oakland Bay Bridge," prepared by John J. Mascitelli in March 1999, revised by Karen Oriegel and Sean Riley in August 1999.

None

Table 4. Properties Determined Eligible for the National Register As a Result of the Current Study

None

Table 5. Resources That Are Historical Resources for the Purposes of CEQA

Map Reference No.	Name	Year Built	OHP Status Code
1	Quarters 8	1905	2S2
2	Quarters 10 & Building 267	1948	1S
3	Senior Officers' Quarters Historic District	1900-1944	1S
4	San Francisco-Oakland Bay Bridge	1936	1S

Table 6. Properties Determined Not Eligible for the National Register As a Result of the Current Study

None

Table 7. Resources That Are Not Historical Resources Under CEQA Per CEQA Guidelines §15064.5 Because They Do Not Meet the California Register Criteria Outlined in PRC §5024.1

None

6. REFERENCES

California Historic Information System (CHRIS), August 8, 2005.

California Office of Historic Preservation. "National Register of Historic Places Registration Form, San Francisco-Oakland Bay Bridge." Prepared by John J. Mascitelli, March 1999, revised by Karen Oriegel and Sean Riley in August 1999.

Caltrans. "Historic Property Survey Report for the Proposed Seismic Retrofit of the San Francisco-Oakland Bay Bridge (EA 012000)" Revision 0. 1995.

Caltrans District 4. "Findings of Adverse Effect: Buildings and Structures, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000." September 1998.

HABS No. CA-1793-A through M.

HAER No. CA-32.

Hice, E. and D. Schierling. "Historical Study of Yerba Buena Island, Treasure Island, and their Buildings," Mare Island Naval Shipyard, Base Realignment and Closure, Revision 1. Prepared for Environmental Department, Naval Station. March 1996.

JRP Historical Consulting Services. "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." Prepared for Engineering Field Activity, West, Naval Facilities Engineering Command. March 1997.

_____. DPR 523 Form for Quarters 8. January 1997.

_____. "History and Historic Resources of the Military in California, 1796 to 1989," Volume II of *California Historic Military Buildings and Structures Inventory*. Prepared for the US Army Corps of Engineers, Sacramento District. March 2000.

SulTech and Tetra Tech EM Inc. "Final Finding of Suitability to Transfer for Property on Yerba Buena Island, Naval Station Treasure Island, San Francisco, California." March 22, 2006.

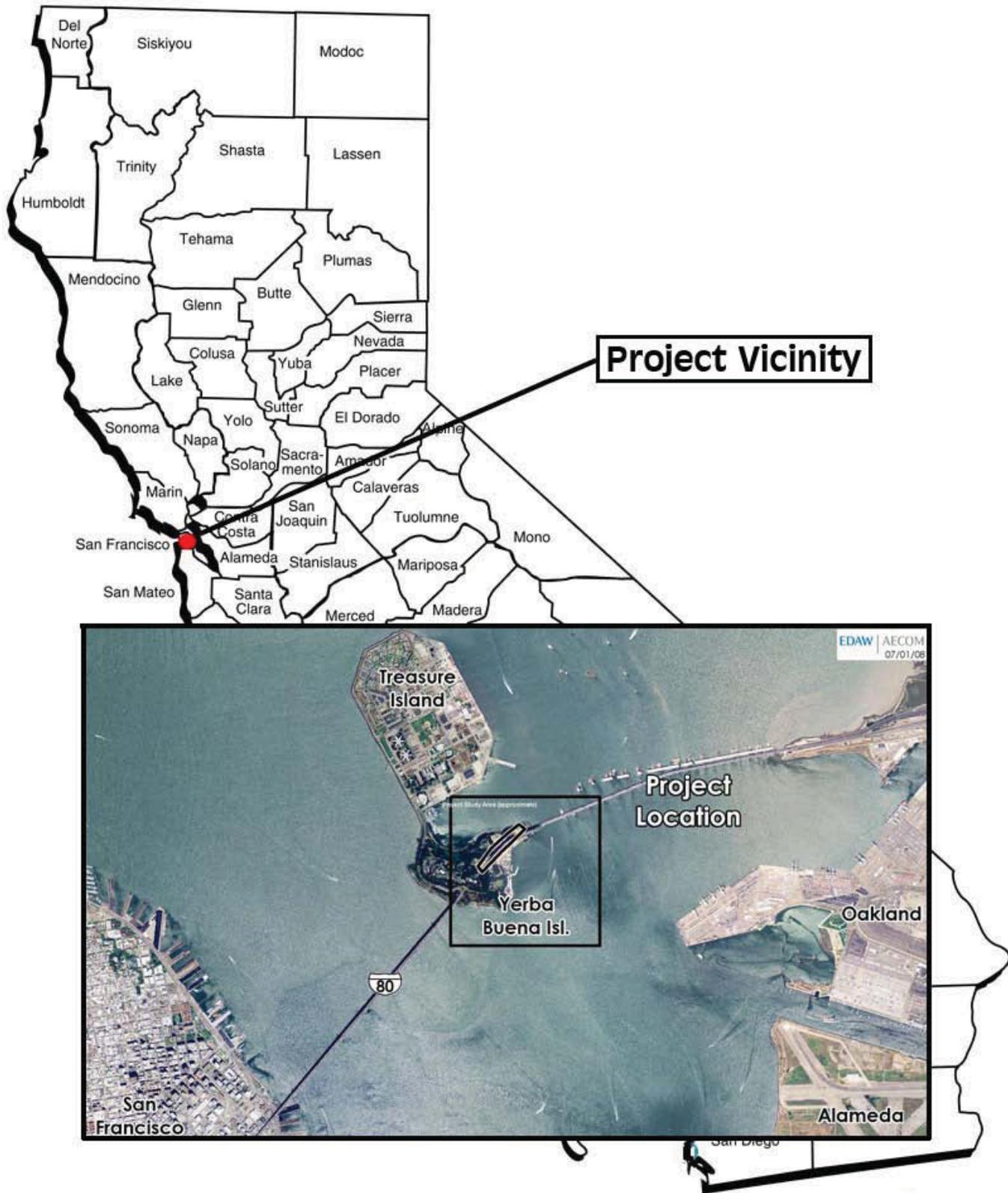
7. PREPARERS' QUALIFICATIONS

This project was conducted under the general direction of Rebecca M. Bunse (M.A. in Public History, California State University, Sacramento), a partner at JRP with more than 19 years experience conducting these types of studies. Ms. Bunse consulted on the development of the APE, provided overall guidance, and edited the report. Based on her level of experience and education, Ms. Bunse qualifies as a historian/architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

JRP architectural historian Toni Webb was the lead historian for this project. Ms. Webb prepared the contextual statement and evaluations, as well as conducted fieldwork, and prepared the updated DPR forms. Ms. Webb received a B.F.A. in Historic Preservation from the Savannah College of Art & Design and has over ten years of experience in public history and historic preservation. Based on her level of experience and education, Ms. Webb qualifies as an architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

Appendix A

Maps



Map 1. Project Location and Vicinity

General Architectural Area of Potential Effects

Yerba Buena Island
Ramps Improvement Project

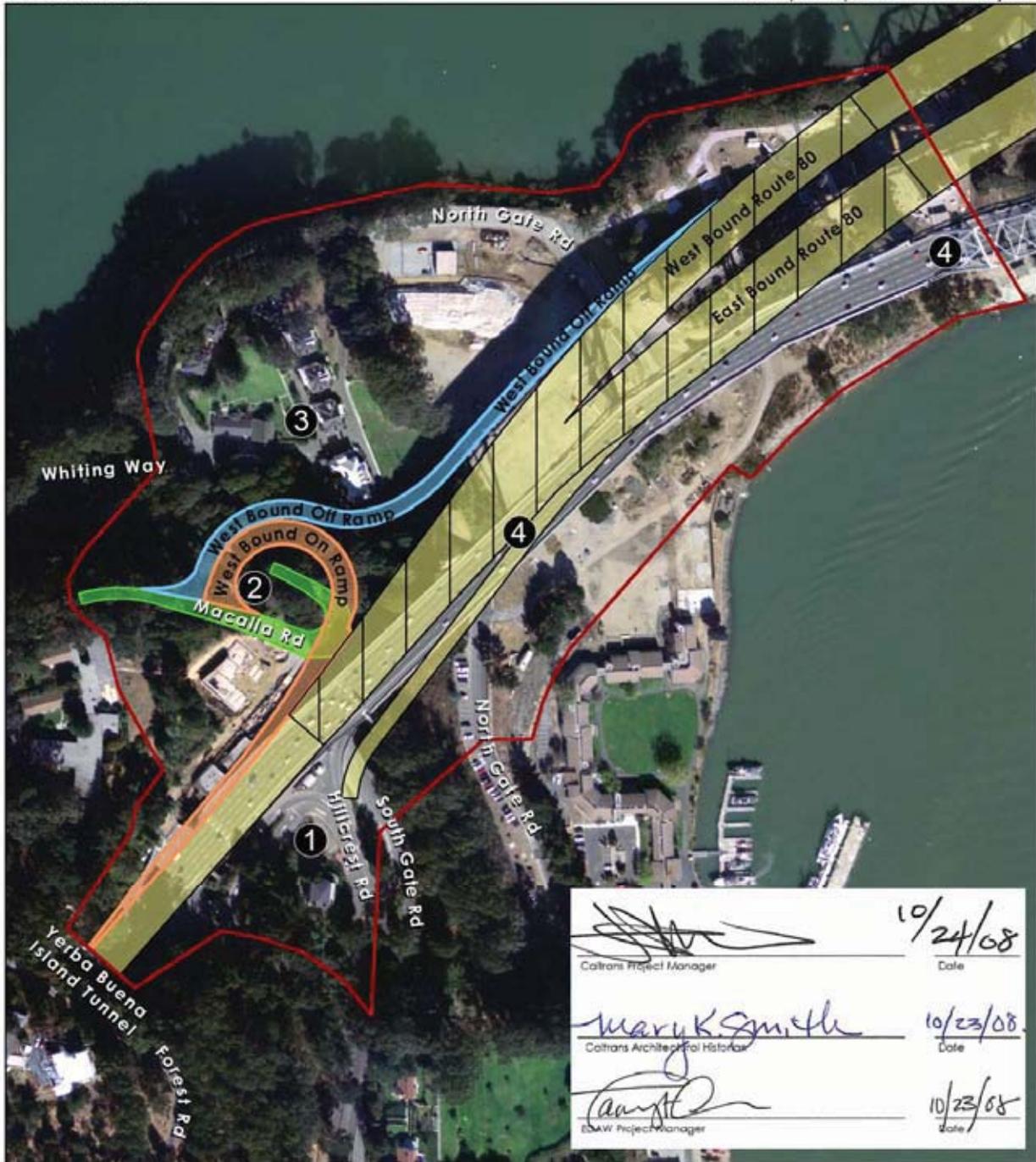


□ Area of Potential Effects



01-09

Map 2. General APE



- Alternative 2b Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

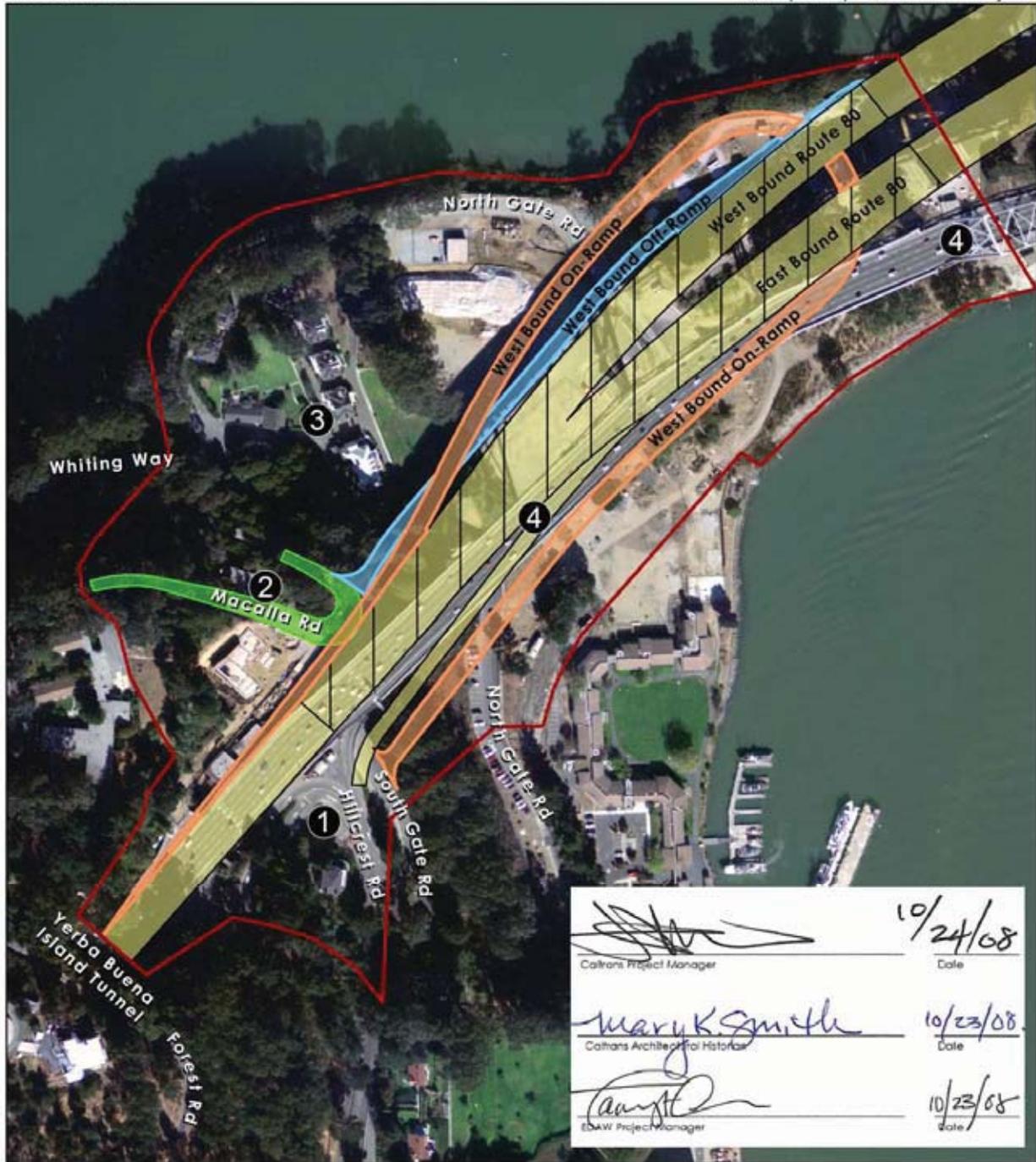
Map Reference

Image: NIMA/USGS 2004
Data: DAJM/Hark, ED&W
5/09

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

0 100 200 300 Feet

Map 3. Focused APE



- Alternative 4 Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

Map Reference

Image: NAD83 USGS 2004
Data: DMJM Hark, EDAW
5/04

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

0 100 200 300 Feet

Map 3. Focused APE

Appendix B
DPR 523 Forms

P1. Other Identifier: Quarters 8

***P3a. Description:** Quarters 8 has been field checked and the building does not appear to have been physically altered since last recorded in 1996. However, the overall setting of this property has been temporarily altered by the use of the northernmost portion of the property (immediately adjacent to this building) for a staging area for the construction of the new East Span of the San Francisco-Oakland Bay Bridge (SFOBB).

***P3b. Resource Attributes:** (HP34) Military property; (HP2) Single-Family Property

***P8. Recorded by:** Toni Webb, JRP Historical Consulting, LLC, 1490 Drew Ave, Suite 110, Davis, CA 95618

***P9. Date Recorded:** November 2008

***P11. Report Citation:** JRP Historical Consulting, LLC, "Historical Resources Evaluation Report, Yerba Buena Island Ramps Improvement Project, San Francisco, California, 04-SF-80, PM 12.6-13.1/7.8-8.1

***B10. Significance:**

JRP Historical Consulting, LLC previously inventoried and evaluated Quarters 8 in 1997 as part of the report entitled "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." That report concluded that Quarters 8 appeared to be eligible for listing in the National Register of Historic Places (and subsequently the California Register of Historical Resources) at the local level under Criterion A, within the context of military history. The evaluation noted that Quarters 8 is a "rare remnant of the turn-of-the-century Naval Training Station on Yerba Buena Island, and apparently as the last vestige of the Marine Corps presence on the island." It also appeared to be eligible under Criterion C, as an unusual example of Mediterranean-style architecture, as well as the work of the master architectural firm of the Reid Brothers. The State Historic Preservation Office (SHPO) concurred with those findings in 1998.¹ The 1997 evaluation identified the period of significance as spanning 42 years beginning in 1905, when the building was constructed, to 1947, an arbitrary 50 year cut-off date. However, no character-defining features were identified, nor was a verbal or graphic description of the property's boundary stated. Review of historical and modern aerials show that Quarters 8 was bounded to the east and northwest by Hillcrest Road and to the south by Treasure Island Road from at least the 1940s to the early 2000s, when the construction of the new East Span of the SFOBB began. This appears to have been the property boundary at the time this building was evaluated in 1997 and would be the current boundary of this historic property.² Presently, the character-defining features of Quarters 8 would include its massing, recessed third floor, symmetrical façade, smooth stucco and wood siding, parapets, full-width front porch with square columns and solid railing, second-floor balcony, hip roof with box cornice and block modillions, and original fifteen-over-one, twelve-over-one, and eight-over-one double hung wood windows, exterior brick chimneys, and triangular-shaped property.

Although construction measures have encroached upon and altered the historic boundary of Quarters 8, the effects of this intrusion is temporary and will be mitigated with the restoration of the grounds of Quarters 8, as stipulated by the Memorandum of Agreement (MOA) for the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project.³ Therefore, the alterations to this historic property since its last documentation in 1997 will not diminish the property's overall importance, as the property will still maintain integrity of location, association, materials, design and workmanship and will continue to convey its significance under Criteria A and C. No change to its National Register or California Register status is warranted. This property is considered a historical resource for the purposes of CEQA.

***B14. Evaluator:** Toni Webb

***Date of Evaluation:** November 2008

¹ SHPO generally concurred with the finding of this report in October 1997 (SHPO Reference USN 970708A) but requested clarification on some buildings, including the Senior Officers' Quarters Historic District. Final concurrence was obtained in 1998. Caltrans, "Historic Property Survey Report, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project," EA 01200 (September 1998).

² Caltrans, "Findings of Adverse Effect: Buildings and Structures, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project," EA 01200 (September 1998) 8-11.

³ "Memorandum of Agreement Among the Federal Highway Administration, the Department of the Navy, the United States Coast Guard, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation for the Bay Bridge East Span Seismic Safety Project in San Francisco and Alameda Counties, California," May 26, 2000.

Photographs:

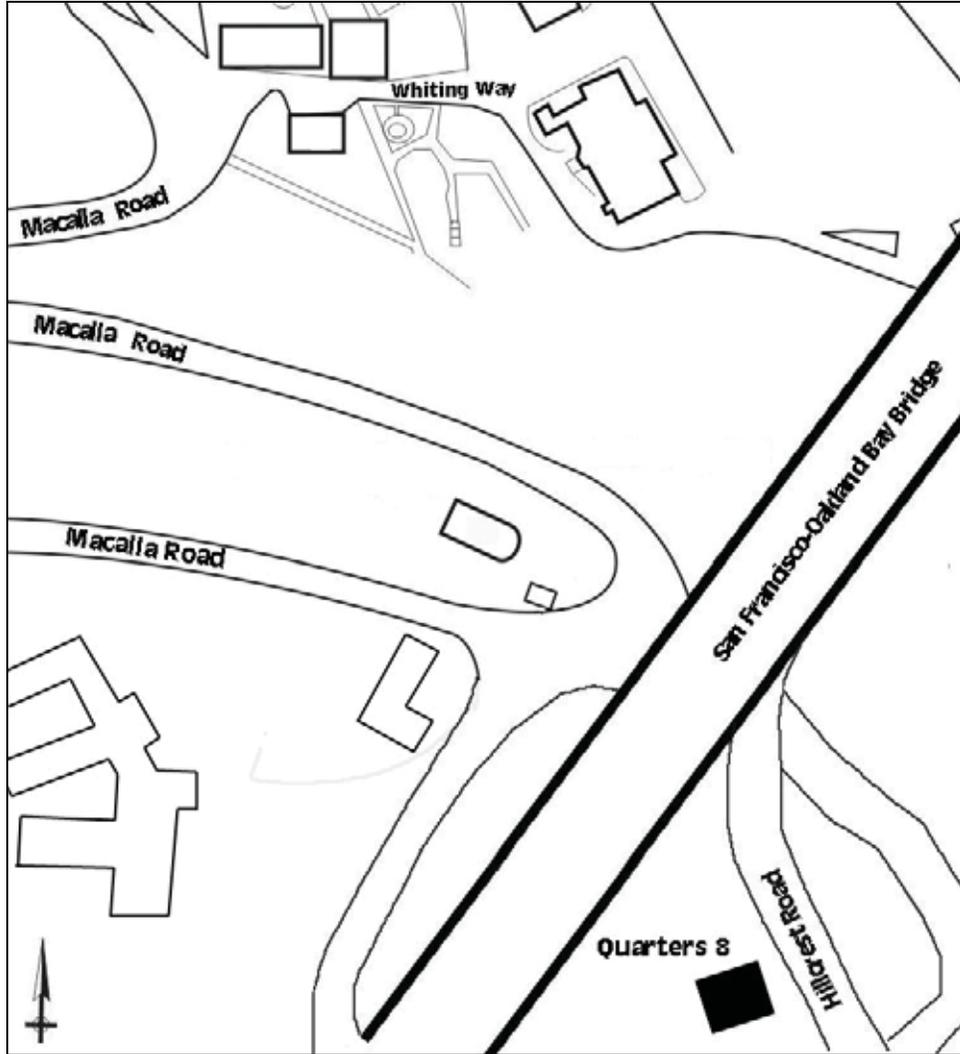


Photograph 1. View of Quarters 8 showing main façade (east side), camera facing west.



Photograph 2. View of Quarters 8 showing north side camera facing southwest.

Sketch Map:



P1. Other Identifier: Quarters 10

*P3a. **Description:** Quarters 10 and its associated garage (Building 267) have been field checked and neither building appears to have been physically altered since their last recorded in 2003.

*P3b. **Resource Attributes:** (HP34) Military property; (HP2) Single-Family Property

*P8. **Recorded by:** Toni Webb, JRP Historical Consulting, LLC, 1490 Drew Ave, Suite 110, Davis, CA 95618

*P9. **Date Recorded:** November 2008

*P11. **Report Citation:** JRP Historical Consulting, LLC, "Historical Resources Evaluation Report, Yerba Buena Island Ramps Improvement Project, San Francisco, California, 04-SF-80, PM 12.6-13.1/7.8-8.1

***B10. Significance:**

Caltrans previously inventoried and evaluated Quarters 10 in 1998 as part of the report entitled "Historic Architecture Survey Report for the Construction of a New East Span for the San Francisco-Oakland Bay Bridge." As a result of that survey, Caltrans found that Quarters 10 and its associated garage (Building 267 as a contributing structure) appeared to be eligible for listing in the National Register of Historic Places (National Register) at the local level of significance under Criterion C, as significant example of mid twentieth century residential architecture. The State Historic Preservation Office concurred with those findings in 1998. Five years later, in 2003, JRP completed a National Register nomination for the district and in February 2008, this property was listed in the National Register and California Register of Historical Resources (California Register).¹ The property boundary includes Quarters 10, Building 267, the landscape immediately adjacent to these buildings including lawn and garden, driveway, and the northern retaining wall. The period of significance for this property is 1948, the year of its construction. Both the 1998 survey and 2003 nomination identified the character-defining of Quarters 10 as representing those distinctive architectural characteristics of the International, Moderne and Bay (Regional) Tradition styles. These include the flat roof with overhanging eaves supported by slender pipe columns; exposed rafters; corner windows; casement windows with horizontal muntins; curved east wall; board formed concrete wall surface; and lap wood siding. While neither inventory identified character-defining features of Building 267, they are similar to Quarters 10 and include the lap wood siding, board formed concrete wall surface, flat roof with overhanging eaves, and exposed rafter tails.

Because the property has been unaltered since its last recordation, no change to its National Register or California Register status is warranted. This property is considered a historical resource for the purposes of CEQA.

*B14. **Evaluator:** Toni Webb

*Date of Evaluation: November 2008

¹ National Register Information System Reference No. 08000084.
DPR 523L (1/95)

Photographs:



Photograph 1. View of Quarters 10 (right) and Building 267 (left), camera facing west.



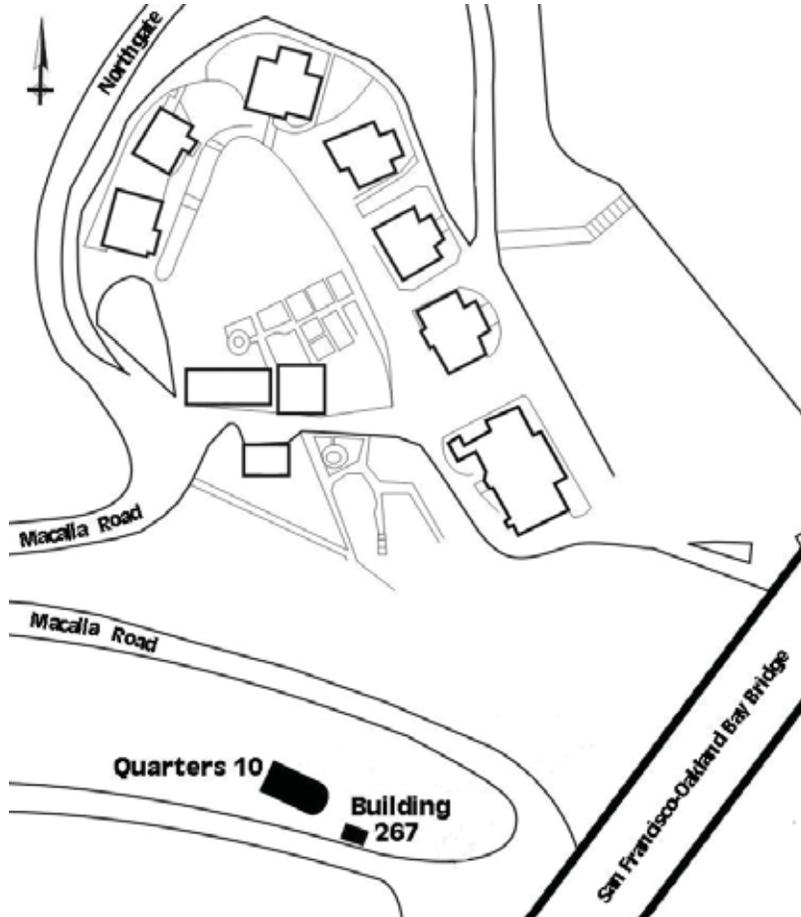
Photograph 2. View of Quarters 10, camera facing southwest.

Photographs:



Photograph 3. View of Building 267, camera facing southwest.

Sketch Map:



P1. Other Identifier: Senior Officers' Quarters Historic District

***P3a. Description:** The Senior Officers' Quarters Historic District includes eleven contributing elements: seven residences (Quarters 1 through 7), two apartments over garages (Buildings 83 and 230), a five-car garage (Building 205), and the landscape that surrounds the district. All of these elements have been field checked and none appear to have been physically altered since their last recorded in 2003. However, the overall setting of the district has been and will be somewhat altered by the on-going construction of the new East Span of the San Francisco-Oakland Bay Bridge (SFOBB) immediately south and west of the historic district.

***P3b. Resource Attributes:** (HP34) Military property; (HP2) Single-Family Property

***P8. Recorded by:** Toni Webb, JRP Historical Consulting, LLC, 1490 Drew Ave, Suite 110, Davis, CA 95618

***P9. Date Recorded:** November 2008

***P11. Report Citation:** JRP Historical Consulting, LLC, "Historical Resources Evaluation Report, Yerba Buena Island Ramps Improvement Project, San Francisco, California, 04-SF-80, PM 12.6-13.1/7.8-8.1

***B10. Significance:**

JRP Historical Consulting, LLC (JRP) previously inventoried and evaluated this property in 1997 as part of the report entitled "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." That report concluded that the district appeared to be eligible for listing in the National Register of Historic Places (National Register) at the local level under Criterion A, for its association with the early development of military facilities on the West Coast, and under Criterion C, as significant examples of Classical Revival/Colonial Revival residential architecture. The State Historic Preservation Office (SHPO) concurred with those findings in 1998.¹ Five years later, in 2003, JRP completed a Historic American Building Survey (HABS No. CA-1793-A through -K) and National Register nomination for the district. The nomination refined and clarified the previously-identified district boundary and the period of significance. The boundary of the district is shown in the attached sketch map on page 2. The period of significance for the district extends from 1900, when the first building was constructed, to 1947, when the station was decommissioned as a "Receiving Ship" facility and ceased its operations as a naval training and distribution center. Additionally, the nomination recognized important characteristics of the districts which were not identified in the 1997 survey. The character-defining features of the Senior Officers' Quarters Historic District include its setting: relationship between each contributing building, size and massing of buildings, landscaping (greensward in front of Quarters 1-3, formal terraced garden behind Quarters 1, central terraced garden behind Quarters 2-5, planting beds adjacent to each building, and hardscape, such as walkways, patios, masonry walls, and roadways); historic integrity of individual contributors (Quarters 1 through 7, Quarters 10, Buildings 267, 83, 205 and 230, and the landscape within the district boundary); the Classical Revival/Colonial Revival architecture; and view shed from Quarters 1-5.

In February 2008 the Senior Officers' Quarters Historic District was listed in the National Register and California Register of Historical Resources (California Register). Additionally in September 1991, Quarters 1, which is commonly referred to as the Nimitz Residence, was previously listed in the National Register and California Register for its significance with West Coast military historic (Criterion A) and as a significant example of Classical Revival architecture (Criterion C). Its period of significance extends from 1898 to 1916.² The character-defining features of this building consists of those architectural features that contribute to its Classical Revival style including, but not limited to, its size and massing, symmetrical façade, brick foundation, porch with portico, dormers, weatherboard siding with decorative cornerboards, stringcourse between first and second floors, flared eaves with box cornices and frieze, brick chimneys, and multi-light wood windows.

¹ SHPO generally concurred with the finding of this report in October 1997 (SHPO Reference USN 970708A) but had questions regarding some resources evaluated, including the Senior Officers' Quarters Historic District. Final concurrence from SHPO was obtained in 1998. Caltrans, Historic Property Survey Report, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 01200 (September 1998).

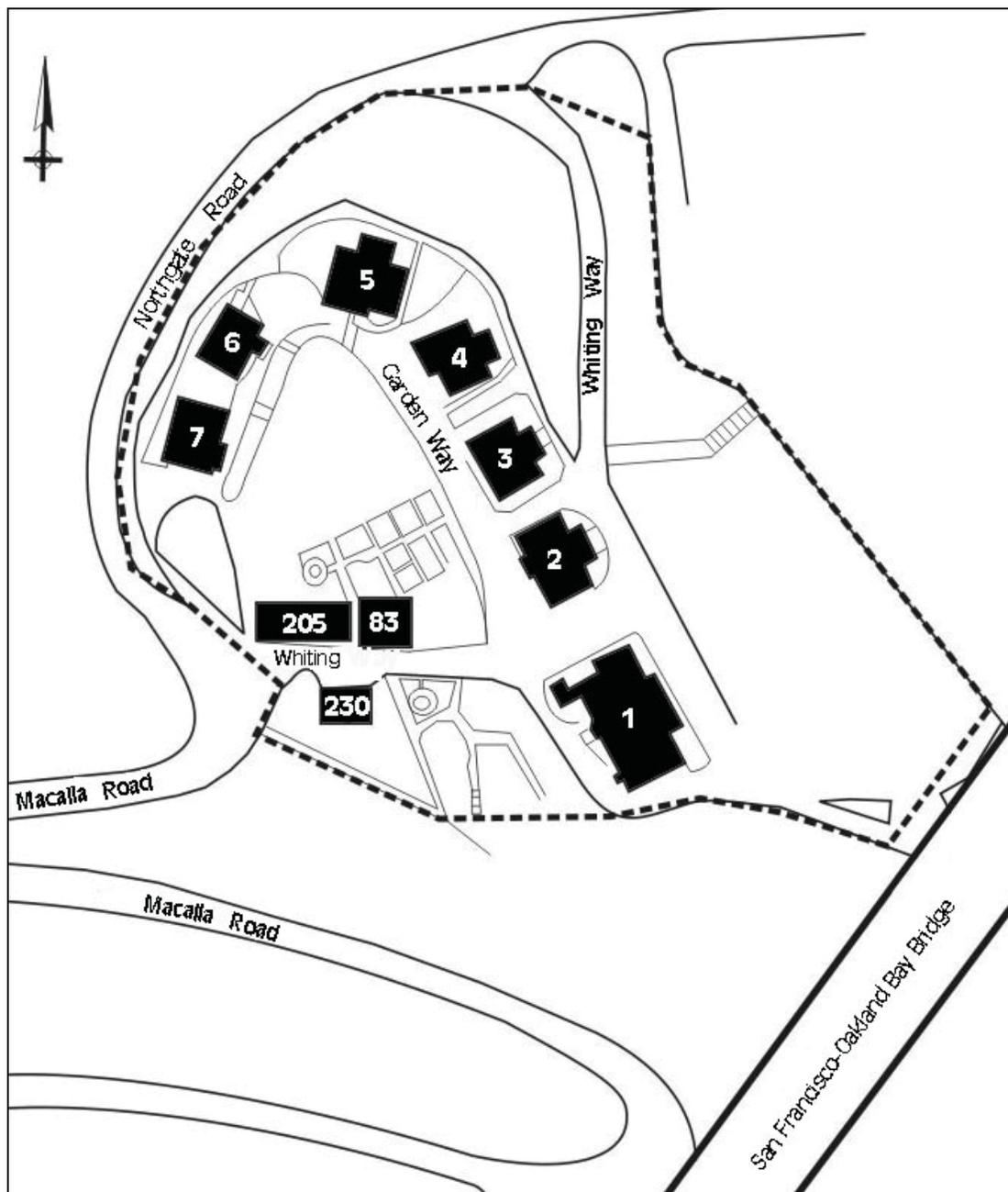
² National Register Information System Reference Nos. 08000085 and 91001380; HABS No. CA-233-A (1998).

While the visual intrusion from the construction of the new East Bay Span of SFOBB has currently altered the district's integrity of setting and feeling, this change is minimal and does not diminish the property's overall historical importance. The property maintains integrity of location, association, materials, design and workmanship and conveys its significance under Criteria A and C, and therefore, no change to its National Register or California Register status is warranted. This property is considered a historical resource for the purposes of CEQA.

*B14. Evaluator: Toni Webb

*Date of Evaluation: November 2008

Sketch Map:



*Boundary of the Officers Quarters Historic District is shown with dotted line.

Photographs:



Photograph 1. View of historic district along Whiting Way, showing Quarters 1, 2 and 3 (left to right), camera facing north.



Photograph 2. View of Quarters 1, camera facing northwest.

Photographs:



Photograph 3. View of Quarters 2, camera facing south.



Photograph 4. View of Quarters 3, camera facing northwest.

Photographs:



Photograph 5. View of Quarters 4, camera facing northwest.



Photograph 6. View of Quarters 5, camera facing north.

Photographs:



Photograph 7. View of Quarters 6, camera facing west.

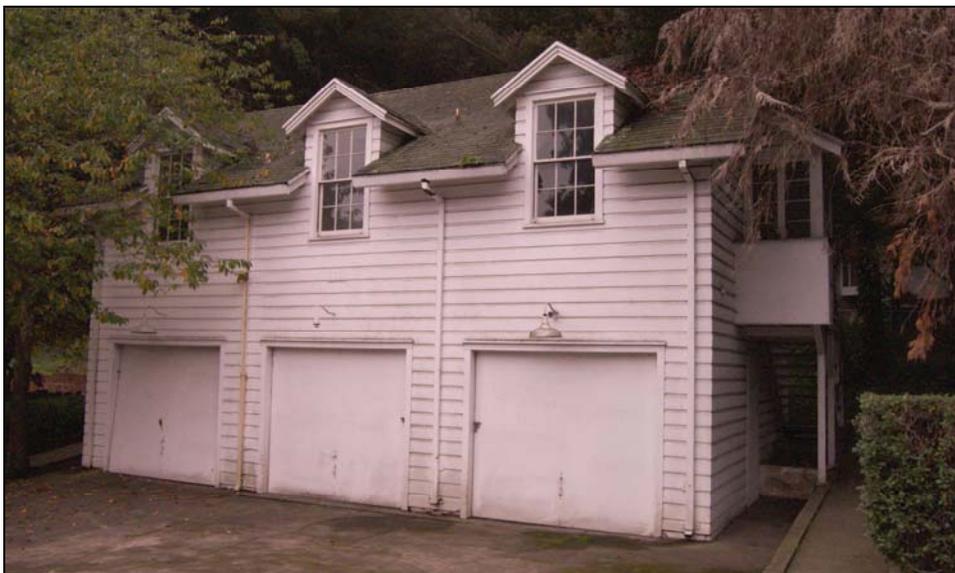


Photograph 8. View of Quarters 7, camera facing east.

Photographs:



Photograph 9. View of Buildings 205 (left) and 83 (right), camera facing northeast.



Photograph 10. View of Buildings 230, camera facing south.

Photographs:



Photograph 11. View of landscape behind (west) Quarters 1, camera facing west.



Photograph 12. View of landscape behind (west) Quarters 1, camera facing northwest.

Appendix C
Letters to Interested Parties

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Jack Gold, Executive Director
San Francisco Architectural Heritage
2007 Franklin Street
San Francisco, CA 94109

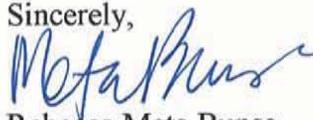
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

M. Bridget Maley, President
San Francisco Landmark Preservation Advisory Board
1660 Mission Street, Ste. 500
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Mark Luellen, Preservation Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Ron Ross, President
San Francisco History Association
PO Box 31907
San Francisco, CA 94131

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Erik Christoffersen, Executive Director
San Francisco Museum and Historical Society
P.O. Box 420470
San Francisco, CA 94142-0470

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

David Crosson, Executive Director
California Historical Society
678 Mission Street
San Francisco CA 94105

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Leigh Ann Baughman, Executive Director
San Francisco Beautiful
564 Market Street, Suite 709
San Francisco, CA 94104

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

William Applegate, President
California Heritage Council
P.O. Box 475046
San Francisco, CA 94147

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Cindy Heitzman, Executive Director
California Preservation Foundation
5 Third St., Ste 424
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Anthea Hartig Ph.D., Director
National Trust for Historic Preservation Western Office
5 Third Street, Suite 707
San Francisco, California 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

John J. Reynolds, Director
National Park Service, Pacific West Region Office
1111 Jackson Street, Suite 700
Oakland, California 94607

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Valerie Garry, President
Oakland Heritage Alliance
446 17th Street, Suite 301
Oakland, CA 94612

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Joann Pavlinec, Secretary & Historic Preservation Planner
Oakland Landmarks Preservation Advisory Board
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Betty Marvin, Planner
Oakland Cultural Heritage Survey
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94612

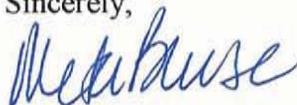
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Winton "Mac" McKibben, President
Alameda County Historical Society
PMB 307
484 Lake Park Ave.

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Alameda County Parks, Recreation and Historical Commission
224 West Winton Ave., #111
Hayward, CA 94544

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir or Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner



Figure 1. Project Location



Figure 2. Project Vicinity

Appendix D
Previous Historic Documentation

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



May 1, 2008

Douglas E. Gilkey
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

RE: Senior Officers Quarters Historic District, Yerba Buena Island Listing on the National Register of Historic Places

Dear Mr. Gilkey:

I am pleased to notify you that on February 26, 2008, the above-named property was placed on the National Register of Historic Places (National Register). As a result of being placed on the National Register, this property has also been listed in the California Register of Historical Resources, pursuant to Section 4851(a)(2) of the Public Resources Code.

Placement on the National Register affords a property the honor of inclusion in the nation's official list of cultural resources worthy of preservation and provides a degree of protection from adverse affects resulting from federally funded or licensed projects. Registration provides a number of incentives for preservation of historic properties, including special building codes to facilitate the restoration of historic structures, and certain tax advantages.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property listed in the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have any questions or require further information, please contact the Registration Unit at (916) 653-6624.

Sincerely,

A handwritten signature in black ink that reads "Stephen D. Donaldson".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



May 1, 2008

Douglas E. Gilkey
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

RE: Quarters 10 and Building 267, Yerba Buena Island Listing on the
National Register of Historic Places

Dear Mr. Gilkey:

I am pleased to notify you that on February 26, 2008, the above-named property was placed on the National Register of Historic Places (National Register). As a result of being placed on the National Register, this property has also been listed in the California Register of Historical Resources, pursuant to Section 4851(a)(2) of the Public Resources Code.

Placement on the National Register affords a property the honor of inclusion in the nation's official list of cultural resources worthy of preservation and provides a degree of protection from adverse affects resulting from federally funded or licensed projects. Registration provides a number of incentives for preservation of historic properties, including special building codes to facilitate the restoration of historic structures, and certain tax advantages.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property listed in the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have any questions or require further information, please contact the Registration Unit at (916) 653-6624.

Sincerely,

A handwritten signature in black ink that reads "Milford Wayne Donaldson".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

April 25, 2008

The Director of the National Park Service is pleased to send you the following announcements and actions on properties for the National Register of Historic Places. For further information contact Edson Beall via voice (202) 354-2255, or E-mail: <Edson_Beall@nps.gov> This and past Weekly Lists are also available here: <http://www.nps.gov/history/nr/nrlist.htm>

Our physical location address is:

National Park Service 2280, 8th floor
National Register of Historic Places
1201 "I" (Eye) Street, NW,
Washington D.C. 20005

Please have any Fed Ex, UPS packages sent to the above address. Please continue to use alternate carriers, as all mail delivered to us via United States Postal Service is irradiated and subsequently damaged.

Landscape Architecture Month:
<http://www.nps.gov/history/nr/feature/landscape/index.htm>

WEEKLY LIST OF ACTIONS TAKEN ON PROPERTIES: 4/14/08 THROUGH 4/18/08

KEY: State, County, Property Name, Address/Boundary, City, Vicinity, Reference Number, NHL, Action, Date, Multiple Name

CALIFORNIA, SAN FRANCISCO COUNTY,
Administration Building, Treasure Island, SE Corner of Avenue of the Palms and California Ave., Treasure Island, 08000081, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Hall of Transportation, Treasure Island, SE Side of California Ave. between Avenue D and Avenue F, Treasure Island, 08000082, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Palace of Fine and Decorative Arts, Treasure Island, SE Side of California Ave. between Avenue F and Avenue I, Treasure Island, 08000083, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Quarters 10 and Building 267, Yerba Buena Island, Jct. Northgate & Macalla Rds., North Shore of Yerba Buena Island, Yerba Buena Island, 08000084, LISTED, 2/26/08

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 5

*Resource Name or #: (Assigned by recorder) Quarters 8

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T: _____; R: _____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

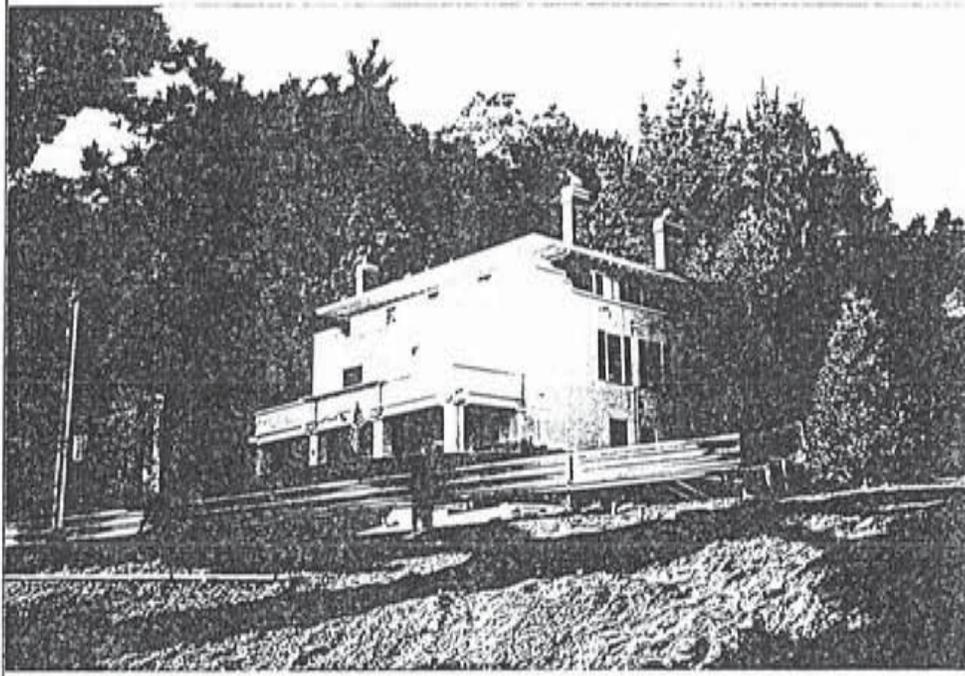
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Quarters 8 is a three-story, woodframe residence, built at this site in 1905. It is a square box building on its first and second story and includes a recessed third story. The first and second story element is sided in stucco and terminates in an elaborate parapet. The third story is woodframe and sided in horizontal boards. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #) _____
East facade, camera facing
southwest.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1905

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Stephen D. Mikesell
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings

*Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

CONTINUATION SHEET

Page 3 of 5

*NRPH Status Code _____
*Resource Name or # (Assigned by recorder) Quarters 8

DESCRIPTION (continued)

The differences in elevation and siding between the first and second story element and the third story element suggest at first glance that the third story was a later addition. Historic photographs confirm, however, that the building was designed in this manner and has not changed materially since its construction.¹

The facade is dominated by a heavy porch with a solid rail balcony at its roofline. This porch serves as a balcony for the second story; the parapet atop the second story serves as a balcony for the setback third story. The main entry, centered on the front porch, includes a solid door with sidelights. Windows throughout the building are double hung wooden sash, with multiple lights on top: fifteen-over-one at the facade, twelve-over-one on the side elevations, and eight-over-one on the recessed third story. The building includes four separate chimneys, set at the four corners of the third story setback.

Quarters 8 appears to be almost completely unmodified. When constructed, the building included elaborate window surrounds on the first and second story element; these have all been removed. There is a single fixed pane, "picture window" to the left of the entry at the first story. These modifications are minor, when considered against the scale of the building.

SIGNIFICANCE (continued)

Quarters 8 was built in 1905, at about the same time as the main compound of Senior Officers' Quarters at Yerba Buena Island (Quarters 1-7; these are treated separately as the Yerba Buena Senior Officers' Quarters Historic District). All eight homes were built at the outset of construction for the Naval Training Station at Yerba Buena Island, which was in operation on Yerba Buena Island between 1898 and 1923. Quarters 8, however, was separated physically from the other senior officers' quarters, situated hundreds of feet south and uphill from the main compound, and is unlike the other quarters from an architectural standpoint.

For reasons not explained in the historic record, the Bureau of Yards and Docks, with overall design and construction responsibility for the buildings at Yerba Buena Island, turned to a private architectural firm to design the entire Marine compound there. While there were exceptions, the Bureau of Yards and Docks designed the bulk of Navy and Marine Corps buildings during the early 20th century. The Bureau almost certainly designed the Colonial Revival Quarters 1-7, which are similar architecturally to the senior officers' quarters at Mare Island Naval Shipyard, built at about the same time. For the Marine compound at Yerba Buena, however, the Bureau hired the noted San Francisco architectural firms of the Reid Brothers.

The Reid Brothers, James and Merritt, comprised one of the most prolific turn-of-the-century architectural firms in California. Canadians by birth and training, the Reid brothers arrived in San Francisco in 1888. Almost immediately they began winning some of the most prized architectural commissions in the state, including: the Hotel del Coronado

¹ The building is shown in "The Work of the Reid Bros.," *Architect and Engineer of California*, XXIII, No. 1, Nov. 1910, p. 72.

CONTINUATION SHEET

Page 5 of 5

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 8

is attributable to the design of the Reid Brothers firm, which was responsible for both the barracks and the commanding officer's quarters. The building also appears to qualify under National Register Criterion C, as the "work of a master." The Reid Brothers firm was responsible for some of the most important buildings in California, dating to the period from the late 1880s through the late 1910s, including the Hotel del Coronado and the Fairmont Hotel. While a modest example, Quarters 8 represents the only known military commission by the Reid Brothers firm and a relatively rare extant example of the firm's residential design.

Primary # _____
 HRI # _____
 Trinomial _____
 NRHP Status Code 3S

Other Listings _____
 Review Code _____ Reviewer _____ Date _____

Page 1 of 7 *Resource Name or #: (Assigned by recorder) Quarters 10, Yerba Buena Island

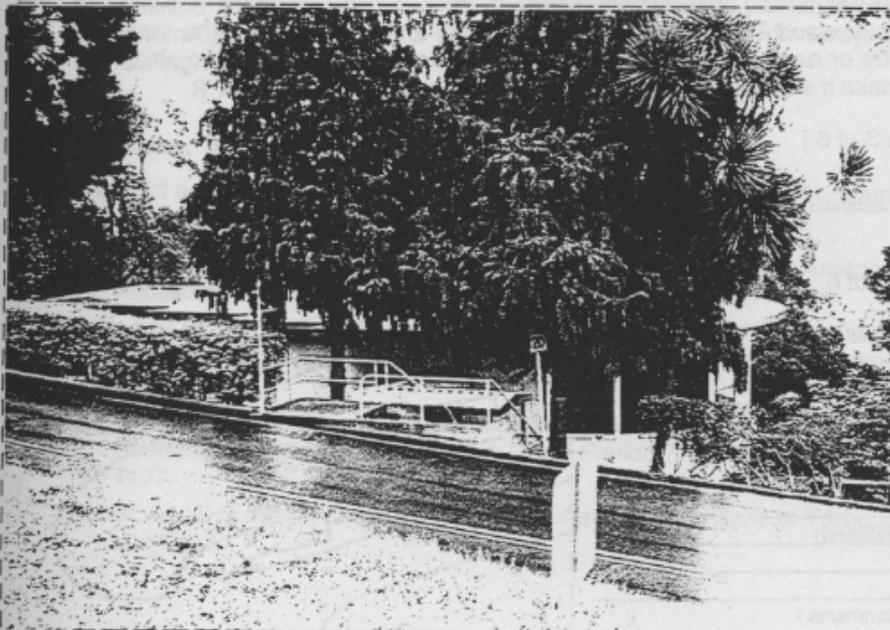
P1. Other Identifier: _____
 *P2. Location: Not for Publication Unrestricted *a. County San Francisco
 and (P2b and P2c or P2d. Attach a Location Map as necessary.)
 *b. USGS 7.5' Quad Oakland West Date T: R: 1/4 of 1/4 of Sec. 1: B. M.
 c. Address Naval Station Treasure Island City San Francisco Zip 94592
 d. UTM: (Give more than one for large and/or linear resources) Zone 10: 556080 mE/ 4184950 mN
 e. Other Location Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

*P3a. Description (Describe the resource and its major elements. Include design, materials, condition, alterations, size, setting & boundaries):

Quarters 10 is a two story residence constructed on a steep hillside site. The main floor is reached by a concrete stairway leading down from the adjacent road. The house has a flat roof with open eaves, and the walls are clad in narrow clapboards from the eaves down to the level of the window sills. The lower portion of the main floor and all of the lower floor walls are clad in flush board siding. The east end of the main floor is entirely glazed, with nine large windows (eight fixed sash and one paired casement) forming a semi-circle. This rounded extension overhangs a paved patio at the lower level, and is supported by four metal-pipe columns. The western end of the upper floor also overhangs a lower level patio and is supported by pipe columns. A series of indentations along the south facade give this portion of the house a jagged roofline and numerous corners, two of which have corner windows. The main floor windows are fixed sash and casements, most having just two horizontal muntins. The lower level patio is accessed from a modern sliding glass door. Another recent alteration is the metal awning that extends from the front door to the foot of the stairway leading up to the street. To the east of the house is a one-car garage (Navy building 267) that matches the construction of the house, with a flat roof and both clapboard and flush board siding.

*P3b. Resource Attributes: (List attributes and codes) HP2 -- Single Family Residence; HP34 -- Military Property

*P4. Resources present: Building Structure Object Site District Element of District Other



P5b. Description of Photo: (View, Date, etc.) View northwest, January 1998

*P6. Date Constructed / Age and Sources: Historic Prehistoric Both
1948 (Historical Study of Yerba Buena Island)

*P7. Owner and Address: Naval Station Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address) Andrew Hope
Caltrans, District 4
111 Grand Avenue
Oakland, CA

*P9. Date Recorded: April 1998

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation (Cite survey report and other sources, or enter "none"): Historic Architecture Survey Report for the Construction of a New East Span for the San Francisco - Oakland Bay Bridge

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure & Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List) _____

- B1. Historic Name: Quarters 10, Naval Station Treasure Island
B2. Common Name: Quarters 10, Naval Station Treasure Island
B3. Original Use: residence B4. Present Use: residence
*B5. Architectural Style: moderne / international
*B6. Construction History: (Construction date, alterations, and date of alterations)

This residence was built in 1948. Later alterations include the sliding glass door at the lower level and the metal canopy at the front entrance. The garage was also built in 1948.

- *B7. Moved? No Yes Unknown Date: _____ Original Location: _____
*B8. Related Features:

Building 267 is a garage associated with Quarters 10.

- B9a. Architect: unknown b. Builder: unknown
*B10. Significance: Theme: modern architecture Area San Francisco
Period of Significance 1948 Property Type residence Applicable Criteria C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Navy facilities on Yerba Buena and Treasure Islands were surveyed and evaluated by JRP Historical Consulting Services in 1997. Quarters 10 was considered ineligible for National Register listing in that survey, because it was less than fifty years old and did not possess exceptional significance. However, the building is fifty years old as of 1998 and is therefore evaluated here without reference to the criteria consideration for properties less than fifty years old.

The JRP survey included information on the function and history of the Naval Station after 1945 that provides a context for evaluating post-war and cold war-era properties. Naval Station Treasure Island was transformed into a training facility after World War II, from its wartime function of supplying an armed guard for merchant marine vessels in the Pacific. Yerba Buena Island was used primarily for officers' housing in the post-war period, with substantial demolition of non-residential buildings. The Navy facilities on Yerba Buena and Treasure Islands did not play a significant role in American military history in the late 1940s or early 1950s, and Quarters 10 is not associated with significant persons or events that would make it eligible for National Register listing under Criteria A or B.

[See Continuation Sheet, Page 3 of 6.]

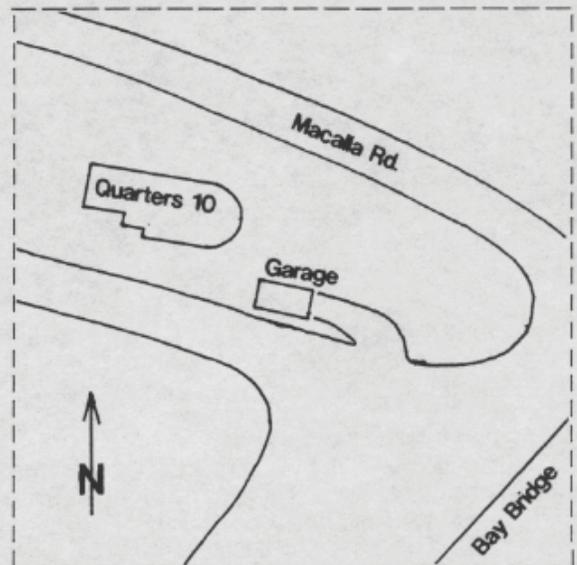
- B11. Additional Resource Attributes: (List attributes and codes) _____
*B12. References:

See Continuation Sheet, page 3 of 6.

- B13. Remarks:

- *B14. Evaluator: Andrew Hope
Caltrans, District 4 (Oakland)
*Date of Evaluation: April 1998

(This space reserved for official comments.)



B10. Significance [continued from Page 2]:

However, Quarters 10 does appear to be a significant example of mid-20th century residential architecture in the local context. The building exhibits the distinctive characteristics of the moderne and International styles, such as the flat roof, corner windows, and curved east end. The horizontal muntins of the casement windows reinforce the building's horizontal emphasis, as is typical of the moderne style, while the overhanging ends of the upper floor, supported by narrow pipe columns, display the structural daring of the International style. In addition, the wood siding and open eaves relate this building to the Bay Region style, a local expression of modernism in the mid-20th century. The clapboard siding may also have been an attempt to make this building more visually compatible with the older Quarters 1 through 7 nearby.

Navy records indicate that the house was constructed in 1948, and its presence on the site in 1958 is confirmed by aerial photographs of Yerba Buena Island taken in that year. While the house is not stylistically innovative for 1948, it is part of a design movement that remained vital in the Bay Area through the 1940s and into the 1950s. Quarters 10 is similar to a small house designed in 1936 by the prominent Bay Region style architect Gardner Dailey, which was published in 1940 in *The Modern House in America*. It also resembles a house in San Mateo County designed by San Francisco architect James Mitchell, which was published in the *Architect and Engineer* in 1941 and has a similar curved living area which takes advantage of a sloping site to provide dramatic views. (These two houses are shown on page 6.)

Quarters 10 retains a high degree of integrity, and appears to be eligible for National Register listing under Criterion C, at the local level significance. Building 267, the garage associated with Quarters 10, is contemporary with the house and is similar in design. It is therefore a contributing feature of the National Register property. As the entire military facility is owned by the Navy and there are no parcel boundaries for individual buildings, the boundary for this property would include the house and its immediate grounds, including adjacent lawn and garden areas, the garage and driveway, and the retaining wall along the north side of the property.

B12. References [continued from Page 2]:

Architect and Engineer, June 1941. (Entire issue devoted to Bay Area architects.)

Architectural Record, May 1949. "Is there a Bay Area Style?"

Ford, James, and Catherine Morrow Ford. *The Modern House in America*. New York: Architectural Book Publishing Co., 1940.

Historical Study of Yerba Buena Island, Treasure Island, and their Buildings. Prepared by the Mare Island Naval Shipyard Base Realignment and Closure (BRAC) Environmental Technical Division. March, 1996.

JRP Historical Consulting Services. *Cultural Resource Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island, Naval Station Treasure Island, San Francisco, California*. March, 1997.

Pacific Aerial Surveys, Oakland, California. Aerial photographs of Yerba Buena Island: 1947, 1958, 1963, and 1983.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____

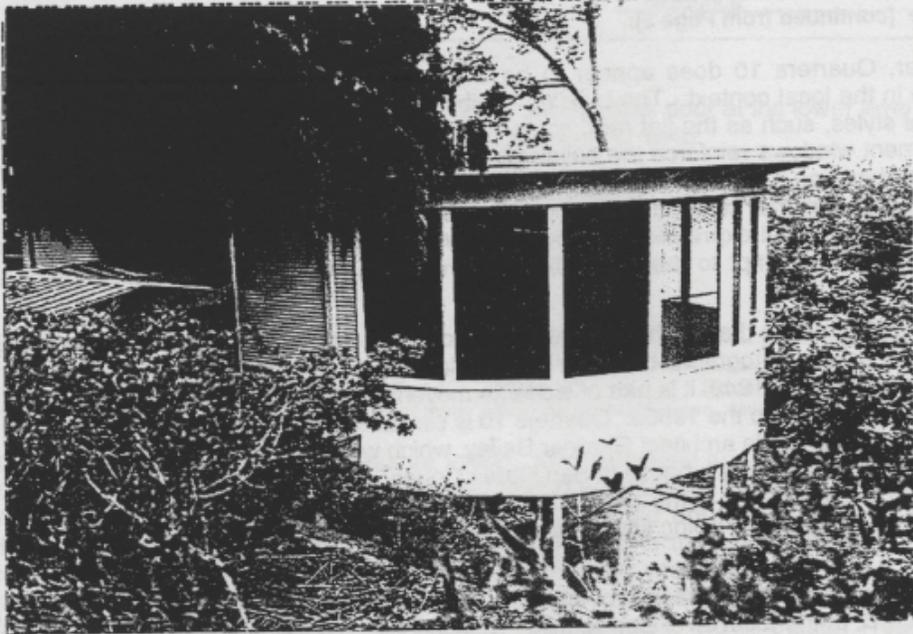
HRI # _____

Trinomial _____

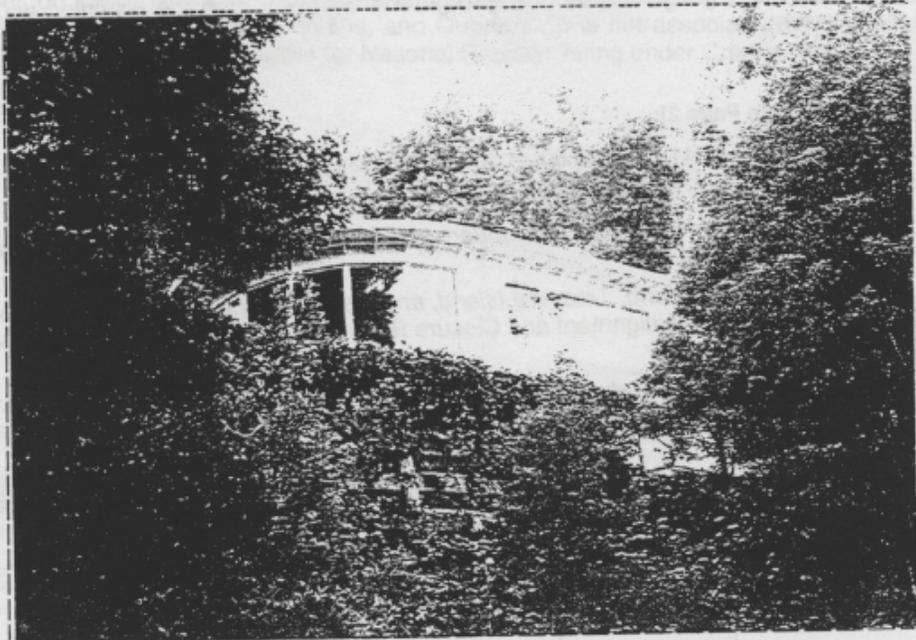
Page 4 of 7

*Resource Name or # (Assigned by recorder) Quarters 10, Yerba Buena Island

*Recorded by: Andrew Hope, Caltrans, District 4 (Oakland) *Date: April 1998 Continuation Update



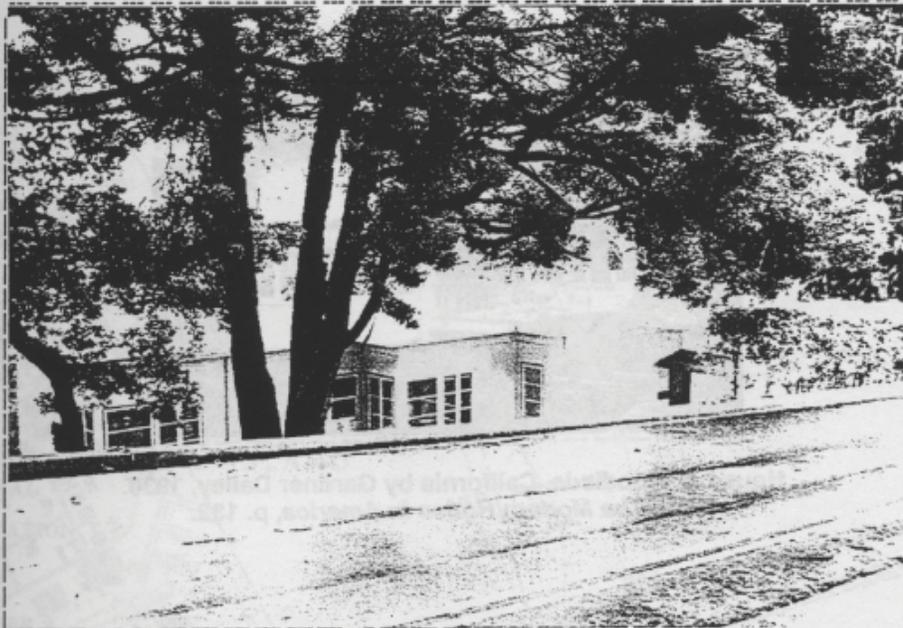
View northwest, at east end of house.
January 1998



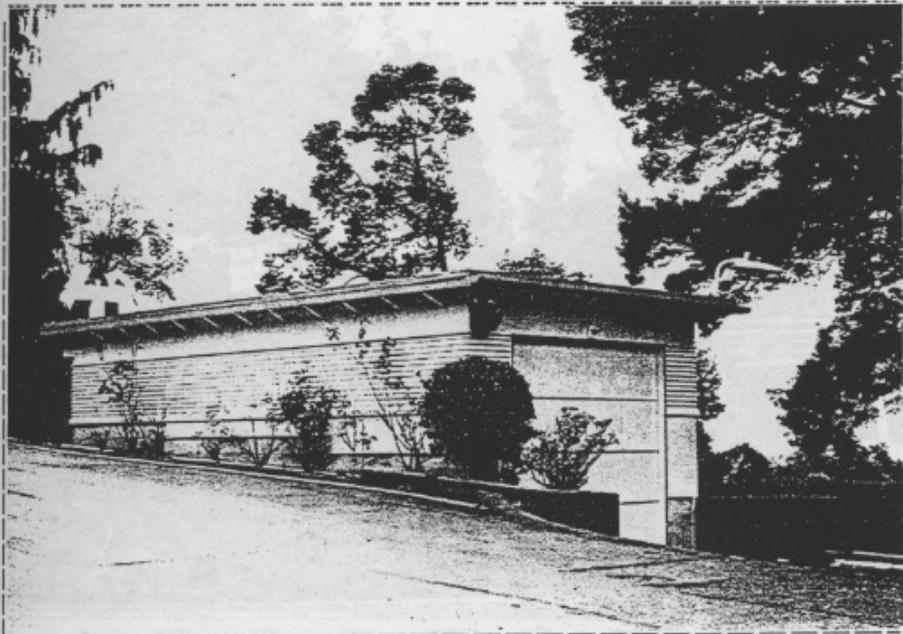
View southwest, at east end and north facade.
January 1998

Page 5 of 7 *Resource Name or # (Assigned by recorder) Quarters 10, Yerba Buena Island

*Recorded by: Andrew Hope, Caltrans, District 4 (Oakland) *Date: April 1998 Continuation Update



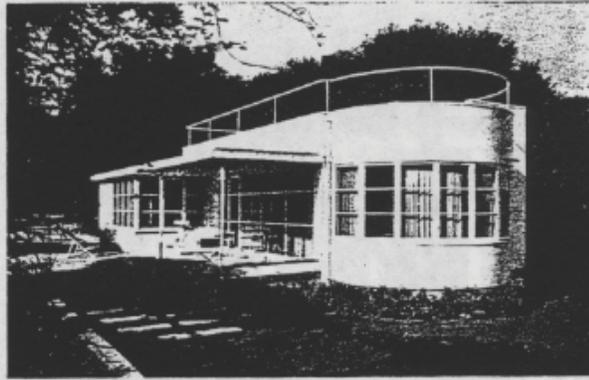
View northeast, at south facade.
January 1998



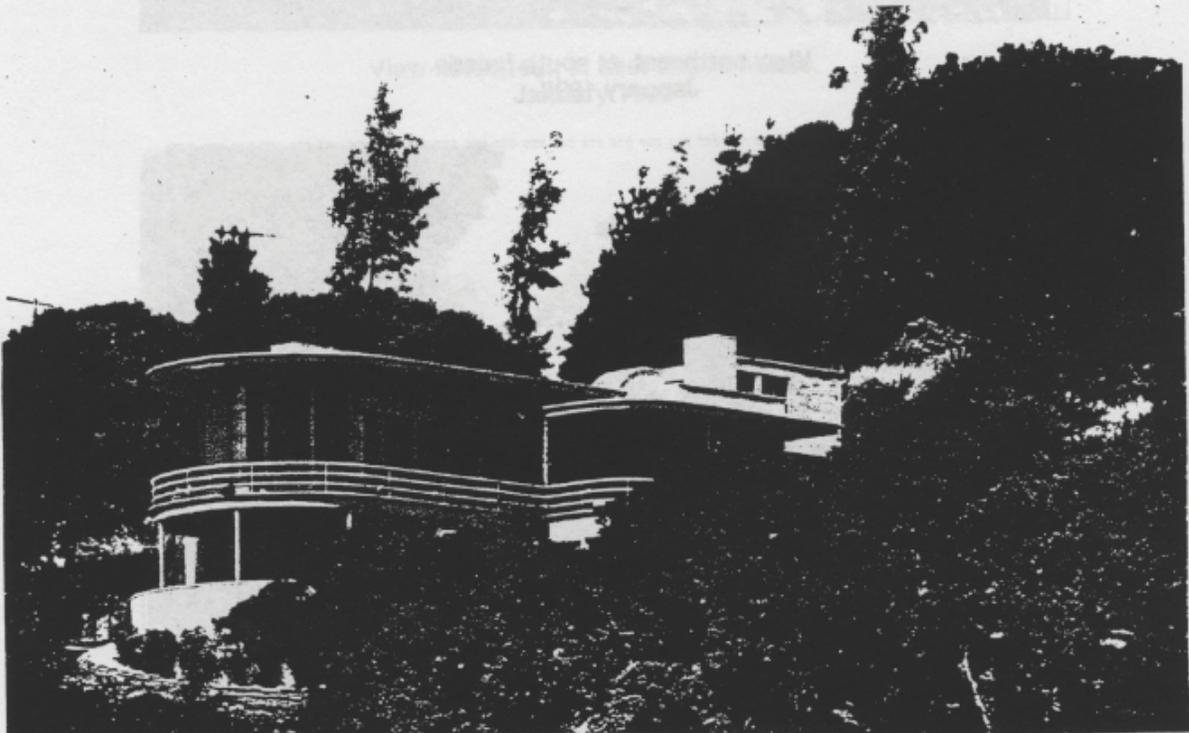
Garage, view northwest
January 1998

Page 6 of 7 *Resource Name or # (Assigned by recorder) Quarters 10, Yerba Buena Island

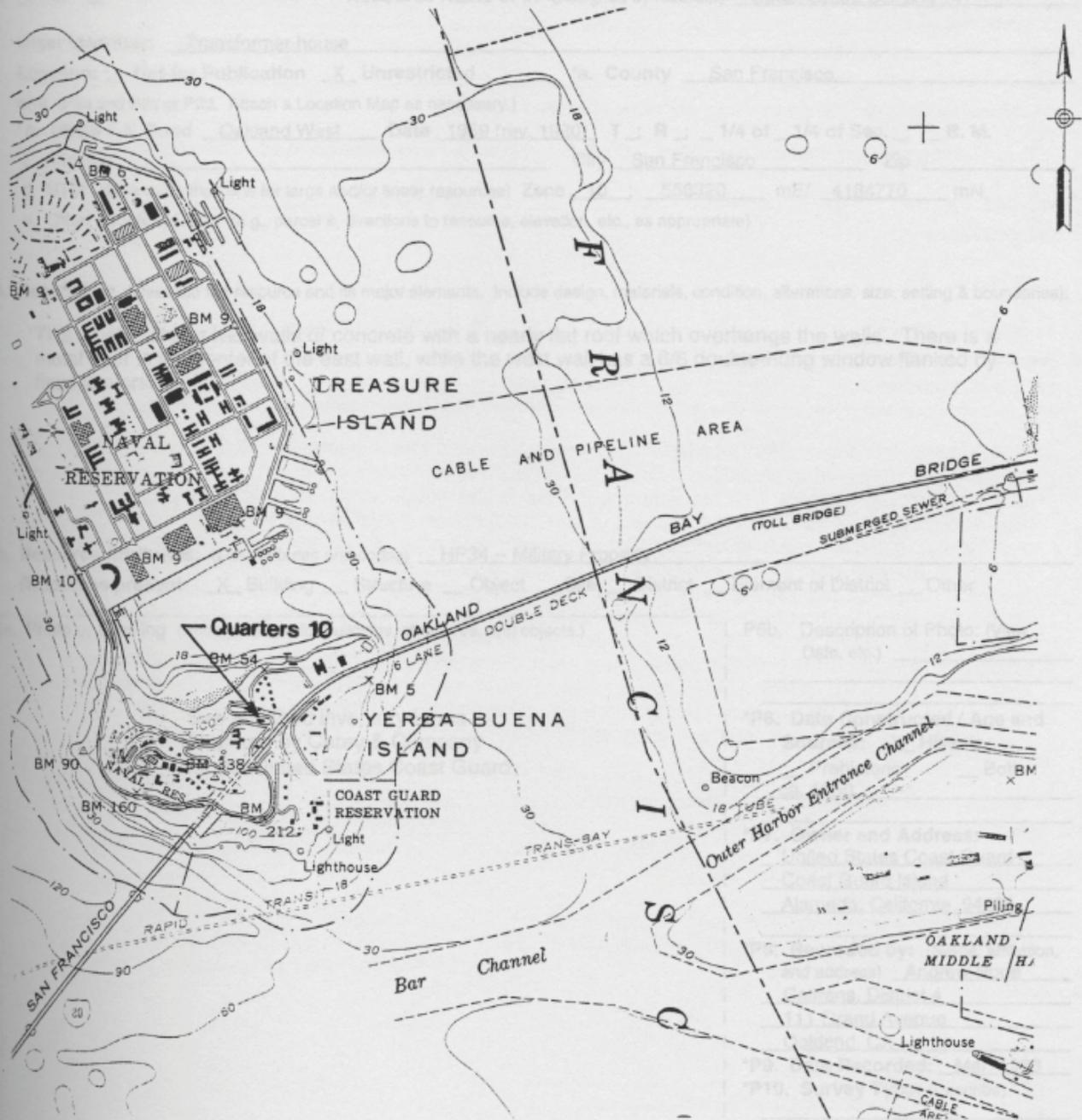
*Recorded by: Andrew Hope, Caltrans, District 4 (Oakland) *Date: April 1998 Continuation Update



House at Woodside, California by Gardner Dailey, 1936.
From *The Modern House in America*, p. 132.



House at Hillsborough, California by James Mitchell
From *Architect and Engineer*, June 1941, p. 43.



DISTRICT RECORD

Page 1 of 8

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Senior Officers' Quarters Historic

District

- D1. Historic Name: Senior Officers' Quarters D2. Common Name: Senior Officers' Quarters
- D3. Detailed Description (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district):
The area of Yerba Buena Island where the Senior Officers' Quarters exist forms a small historic district, set apart by its location, its quality of housing, and its interrelated landscape elements. Seven Senior Officers' houses (Quarters 1-7), two garages (Buildings 83 and 205), and one residence over garage (Building 230) make up the buildings of the historic district. The area is located at the north edge of the island, toward the east end, set high on the hill with views looking north and east out to the bay. Three roads run at or near the boundaries of the district, (one of which runs in a "V" shape): Whiting Way, Northgate Road, and the second arm of Whiting Way that connects with Northgate further west and higher on the hill, altogether making a roughly triangular district. (See continuation sheet.)
- D4. Boundary Description (Describe limits of district and attach map showing boundary and district elements):
The boundary lines of the roughly triangular Senior Officers' Historic District are drawn by Northgate Road on the west side, the lower edge of the greensward on the east side, and a third line up the hill from the inner "V" of Whiting Way on the south side, to encompass the formal gardens between Quarts 1 and Building 230. Whiting Way runs approximately south to north, with Quarters 1 through 5 located on the west side. Northgate Road runs approximately east to west, with Quarters 6 and 7 located on the south side. The second arm of Whiting Way runs approximately northwest to southeast, with Buildings 205 and 83 on the northeast side, and Building 230 on the southwest side. The outside perimeter of the boundaries immediately surrounds the buildings at the west and south sides, and surrounds the lower edge of the greensward on the east side. The housing area is tied together at the center by a terraced park, along with one interior road running behind Quarters 2 through 7. The boundaries of the historic district are shown in the attached sketch map.
- D5. Boundary Justification:
Boundaries were determined to include the historic buildings of the area, and the landscape elements that tie them together. Each of the buildings is an important contributor to the district. Quarters 1 through 7, lining the east lawn area and north boundary, are the large and significant Officers' Quarters. Buildings 205, 83, and 230, which line the southwestern boundary behind the quarters, are the garages and family quarters. The southern boundary also runs through two landscaped terraced park areas. All of the buildings retain a high degree of integrity, with virtually no alterations since the historic period. The landscape that connects the buildings has also been retained in a design appropriate to the historic district.
- D6. Significance: Theme U.S. Naval Training Station Area Yerba Buena Island
Period of Significance - 1900-1947 Applicable Criteria A,C
(Discuss district's importance in terms of historical or context as defined by theme, period, and geographic scope. Also address integrity.)
The Senior Officers' Quarters Historic District at Yerba Buena Island appears to qualify for listing in the National Register of Historic Places under Criteria A and C, in the areas of military history and architecture. The boundaries of this historic district are shown in **Figure 1**. Contributing buildings include Quarters 1, 2, 3, 4, 5, 6, and 7, as well as three associated garages, Buildings 83, 205, and 230. The period of significance extends from 1900 to 1947; the former represents the oldest date of construction at the site, the latter an arbitrary 50 year cut-off, to account for the fact that the district does not appear to be exceptionally significant. The historic district is eligible at the local level of significance. (See continuation sheet.)
- D7. References:
Mare Island Naval Shipyard, BRAC Environmental Division, "Historical Study of Yerba Buena Island, Treasure Island, 1995.
- D8. Evaluator: Stephen D. Mikesell
Date of Evaluation: January 1997

DESCRIPTION (continued)

The main road that runs near the east boundary, separating the group of Quarters 1-4 and the greensward that sweeps down the hill in front of them, is Whiting Way. Quarters 5 faces out onto the juncture between Whiting Way and Northgate Road, where Quarters 6 and 7 continue along the outside curve of the district boundary, with views north to Treasure Island and the bay. Quarters 6 and 7, however, are accessible only from the rear inner road, known as Garden Way, behind the houses. The third road, a second arm of Whiting Way, runs alongside the southwestern boundary of the district, with garages (Buildings 205 and 83) on the east side, and the residence over garage (Building 230) on the west side.

Landscape elements that tie the district together are both formal and informal. The setting of the district on the hill places the buildings in an area that is bounded by steep hillsides at the south and west edges, and steep downward slopes at the north and east edges. Quarters 1 is located at the innermost point where the roads meet. It fronts the road directly and is immediately surrounded by boxed hedges. The front hedges are shown in **Photograph 1**, facing out onto a sweeping greensward. The front road continues north, while a walkway splits off just uphill from the road, leading up to Quarters 2 through 4, as shown in **Photograph 2**. Grass lawn is planted between the walkway and street, but ends at Quarters 5 where earth cover begins and Eucalyptus trees grow informally on the steep slope in front of the house, as shown in **Photograph 3**. Quarters 5 has its own individual walkway coming up from the street. Quarters 6 and 7 continue along the same slope of informal Eucalyptus trees but are accessible only from the inside road (Garden Way).

Whiting Way takes off of Northgate Road, leading south to Quarters 1, past Building 205 and 83 (the garages) on the left, and Building 230 (the residence over garage) on the right. Building 230 has its own semi-formal enclosed yard surrounding it. The two most formal community type gardens that tie the district together are the terraced gardens that exist at the outside boundary between Building 230 and Quarters 1, and at the interior park space, central to the district, behind the quarters on the north and east sides and behind the garages on the west side. The garden at the western boundary, shown in **Photograph 4**, is bounded by boxed hedges at the street, with a grass lawn, pathways and trees, and brick walls with terraced gardens cut back into the hillside. The garden at the center of the district, shown in **Photograph 5**, is bounded by random cut stone retaining walls at street level, with walls at terrace levels, and grass, trees, tables and benches.

SIGNIFICANCE (continued)

In 1898, the U.S. Navy built a Naval Training Station at Yerba Buena Island. At the time it was built, the Yerba Buena Naval Training Station was one of four such facilities in the United States and the only one on the West Coast.¹ The Training Station was a key facility for the Navy on the West Coast, ultimately too important to be housed on the limited usable land at Yerba Buena Island: the training facility would be moved to San Diego in 1923, representing a large step in the transfer of major Navy installations from northern California to San Diego.

¹ Mare Island Naval Shipyard, BRAC Environmental Division, "Historical Study of Yerba Buena Island, Treasure Island, 1995, p. 1-14. Hereafter cited as Mare Island 1995.

CONTINUATION SHEET

Page 3 of 8

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Senior Officers' Quarters Historic District

The Training Station property used all of Yerba Buena Island to some extent but was centered on relatively flat lands at the East Cove. The functional core of the Training Station was bounded by East Point (a hill at the eastern end of the island, now hidden beneath the Bay Bridge) on the east; East Cove on the south (Army Point is now used by the Coast Guard); San Francisco Bay on the north (now the harbor between Yerba Buena and Treasure islands); and on the west by the central hillside of Yerba Buena (denoted today by the east portal to the Yerba Buena Tunnel). While some buildings existed on the hilltop and the west side of the island, the key facilities of the Station were in this small geographical area.

The key facility of the Station was a large barracks, capable of housing 500 men, with a very large drill hall. This building was completed in early 1900. It measured 300' x 600' and was located on the flat land at the east end of the island, adjacent to extant tennis courts, just east of and downhill from the officers' quarters (Buildings 1-7). This building would remain in place until it was demolished in 1960.

While the barracks were under construction, the Navy began building a series of Senior Officers' Quarters, just uphill from the barracks. The Commander's Quarters, Building 1, was completed in 1900; the seven other Senior Officers' Quarters (Buildings 2-8), were completed between 1901 and 1905. All eight of these buildings still exist and are in use. Buildings 1 through 7 are clustered in a neat neighborhood on the north side of the Bay Bridge. Quarters 8, on the south side of the Bay Bridge, is now isolated from the others; it is geographically more closely related to the Coast Guard housing complex than to the remainder of the 1901-1905 officers' quarters.

Although original plans have not been located, it is presumed that Quarters 1-7 were designed by the Bureau of Yards and Docks, the design and construction arm of the Navy. The buildings are quite similar in style to the Senior Officers' Quarters at the Mare Island Naval Shipyard; the quarters at Mare Island were under construction at about the same time as Quarters 1-7 at Yerba Buena Island. The Senior Officers' Quarters at Mare Island were designed by the Bureau of Yards and Docks, with no assistance from private architects. [Quarters 8, by contrast, was designed by the Reid Brothers, a well-known San Francisco architectural firm. Quarters 8 was part of the Marine camp at Yerba Buena Island. It and the Marine barracks were both privately-designed.]

The Training Station was active at the site between 1900 and 1923. Typically, between four and five hundred trainees were present at the station at any given time. Training included six months shore training, followed by six months at sea on training ships. As a busy facility, the only such basic training operation on the West Coast, the training station required a great deal of building activity. Dozens of buildings were constructed there between 1900 and 1923, the majority of which have since been demolished. Twenty-seven buildings remain from this period.

The small island was perennially overcrowded, causing the Navy to look elsewhere for a major West Coast Training Station. The preparedness build up prior to American entry into World War I so overtaxed the Yerba Buena facility -- 13,000 men were assigned there at one time -- that the Navy established a second California Training Station in San Diego, beginning in 1917. After the war, the Navy elected to expand the San Diego facility and close the training station at Yerba Buena Island. The last of the Training Station personnel were relocated to San Diego in 1923 and the Yerba Buena facility decommissioned. The island did remain a Navy facility, however, for a more limited "receiving ship" function: a "receiving ship" was a transient station for sailors awaiting assignment to duty on ships at sea. It appears that relatively few men were stationed at the facility in association with this function; those that were stationed there re-occupied the barracks and re-used the other buildings that had been built for the Training Station.²

² Mare Island, 1995, p. 1-39.

CONTINUATION SHEET

Page 4 of 8

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Senior Officers' Quarters Historic District

Yerba Buena Island was also used as a Receiving Ship facility during World War II, giving the area a continued use for the old Training Station buildings. At the end of World War II, the entire Yerba Buena Island-Treasure Island Naval Station was severely downsized and given training functions, unrelated to any previous uses there. This functional re-orientation had the most profound impact on Yerba Buena Island, which was transformed into an Officers' housing compound to serve the training center of Treasure Island. As a result, virtually all non-residential buildings were either demolished or converted for residential uses.

The effect of this re-orientation was destruction of most traces of the once-busy Naval Training Station. There are 23 buildings and structures on Yerba Buena Island that were built between 1900 and 1923. Eight of these are included within this historic district (Quarters 1-7 and Building 83). The remaining 15 buildings and structures are scattered throughout the island, including two oil tanks, two water tanks, six heavily modified duplexes, a power house, a converted barracks building, and a small storage building. There is also an eighth Senior Officer's Quarters (Building 8), which is eligible for listing in the National Register individually but is too distant physically to be included within this historic district.

Of the scant remains from the Naval Training Station, only this historic district and Quarters 8 reflect their appearance at the time the Naval Station operated. (Quarters 8 is discussed separately.) The historic district is best representative of the architecture of the time because it retains integrity, not only of the individual buildings, but of the streetscape and the general ambiance of the housing compound.

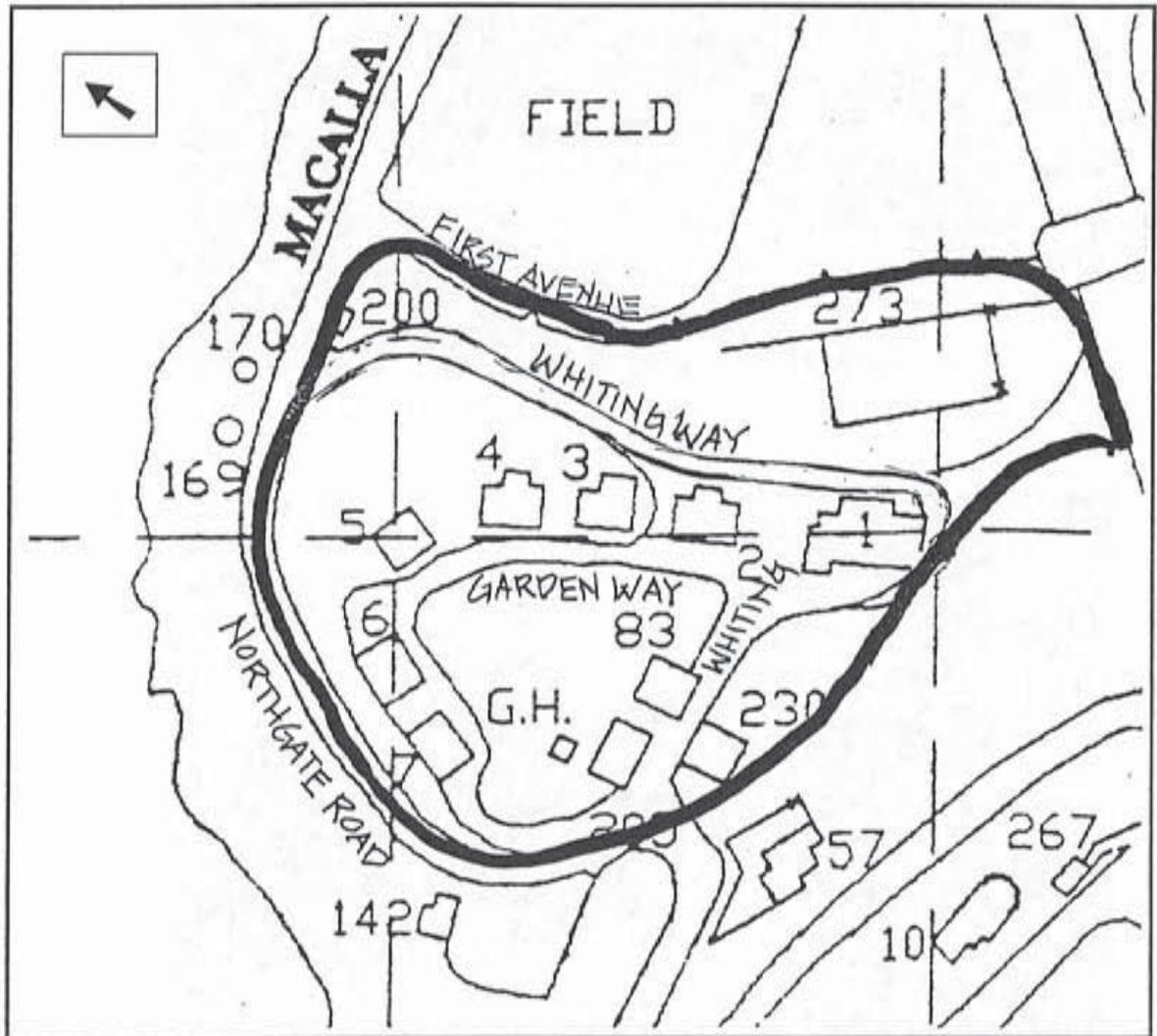


Figure 1. Senior Officers' Quarters Historic District, boundaries.

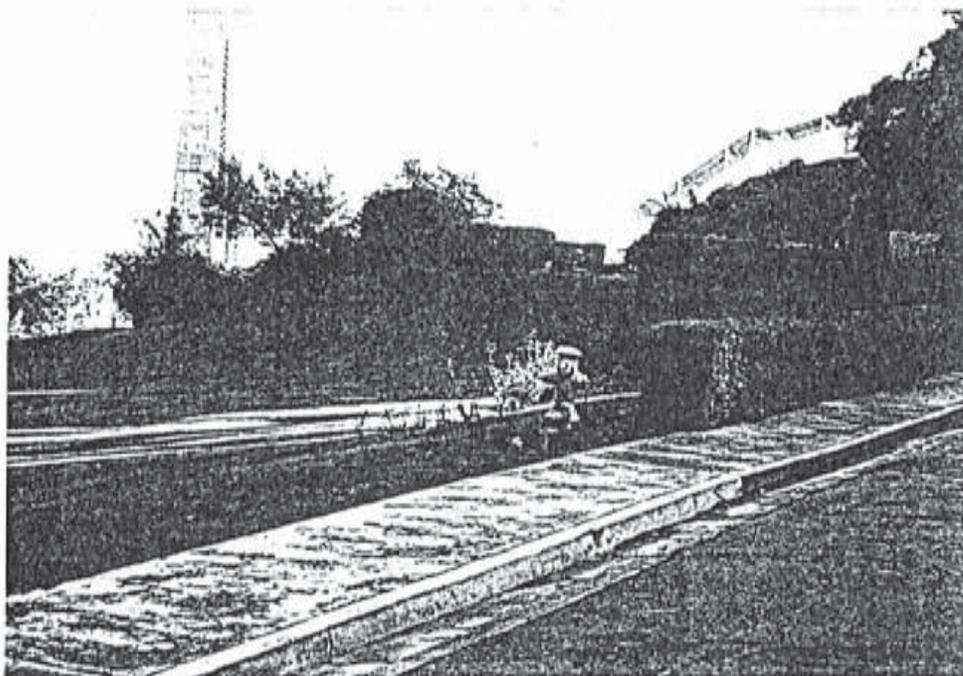


Photo 1. Boxed hedges at greensward in front of Quarters 1, camera facing south.

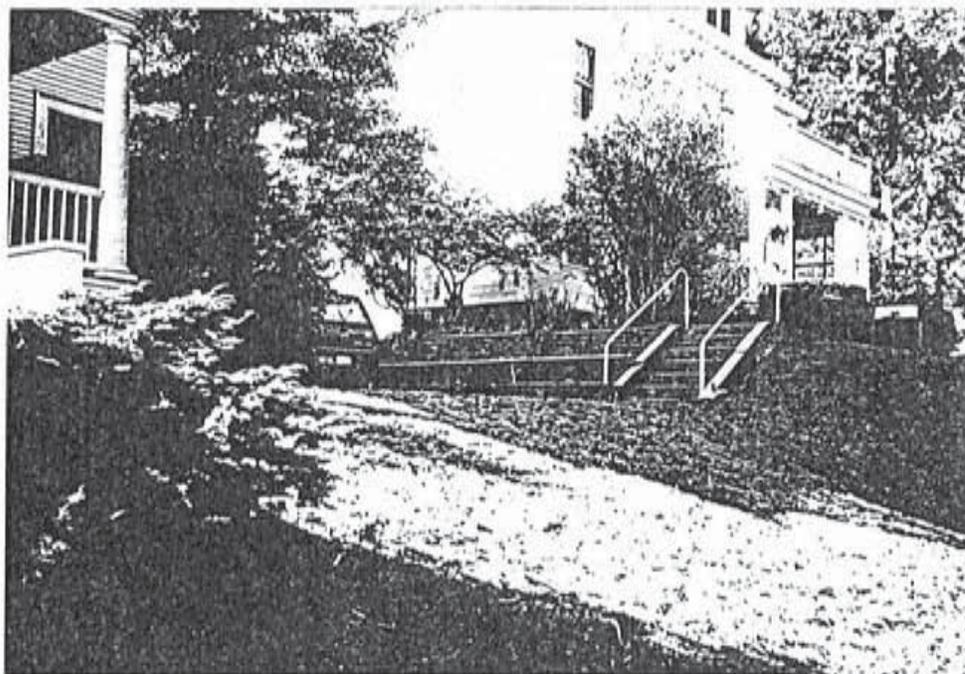


Photo 2. Walkway between Quarters 3 and 4, camera facing north.



Photo 3. Informal Eucalyptus trees on slope between Quarters 4 and 5.

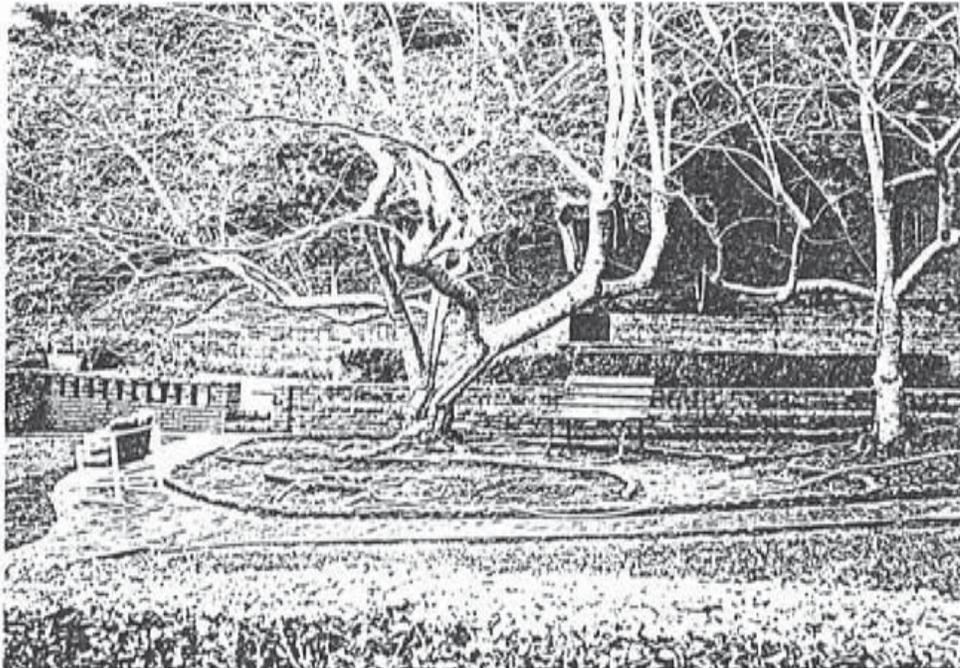


Photo 4. Terraced garden at western edge of boundary, between Quarters 1 and Building 230, camera facing west.

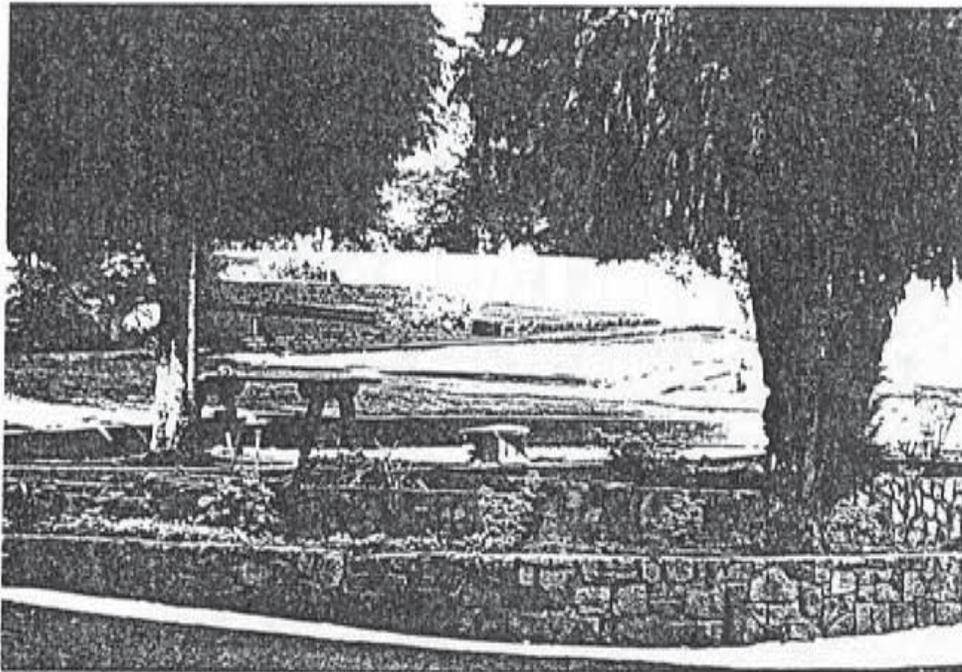


Photo 5. Central terraced garden behind Quarters 2-7, camera facing northeast.

PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 1

P1. Other Identifier: "Nimitz Quarters" -- Flag Officer's Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T____; R____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

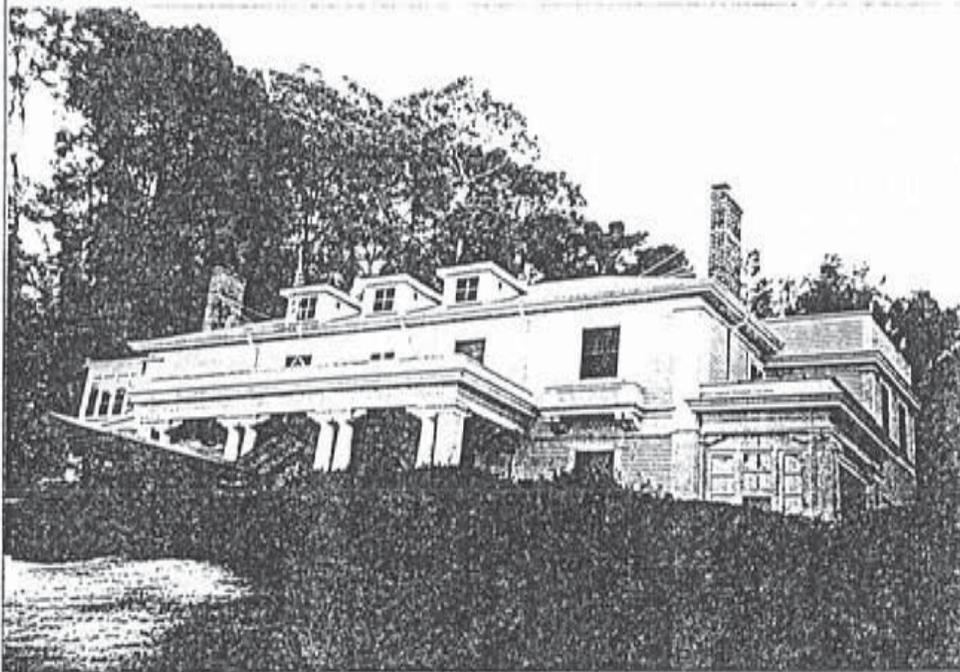
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Quarters 1, known as "Nimitz House" is the largest and most detailed of the Officers' Quarters, distinguishing it from the other quarters in the small surrounding district. It is also set apart by its location and surroundings, placed on the hillside at the southern edge of the district, facing east toward the bay. A greensward sweeps down the hill in front of the house, and formal gardens are built into the hillside behind the house. The house is prominent, with 5886 square feet, designed in the Classical Revival style. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #)

East facade, camera facing southwest

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1900

*P7. Owner and Address:

Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)

Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 1

- B1. Historic Name: Naval Station Commander's Quarters
- B2. Common Name: Quarters 1; "Nimitz Quarters" -- Flag Officer's Quarters
- B3. Original Use: Naval Station Commander's quarters B4. Present Use: Flag Officer's quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alterations.)
Built 1900. 1900-1945 -- Naval Station Commander's quarters. 1945-present -- Flag Officer's quarters. Notes: Heavily damaged by fire in 1934. The first two floors were rebuilt in 1935. The third floor was not repaired and was sealed off to prevent reuse.

- B7. Moved? No Yes Unknown Date: _____ Original Location: _____
- *B8. Related Features:
Senior Officers' Quarters Historic District; greensward at front; terraced gardens at back.

- B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
- *B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco
Period of Significance 1900-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 1 has been listed in the National Register of Historic Places under Criterion A for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast. Quarters 1 is also listed in the National Register under Criterion C for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of integrity, even though fire damage repairs in 1934 made some modifications. Not only does the building qualify for listing individually, but also as an important contributor to the 10 buildings of the Senior Officers' Quarters Historic District. (See continuation sheet.)

- B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

- *B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure
(BRAC)

B13. Remarks:

- *B14. Evaluator: Stephen D. Mikesell
- *Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

The two story wood frame house is built on a brick foundation and clad in weatherboard siding. Windows of the house are predominantly 1/1 double-hung wooden sash. Some 6/6 windows are found on the rear wing. Sidelights and a segmental arched transom are found at the front door entrance. Its form takes shape with a large central rectangular element, flanked at each side by smaller wings, and by additive elements at the rear. The main central element has a hipped ridged roof with three small hipped dormers at the front center. Each dormer has a four-pane pivotal window. Wings extend from the two sides of the building, with the front of each wing set back from the front of the main building, but flush with the rear walls of the main building. The wings have two stories, capped by parapeted gable-roofs inserted into the main hip-roof on the back sides. A solarium with multiple square lights fills each of the front corners between the main building element and each wing; a two story solarium on the southwest wing and a one story solarium on the northeast wing.

A full front porch lines the main element, with a perpendicular canopied walkway at the front, and walkways at each side of the porch. The railing is a simple low brick wall. A flat roof with molded cornice detailing covers the front. Pairs of fluted Doric columns with scrolled brackets support the cornice, with one squared paneled column is at each corner. Dentils and spheres are found in the detailing above the columns. The same types of columns in pilaster relief are found on the solariums and in other details of the building.

The rear of the building has some additional projecting elements. The left (north) end of the rear has the largest element with a hipped wing and shed extension off of that wing. A two story angled bay is at the center of the rear. At the right (south) end is a boxed bay projecting from the second story and supported by a square post with angled braces.

Alterations to the house have been minimal, all occurring before 1946 and therefore associated with the historic period. In 1934, the upper floor was damaged by fire, but rebuilt the same except for the central dormer, which was originally larger but rebuilt to match the other two dormers. Other minor alterations that occurred before 1946 include closing in of the ground floor porches on the wings and the addition of the solarium on the upper level of the southwest wing.

SIGNIFICANCE (continued)

Quarters 1 came to be known as "Nimitz House" for 5-star Admiral Chester Nimitz who was permitted to use the Quarters as his residence from the end World War II until he died. Admiral Nimitz did not, however, reside at the house during its period of significance; for that reason, the building does not qualify for the National Register for its association with Admiral Nimitz.

Quarters 1 was built in 1900, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished as building requirements have changed with changing uses of the island since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain on the island -- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but their integrity as a group as well.

PRIMARY RECORD

Primary # _____

HRI # _____

Trinomial _____

NRHP Status Code _____

Other Listings _____

Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 2

P1. Other Identifier: Senior Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T____; R____; _____ ¼ of _____ ¼ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

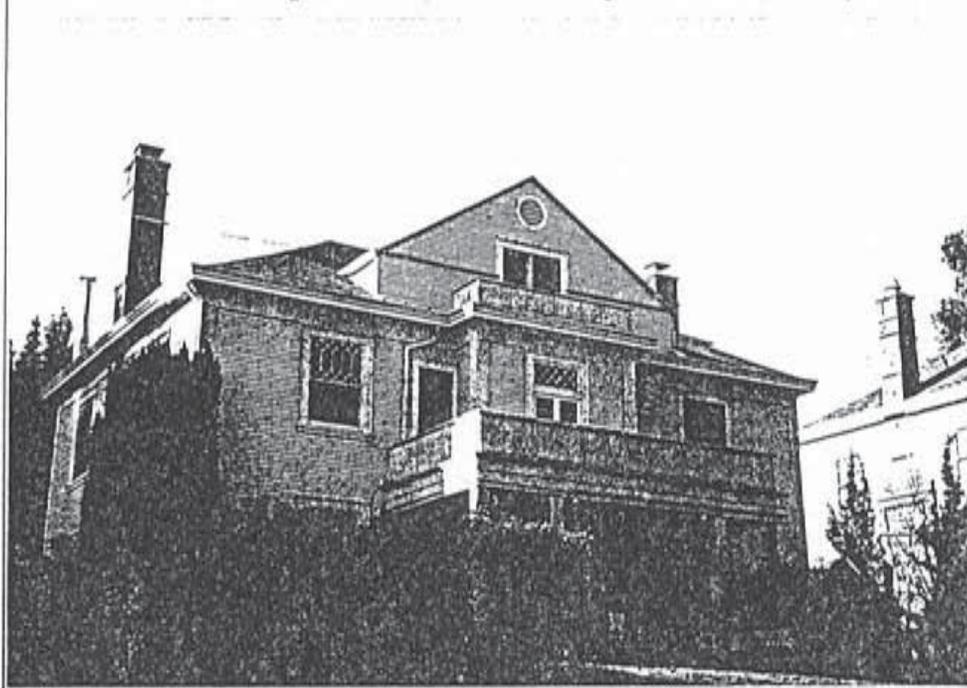
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Quarters 2 is a residence that was built in 1900 as Officers' Quarters. It is built upon a brick foundation, set high on the hill among a small district of Officers' Quarters. Quarters 2 faces east, across a small park area and out toward the east bay. The general form of the building is that of the two story American four-square, with embellishments to distinguish it as Officers' Quarters and to correlate it with the neighboring quarters. A ridged hipped roof with boxed eaves tops the rectangular building. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

(View, date, accession #) _____

East facade, camera facing

northwest

*P6. Date Constructed / Age and

Sources: Historic

Prehistoric Both

1900

*P7. Owner and Address:

Naval Station

Treasure Island

San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation,

and address)

Janice Calpo

IRP Historical Consulting

1477 Drew Ave., Suite 105

Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)

Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 2

- B1. Historic Name: Senior Officers' Quarters
- B2. Common Name: Quarters 2, Senior Officers' Quarters
- B3. Original Use: Senior Officers' quarters B4. Present Use: Senior Officers' quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1900.

- B7. Moved? No Yes Unknown Date: _____ Original Location: _____
- *B8. Related Features:
Senior Officers' Quarters Historic District

- B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
- *B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco
Period of Significance 1900-1947 Property Type Building Applicable Criteria A, C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 2, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

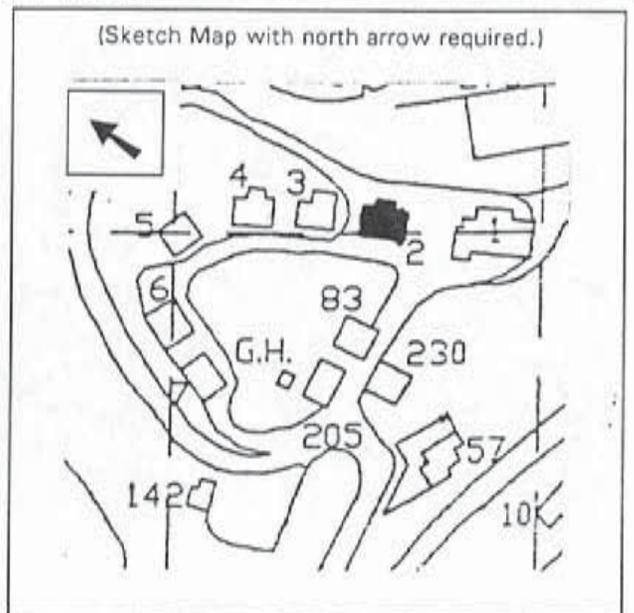
- B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

- *B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure
(BRAC)

B13. Remarks:

- *B14. Evaluator: Stephen D. Mikesell
- *Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

A large gable dormer dominates the front of the house, rising to a ridge height above the main roof. A smaller truncated gable dormer exists at the back of the house. Additional small shed dormers exist on the front. The generally rectangular shape of the house is interrupted at the front where at second story level, the wall and the dormer above it protrude forward. Double doors open from that section out onto a balcony which is created by the cover of the main entry porch below. A balustrade of simple posts and flat railing surrounds the balcony. The lower porch is enhanced with slightly more detailing, having a molded porch railing, a molded cornice with a plain frieze, and squared columns. Concrete steps with a solid brick railing lead up to the front porch.

Narrow two-part lapped siding sheathes the house. Windows are predominantly double hung sash, with most windows having a leaded glass design in the upper sash. The glass design is in the form of narrow vertical panels, with diamond shapes at the top and bottom. Other windows include sidelights at the front door, an Italianate bay window with brackets at the rear, a casement window with fanlight at the rear, and windows in the dormers. Additional detailing can be found in the upper story soffit, with a block pattern where every other block contains a series of small spheres. Pilasters are found on the main front dormer, in a simple rectangular relief with the same sphere pattern at the top representing capitals.

A large, two-story fireplace lines each of the two side walls of the house. One appears to be sunken into the wall and the other stands beside the wall. A pattern of sunken bricks with crenellations at the top is found just below the neck of the fireplace.

SIGNIFICANCE (continued)

Quarters 2 was built in 1900, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain-- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 3

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T___; R___: ___ ¼ of ___ ¼ of Sec ___; ___ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

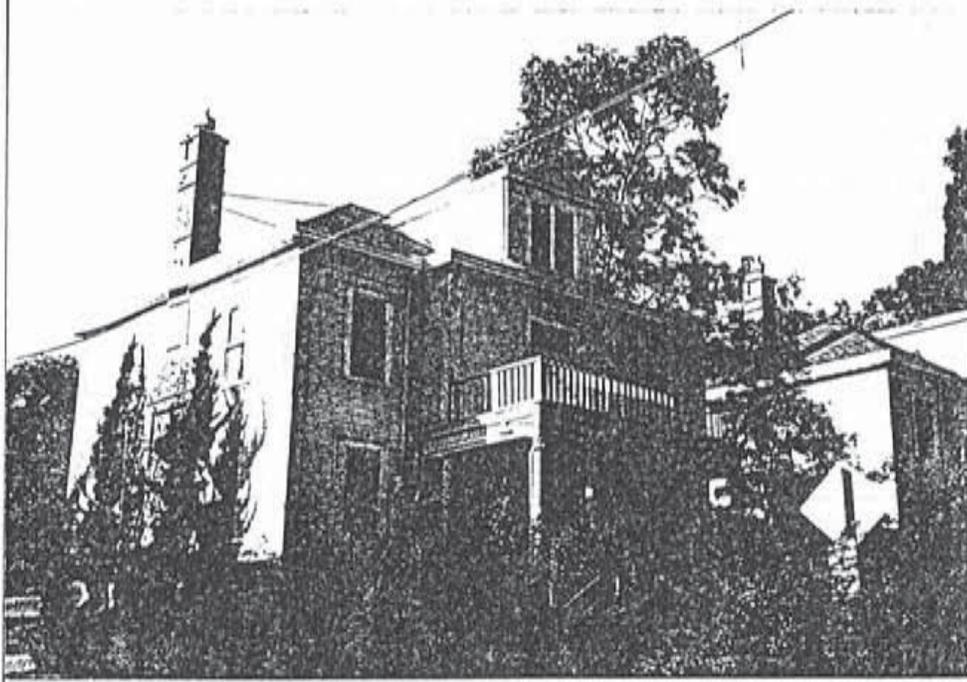
*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
Quarters 3 is a residence that was built in 1901 as Officers' Quarters. It is built upon a brick foundation, set high on the hill among a small district of Officers' Quarters. Quarters 3 faces east, across a small park area and out toward the east bay. The general form of the building is that of the two story American four-square, with embellishments to distinguish it as Officers' Quarters and to correlate it with the neighboring quarters. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property: HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #) _____

East facade, camera facing northwest.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1901

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet
 Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 3

- B1. Historic Name: Officers' Quarters
- B2. Common Name: Quarters 3, Officers' Quarters
- B3. Original Use: Officers' quarters B4. Present Use: Officers' quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1901.

- B7. Moved? No Yes Unknown Date: _____ Original Location: _____
- *B8. Related Features:
Senior Officers' Quarters Historic District

- B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
- *B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco
Period of Significance 1901-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 3, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

- B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

- *B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

- *B14. Evaluator: Stephen D. Mikesell
- *Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

A ridged hipped roof with boxed eaves tops the rectangular building. There are two large dormers aligned at the center in front and back. A shed dormer, capped by a small gable, is at the front and a truncated gable dormer is at the back. Additional small shed dormers exist on the front. The generally rectangular shape of the house is interrupted at the front where at second story level, the wall and the dormer above it protrude forward. Double doors open from that section out onto a balcony which is created by cover of the main entry porch below. A balustrade of simple posts and flat railing surrounds the balcony. The lower porch is enhanced with slightly more detailing, having a molded porch railing, a molded cornice with a plain frieze, and simple columns in the Tuscan order. Concrete steps with a solid railing lead up to the front porch.

Narrow two-part lapped siding sheathes the house. Windows are predominantly double hung sash, with most windows having a leaded glass design in the upper sash. The glass design is in the form of narrow vertical panels, with diamond shapes at the top and bottom. Other windows include sidelights at the front door, an arched bay window with brackets at the rear, a casement window with fanlight at the rear, and windows in the dormers. Additional detailing can be found in the upper story soffit, with a block pattern where every other block contains a series of small spheres. Pilasters are found on the main front dormer, in a simple rectangular relief with the same sphere pattern at the top representing capitals.

A large, two-story fireplace lines each of the two side walls of the house. One appears to be sunken into the wall and the other stands beside the wall. A pattern of sunken bricks with crenellations at the top is found just below the neck of the fireplace.

SIGNIFICANCE (continued)

Quarters 3 was built in 1901, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain-- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

PRIMARY RECORD

Primary # _____

HRI # _____

Trinomial _____

NRHP Status Code _____

Other Listings _____

Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 4

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T: _____; R: _____; _____ ¼ of _____ ¼ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

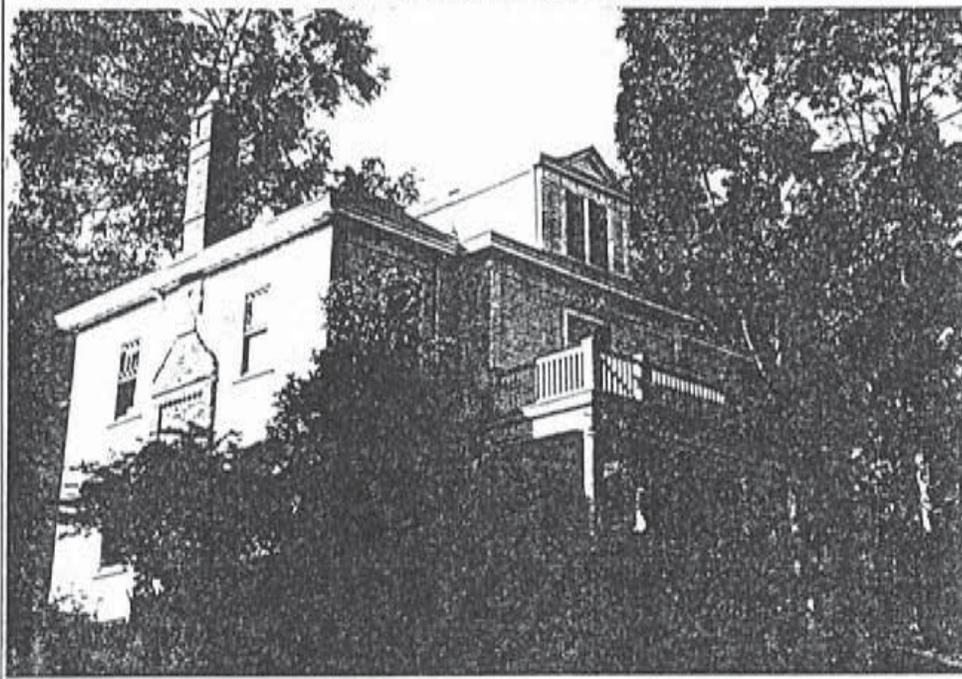
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Quarters 4 is a residence that was built in 1901 as Officers' Quarters. It is built upon a brick foundation, set high on the hill among a small district of Officers' Quarters. Quarters 4 faces east, looking out toward the east bay. A slope of Eucalyptus trees and other non-landscaped plants exists directly in front of the house. The general form of the building is that of the two story American four-square, with embellishments to distinguish it as Officers' Quarters and to correlate it with the neighboring quarters. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

(View, date, accession #) _____

East facade, camera facing northwest.

*P6. Date Constructed / Age and Sources:

Historic

Prehistoric Both

1901

*P7. Owner and Address:

Naval Station

Treasure Island

San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)

Janice Calpo

JRP Historical Consulting

1477 Drew Ave., Suite 105

Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)

Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 4

- B1. Historic Name: Officers' Quarters
B2. Common Name: Quarters 4, Officers' Quarters
B3. Original Use: Officers' quarters B4. Present Use: Officers' quarters
*B5. Architectural Style: Classical Revival
*B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1901.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:
Senior Officers' Quarters Historic District

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks

*B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco

Period of Significance 1901-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 4, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

*B14. Evaluator: Stephen D. Mikesell
*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION

A ridged hipped roof with boxed eaves tops the rectangular building. There are two large dormers aligned at the center in front and back. A shed dormer, capped by a small gable, is at the front and a truncated gable dormer is at the back. Additional small shed dormers exist on the front. The generally rectangular shape of the house is interrupted at the front where at second story level, the wall and the dormer above it protrude forward. Double doors open from that section out onto a balcony which is created by the cover of the main entry porch below. A balustrade of simple posts and flat railing surrounds the balcony. The lower porch is enhanced with slightly more detailing, having a molded porch railing, a molded cornice with a plain frieze, and simple columns in the Tuscan order. Concrete steps with a solid railing lead up to the front porch.

Narrow two-part lapped siding sheathes the house. Windows are predominantly double hung sash, with most windows having a leaded glass design in the upper sash. The glass design is in the form of narrow vertical panels, with diamond shapes at the top and bottom. Other windows include sidelights at the front door, an angled bay window with brackets at the rear, a casement window with fanlight at the rear, and windows in the dormers. Additional detailing can be found in the upper story soffit, with a block pattern where every other block contains a series of small spheres. Pilasters are found on the main front dormer, in a simple rectangular relief with the same sphere pattern at the top representing capitals.

A large, two-story fireplace lines each of the two side walls of the house. One appears to be sunken into the wall and the other stands beside the wall. A pattern of sunken bricks with crenellations at the top is found just below the neck of the fireplace.

SIGNIFICANCE (continued)

Quarters 4 was built in 1901, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain-- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

PRIMARY RECORD

Primary # _____

HRI # _____

Trinomial _____

NRHP Status Code _____

Other Listings _____

Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 5

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T____; R____: ____ ¼ of ____ ¼ of Sec ____; ____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Quarters 5 is a residence that was built in 1901 as Officers' Quarters. It is built upon a brick foundation, set high on the hill among a small district of Officers' Quarters. Quarters 5 faces northeast, and looks out toward the east bay. A very steep slope with Eucalyptus trees exists between the house and the road, with a concrete stairway leading up to the house. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

(View, date, accession #) _____

Northeast facade, camera facing southwest

*P6. Date Constructed / Age and Sources: Historic

Prehistoric Both

1901

*P7. Owner and Address:

Naval Station

Treasure Island

San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)

Janice Calpo

JRP Historical Consulting

1477 Drew Ave, Suite 105

Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)

Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 5

- B1. Historic Name: Officers' Quarters
- B2. Common Name: Quarters 5, Officers' Quarters
- B3. Original Use: Officers' quarters B4. Present Use: Officers' quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1901.

- B7. Moved? No Yes Unknown Date: _____ Original Location: _____
- *B8. Related Features:
Senior Officers' Quarters Historic District

- B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
- *B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco
Period of Significance 1901-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 5, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

- B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

- *B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

- *B14. Evaluator: Stephen D. Mikesell
- *Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

The general form of the building is that of the two story American four-square, with embellishments to distinguish it as Officers' Quarters and to correlate it with the neighboring quarters. A ridged hipped roof with boxed eaves tops the rectangular building. There are two large dormers aligned at the center in front and back. A shed dormer, capped by a small gable, is at the front and a truncated gable dormer is at the back. Additional small shed dormers exist on the front. The generally rectangular shape of the house is interrupted at the front where at second story level, the wall and the dormer above it protrude forward. Double doors open from that section out onto a balcony which is created by the main entry porch below. A balustrade of simple posts and flat railing surrounds the balcony. The lower porch is enhanced with slightly more detailing, having a molded porch railing, a molded cornice with a plain frieze, and simple columns in the Tuscan order. Concrete steps with a solid railing lead up to the front porch.

Narrow two-part lapped siding sheathes the house. Windows are predominantly double hung sash, with most windows having a leaded glass design in the upper sash. The glass design is in the form of narrow vertical panels, with diamond shapes at the top and bottom. Other windows include sidelights at the front door, an angled bay window with brackets at the rear, a casement window with fanlight at the rear, and windows in the dormers. Additional detailing can be found in the upper story soffit, with a block pattern where every other block contains a series of small spheres. Pilasters are found on the main front dormer, in a simple rectangular relief with the same sphere pattern at the top representing capitals.

A large, two-story fireplace lines each of the two side walls of the house. One appears to be sunken into the wall and the other stands beside the wall. A pattern of sunken bricks with crenellations at the top is found just below the neck of the fireplace.

SIGNIFICANCE (continued)

Quarters 5 was built in 1901, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain-- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 6

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T ; R ; ¼ of ¼ of Sec ; B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: ; mE/ mN

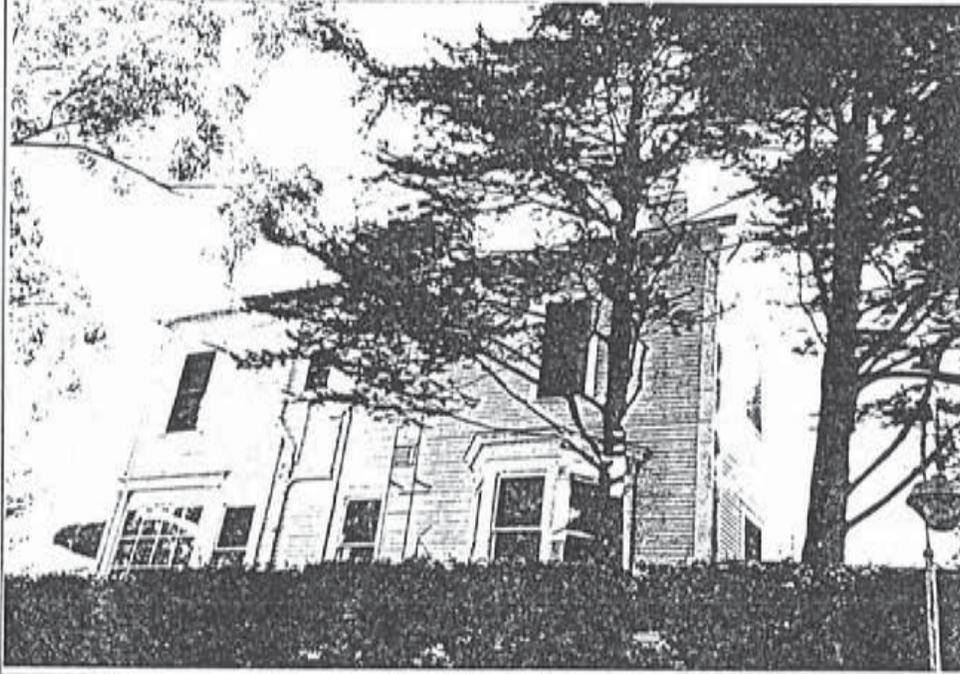
*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
Quarters 6 was built as Officers' Quarters in 1903, set high on the hillside that looks north toward Treasure Island. Both Quarters 6 and 7 are accessible only from the back which abuts the park area at the center of the Officers' housing. They are also the most simplified of the buildings among the Officers' Quarters district. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #) _____

North facade, camera facing
southeast.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1903

*P7. Owner and Address:

Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)

Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island,
Treasure Island, and Their Buildings

*Attachments: Location Map Sketch Map Continuation Sheet
 Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling
Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 6

- B1. Historic Name: Officers' Quarters
- B2. Common Name: Quarters 6, Officers' Quarters
- B3. Original Use: Officers' quarters B4. Present Use: Officers' quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alterations.)
Built 1903.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:
Senior Officers' Quarters Historic District

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks

*B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco

Period of Significance 1903-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 6, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

*B14. Evaluator: Stephen D. Mikesell
*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

Quarters 6 is generally rectangular in plan, with a ridged hipped roof. Double lapped siding sheathes the walls. There is one angled bay window at the front right side, with the rest of the windows being predominantly 1/1 double hung wooden sash. An enclosed shed porch is located at the rear of the house giving shelter to a basement stairway. No other porches exist on the house.

SIGNIFICANCE (continued)

Quarters 6 was built in 1903, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirement since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain-- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Quarters 7

P1. Other Identifier: Officers' Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T ; R ; % of % of Sec ; B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: ; mE / mN

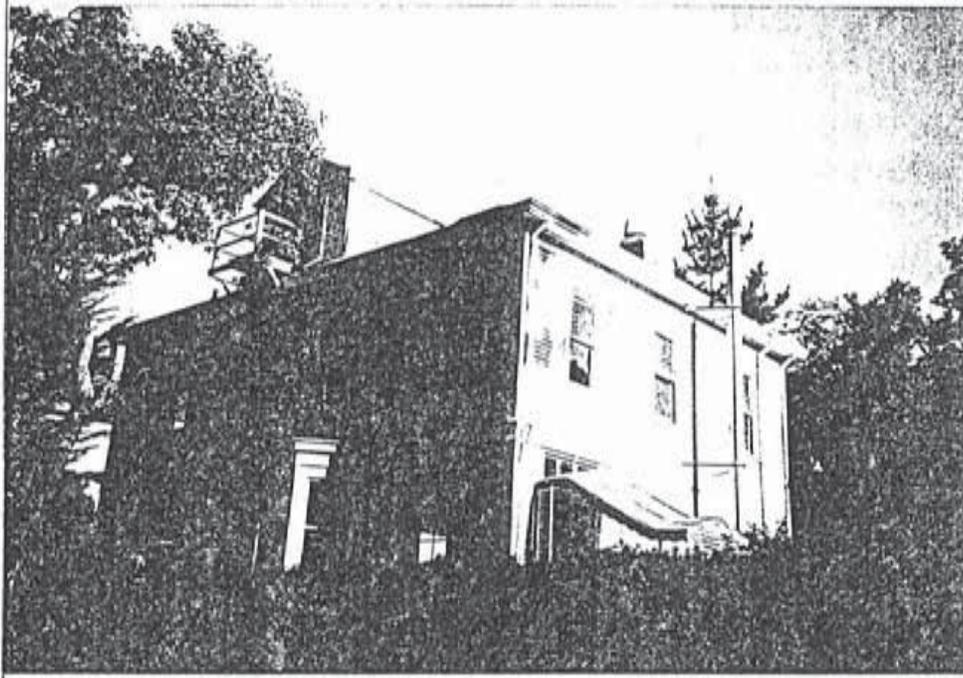
*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)
Quarters 7 was built as Officers' Quarters in 1903, set high on the hillside that looks north toward Treasure Island. Both Quarters 6 and 7 are accessible only from the back which abuts the park area at the center of the officers' housing. They are also the most simplified of the buildings among the Officers' Quarters district. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property: HP2 Single Family Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #) _____

North facade, camera facing
southeast.

*P6. Date Constructed / Age and Sources:
 Historic
 Prehistoric Both
1903

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/23/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet
 Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Quarters 7

- B1. Historic Name: Officers' Quarters
- B2. Common Name: Quarters 7, Officers' Quarters
- B3. Original Use: Officers' quarters B4. Present Use: Officers' quarters
- *B5. Architectural Style: Classical Revival
- *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1903.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:
Senior Officers' Quarters' Historic District

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks

*B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco

Period of Significance 1903-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Quarters 7, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places at the local level of significance. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. The building also appears to qualify for listing under Criterion C, for its architecture, having integrity of design, workmanship, feeling and association. The building retains a high degree of individual integrity as well as integrity as part of the historic district. (See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

*B14. Evaluator: Stephen D. Mikesell
*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

Quarters 7 is generally rectangular in plan, with a ridged hipped roof. Double lapped siding sheathes the walls. There are two angled bay windows at the front left side, with the rest of the windows being predominantly 1/1 double hung wooden sash. An enclosed shed porch is located at the rear of the house giving shelter to a basement stairway. No other porches exist on the house.

SIGNIFICANCE (continued)

Quarters 7 was built in 1903, as part of the initial wave of building construction that established the Naval Training Station as an active base between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation. Eight unmodified Senior Officers' Quarters remain -- including Quarters 8 that exists outside the district -- and are especially important to the history of Yerba Buena Island because they represent all of the major unmodified buildings on the island dating to its use as a Naval Training Station. Quarters 1-7 are notable because they retain not only their individual integrity but also their integrity as a group.

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Building 83

P1. Other Identifier: Family Quarters and Garage

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T: _____; R: _____ ¼ of _____ ¼ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

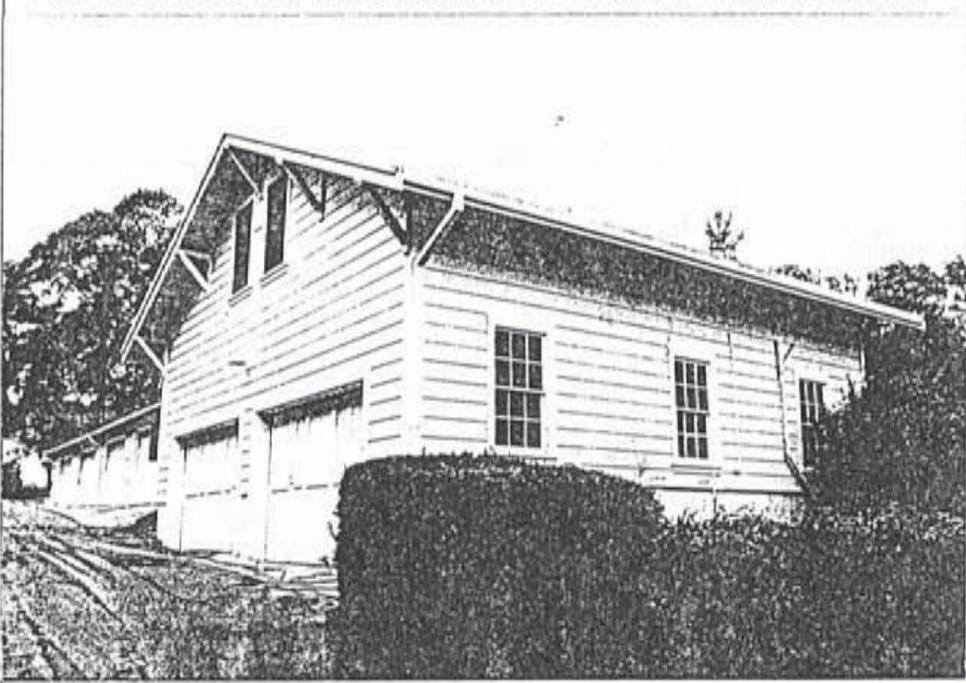
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 83 is a garage with family quarters that was built in 1918. Garage space is located at street level, with two vehicle access doors, and a modest living space is located on a second floor above the garage area. Although the building form is a simple 1½ story rectangular plan with a front gabled roof, certain elements characterize it as craftsman in style. Roof eaves are moderately wide with prominent knee braces supporting them. Windows are 6/6 double hung wooden sash. Wide shiplap siding sheathes the walls. The building retains a high degree of integrity to its 1918 character and appearance.

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

(View, date, accession #) _____
West facade, south side, camera facing northeast.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1918

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Building 83

- B1. Historic Name: Garage Extension and Chauffeur's Quarters
- B2. Common Name: Building 83, Family Quarters and Garage
- B3. Original Use: Garage extension & Chauffeur's quarters B4. Present Use: Family quarters
- *B5. Architectural Style: Craftsman
- *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1918. 1918-1961 -- Garage extension and chauffeur's quarters. 1961-1969 -- Rental quarters and 3-car garage. 1969-present -- Family quarters and garage.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:
Senior Officers' Quarters Historic District

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks

*B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco

Period of Significance 1918-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Building 83, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. As a garage associated with the Senior Officers' Quarters, the building also appears to meet Criterion C for listing in the National Register, for its architecture, having integrity of design, workmanship, feeling and association. The building has been unmodified, retaining a high degree of historic integrity. (See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

*B14. Evaluator: Stephen D. Mikesell

*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

SIGNIFICANCE (continued)

Building 83 was built in 1918, with the second major wave of construction during Yerba Buena Islands period as a Naval Training Station, that period being between 1900 and 1923. The second wave of construction came between 1914 and 1918 in a preparedness effort for American entry into World War I. At its peak in 1917, 13,000 men were assigned to the island. Dozens of buildings were constructed during this period, the majority of which have since been demolished with changing military requirements since World War I. Twenty-three buildings currently remain from the period of the island as a Naval Training Station, making the 10 buildings of this district a more rare representation.

Building 83 is one of three garages in the Senior Officers' Quarters Historic District; the others are Building 205 and 230. Building 83 was built in 1918, Building 205 in 1936, and Building 230 in 1944. The garages are lesser elements of the historic district, which is centered on Quarters 1-7. Nonetheless, the garages were built during the period of significance for the district and are generally compatible with the character of the area; for these reasons, the buildings are treated as contributing elements of the historic district.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 2

*Resource Name or #: (Assigned by recorder) Building 205

P1. Other Identifier: Garage

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T: _____; R: _____; _____ of _____ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____ mE/ _____ mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

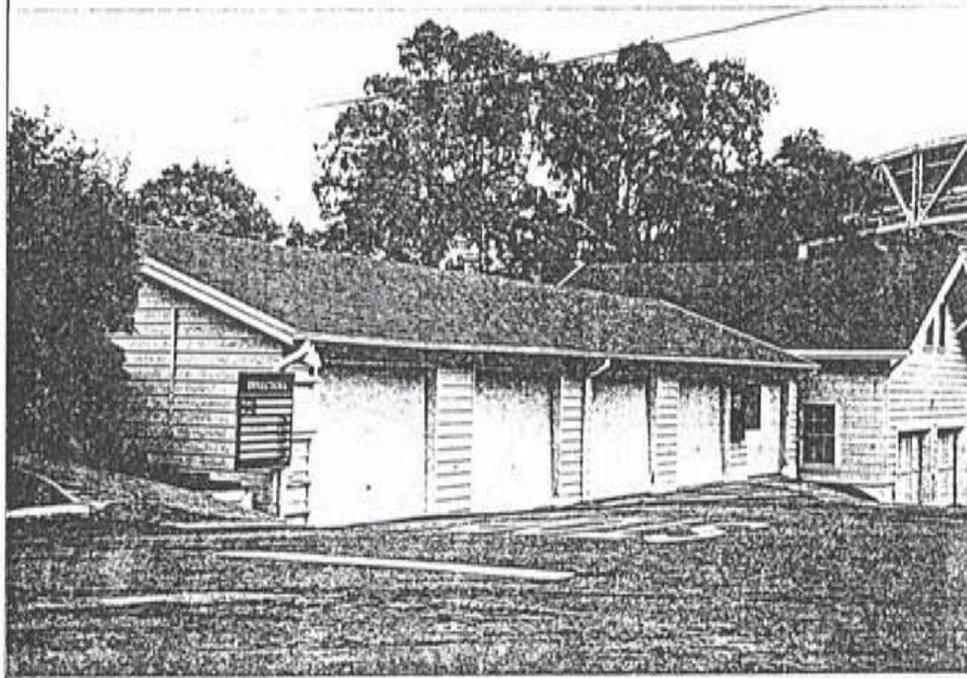
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 205 is a five unit garage, built in 1936 on a long narrow plan running parallel with the street. It has a medium-pitched side gable roof with composition roof shingles. Eaves are narrow with exposed rafters. Wide lapped weatherboard covers the sides of the structure. The garage doors are the single pivotal lift-up type with a twist handle on the outside. Rectangular louvered vents exist high in the gable ends.

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP4 Ancillary Building

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:
(View, date, accession #) _____
West facade, camera facing
southeast.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1936

*P7. Owner and Address:
Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)
Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings *Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRPH Status Code _____

*Resource Name or # (Assigned by recorder) Building 205

B1. Historic Name: Garage
 B2. Common Name: Building 205, Garage
 B3. Original Use: Garage B4. Present Use: Garage
 *B5. Architectural Style: Utilitarian
 *B6. Construction History: (Construction date, alterations, and date of alternations.)
Built 1936.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____
 *B8. Related Features: _____

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks
 *B10. Significance: Theme Naval Station Area Yerba Buena Island, San Francisco
 Period of Significance 1936-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Building 205, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. Although the garage was built in 1936, much later than the Officers Quarters that it is associated with, it is nonetheless a fitting element within the place that it occupies.

Building 205 was built in 1936, during a later period when Yerba Buena Island was being used by the Navy as a "Receiving Ship" facility, providing a lay-over facility for sailors awaiting reassignment to other ships or on-shore facilities. Building 205 is one of three garages in the Senior Officers' Quarters Historic District; the others are Buildings 83 and 230. Building 83 was built in 1918, Building 205 in 1936, and Building 230 in 1944. The garages are lesser elements of the historic district, which is centered on Quarters 1-7. Nonetheless, the garages were built during the period of significance for the district and are generally compatible with the character of the area; for these reasons, the buildings are treated as contributing elements of the historic district.

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks: _____

*B14. Evaluator: Stephen D. Mikesell
 *Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code _____

Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 3

*Resource Name or #: (Assigned by recorder) Building 230

P1. Other Identifier: Garage and Quarters

*P2. Location: Not for Publication Unrestricted *a. County San Francisco
and P2c, P2e, and P2b or P2d. (Attach Location Map as necessary.)

*b. USGS 7.5' Quad Oakland West Date 1980 T: _____; R: _____; _____ ¼ of _____ ¼ of Sec _____; _____ B.M.

c. Address Naval Station, Treasure Island City San Francisco Zip 94592-5100

d. UTM: (Give more than one for large and/or linear resources) Zone: _____; _____mE/ _____mN

*e. Other Locational Data: (E.g., parcel #, directions to resource, elevation, etc., as appropriate.)

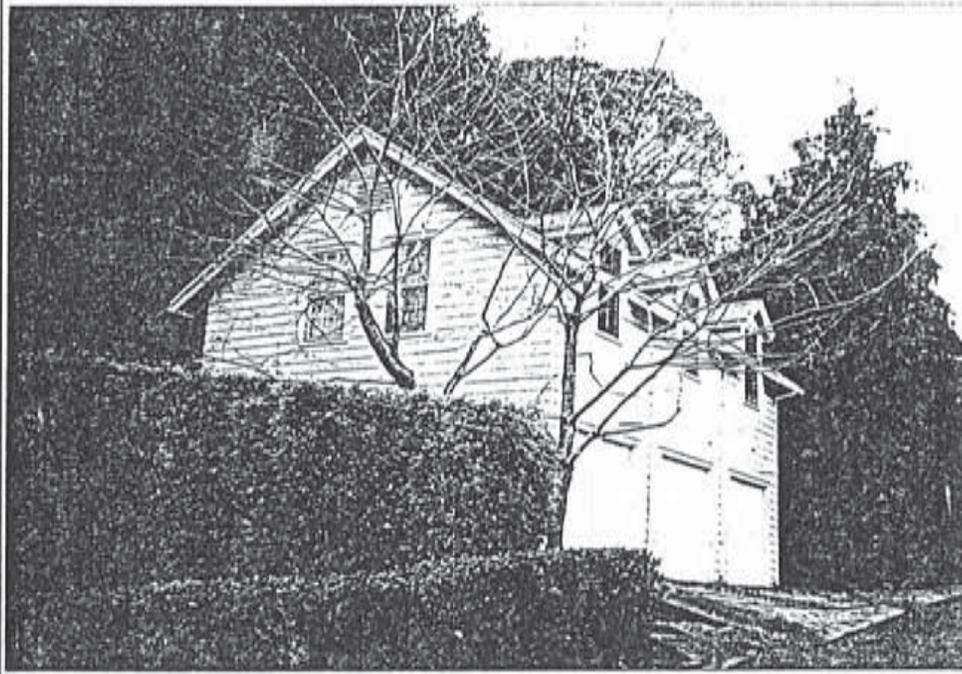
*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 230 was built in 1944 as a residence over a garage that maximizes the site on which it is built. The site is on a steep hillside, with the garage at ground level and cut into the lower edge of the hill. The residential area is built above the garage space, and is surrounded by the yard that is on the steep hillside. Having the residence on the second story above street level maximizes the views looking out to the bay, and the land surrounding it that can be used as a yard. (See continuation sheet.)

*P3b. Resource Attributes: (See attributes and codes) HP34 Military Property; HP2 Single Family Property

*P4 Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo:

(View, date, accession #) _____
South side, north facade, camera
facing northwest.

*P6. Date Constructed / Age and Sources: Historic
 Prehistoric Both
1944

*P7. Owner and Address:

Naval Station
Treasure Island
San Francisco, CA 94130

*P8. Recorded by: (Name, affiliation, and address)

Janice Calpo
JRP Historical Consulting
1477 Drew Ave., Suite 105
Davis, CA 95616

*P9. Date Recorded: 12/12/96

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite Survey report and other sources, or enter "none.") Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings

*Attachments: Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record Linear Resource Record Archaeological Record District Record Milling Station Record Rock Art Record Artifact Record Photograph Record Other (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 3

*NRPB Status Code _____

*Resource Name or # (Assigned by recorder) Building 230

- B1. Historic Name: Garage and Quarters
B2. Common Name: Building 230, Garage and Quarters
B3. Original Use: Garage and quarters B4. Present Use: Garage and quarters
*B5. Architectural Style: Colonial Revival
*B6. Construction History: (Construction date, alterations, and date of alterations.)
Built 1944.

B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:
Senior Officers' Quarters Historic District

B9a. Architect: Bureau of Yards and Docks B9b. Builder: Bureau of Yards and Docks

*B10. Significance: Theme Naval Training Station Area Yerba Buena Island, San Francisco

Period of Significance 1944-1947 Property Type Building Applicable Criteria A,C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Building 230, as a contributing element of the Senior Officers' Quarters Historic District, appears to qualify for listing in the National Register of Historic Places. The district is significant for its association with the period in which Yerba Buena Island was established as one of only four Naval Training Stations in the United States, and as the only Naval Training Station on the West Coast, thereby meeting National Register Criterion A. Although the building was built in 1944, much later than the Officers Quarters that it is associated with, it is nonetheless a fitting element within the place that it occupies. The building also retains a good degree of integrity. (See continuation sheet.)

B11. Additional Resource Attributes: (List attributes and codes): HP34 Military Property

*B12. References: Historical Study of Yerba Buena Island, Treasure Island, and Their Buildings, prepared by Mare Island Naval Shipyard Base Realignment and Closure (BRAC)

B13. Remarks:

*B14. Evaluator: Stephen D. Mikesell

*Date of Evaluation: January 1997

(This space reserved for official comments.)



*Required Information

DESCRIPTION (continued)

The building has a steeply pitched side gabled roof with three gabled dormers above and parallel to the three garage doors below on the first story. Each garage door has an industrial light extending from the wall above the door. (The middle light is currently broken.) Composition shingles cover the roof and shiplap siding sheathes the walls. Windows are predominantly 6/6 double hung wooden sash, including one window placed within each dormer. Main access to the residence is up a wooden stairway and into a door at the right side of the upper story.

SIGNIFICANCE (continued)

Building 230 was built in 1944, during the seven year period in which both Yerba Buena Island and Treasure Island experienced their most frenetic use as a Naval facility during World War II. Although the building is not significant to the war efforts itself, it remains as a building associated with the earlier Senior Officers' Quarters, and has its place among the buildings of the Senior Officers' Quarters historic district. Building 230 is an integral contributor to the district as a whole.

Building 230 is one of three garages in the Senior Officers' Quarters Historic District; the others are Building 83 and 205. Building 83 was built in 1918, Building 205 in 1936, and Building 230 in 1944. The garages are lesser elements of the historic district, which is centered on Quarters 1-7. Nonetheless, the garages were built during the period of significance for the district and are generally compatible with the character of the area; for these reasons, the buildings are treated as contributing elements of the historic district.

Introduction

For the purposes of this evaluation, the San Francisco-Oakland Bay Bridge is considered to be those elements of the original 1930-1937 design, as differentiated from subsequent freeway connecting structures. For clarification, please refer to attached plans and maps. The bridge includes Bridge No. 34-03, Bridge No. 34-117S, Bridge No. 34-118 R, Bridge No. 34C-58, Bridge No. 34C-59 and the Transbay Transit Terminal (see attached evaluation form).

An Evaluation Of The
San Francisco-Oakland Bay Bridge
In Connection With

4-SF-I280 Transfer Concept

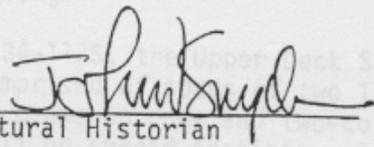
The individual elements, which collectively comprise the Bay Bridge, are described as follows:

Bridge No. 34-118 R, the San Francisco Approaches or Lower Deck On-Ramp is comprised of continuous concrete box girders, simple span composite rolled steel stringers, and haunched concrete girders with transverse floor beams, carried on concrete bents on spread pile footings. Originally a top deck off-ramp, this was functionally revised in 1958 following removal of railroad tracks from the bridge's lower deck and conversion of deck to eastbound-only traffic flow. Its 32 spans total 3,108 feet long.

Prepared for:

R. D. Sayre, Chief
Environmental Branch
District 4
Department of Transportation

Prepared by:

John W. Snyder 
Chief Architectural Historian
Office of Environmental Analysis
Department of Transportation

California Department of Transportation
Sacramento, California

August 11, 1983

Introduction

For the purposes of this evaluation, the San Francisco-Oakland Bay Bridge is considered to be those elements of the original 1930-1937 design, as differentiated from subsequent freeway connecting structures. For clarification, please refer to attached plans and maps. These elements are carried separately by Caltrans' Office of Structures, and include Bridge No. 34-118 R/L, Bridge No. 34-117S, Bridge No. 34-116F, Bridge No. 34-03, Bridge No. 34-04, Bridge No. 33-25, Bridge No. 34C-58, Bridge No. 34C-59 and the Transbay Transit Terminal (see attached evaluation form).

Description

These individual elements, which collectively comprise the Bay Bridge, are described as follows:

1. Bridge No. 34-118 R, the San Francisco Approaches or Lower Deck On-Ramp is comprised of continuous concrete box girders, simple span composite rolled steel stringers, and haunched concrete girders with transverse floor beams, all carried on concrete bents on spread pile footings. Originally a top deck off-ramp, this was functionally revised in 1958 following removal of interurban railroad tracks from the bridge's lower deck and conversion of the lower deck to eastbound-only traffic flow. Its 32 spans total 3,108 feet long.¹
2. Bridge No. 34-118L, the Upper Deck San Francisco Approaches or Center Ramps are comprised of continuous spans with suspension span in between, rigid frame connection between superstructure and bents. The superstructure is haunched concrete T-beams with transverse floor beams, and cellular structure at cable anchorage and abutment, carried on a substructure of reinforced concrete bents on pile and spread footings. Its 56 spans total 3,850 feet long.²
3. Bridge No. 34-117S, the Upper Deck San Francisco Approaches or South Off-Ramp, is comprised of spans of two T-beam longitudinal girders with transverse floor beams on one- and two-column bents and open end diaphragm abutment, all on spread footings. Its 23 spans total 1,035.2 feet long.³
4. Bridge No. 34-116F, the Upper Deck San Francisco Approaches or North Connector (Westbound 80/Northbound 480), is comprised of a superstructure of T-girder and composite steel girder spans, carried on a substructure of reinforced concrete wall piers, two-column bents, reinforced concrete abutment with reinforced concrete wingwalls, reinforced concrete retaining walls, all on spread footings. Its 40 spans total 1,843.2 feet long.⁴
5. Bridge No. 34-03, West Bay Spans, is comprised of steel Warren truss approach spans carrying a double deck and supported by steel bents on concrete footings, and a double-deck suspension bridge consisting of twin bridges placed end-to-end with steel towers supported on concrete footings and caissons, and with a center concrete anchorage and two concrete end anchorages. Its 9 spans total 10,303 feet long.⁵

6. Bridge No. 34-04, Yerba Buena Tunnel, consists of two double-deck, cast-in-place, reinforced concrete T-beam viaducts with continuous spans, on spread footings, separated by a double-deck concrete arch tunnel. It is 1,791 feet long.⁶
7. Bridge No. 33-25, East Bay Spans, consists of double-deck steel truss and cantilever truss spans, steel girder spans, and concrete T-beam spans, on steel and concrete piers, concrete footings, concrete caissons, and timber piles. Its 52 spans total 11,327 feet long.⁷
8. Bridge No. 34C-58, Key System South Underpass (over Beale Street) is described as riveted steel girders on a concrete bent and steel bent. Its single span is 78 feet long.⁸
9. Bridge No. 34C-59, Key System North Underpass (over Beale Street) is described as riveted steel girders on windowed reinforced concrete bents. Its single span is 66 feet long.⁹
10. Transbay Transit Terminal: see attached evaluation.

Significance

"Even as Joseph Strauss gathered support for the Golden Gate Bridge, which he designed and later supervised as chief engineer, interest grew in a companion project: a bridge between Oakland and San Francisco to replace the picturesque but slow ferry trip.

"Engineers considered it a relatively easy challenge to span San Francisco Bay. Several low-level structures had been proposed even before the turn of the century. But the danger to ships, especially in the frequent fogs, ruled out a low-level structure. So chief engineer Charles H. Purcell, bridge engineer Charles E. Andrew and design engineer Glenn B. Woodruff agreed upon a high-level design.

"This called for two structures connected on Yerba Buena Island by a tunnel, which was the first double-decked highway tunnel in the U.S.

"The San Francisco side of the bridge is really two suspension bridges joined by a common center pier. The Oakland side combines two types of truss design, with a cantilever channel span of 1,400 feet--a distance that remained a record for more than 20 years.

"The outstanding engineering feature of the bridge is the center pier between the two 2,310-foot suspension spans of the western half. The pier extends 220 feet below the water surface to bedrock. A special caisson of steel cylinders balanced by compressed air ballast was used to position it at this record-breaking depth.

"When the bridge opened in 1936, three years after construction began, its top deck carried six lanes of auto traffic. The lower deck had three lanes for trucks and a double-track rapid transit line.

"This farsighted inclusion of a rail line on the Bay Bridge enabled electric railway cars to enter downtown San Francisco from East Bay points.

"The project cost \$77 million. Traffic first crossed it on November 12, 1936.

"As a result of the abandonment of rail service in 1958, the main change in the bridge was expansion of the roadways for mixed trucks and auto traffic: five lanes westbound above and five eastbound below.

"Reconstruction of the upper deck was completed in 1963. The work was accomplished without stopping any of the 110,000 vehicles using the bridge per day. In the first 49 days after it opened, the average traffic was 27,000 vehicles per day. Today it is 190,000 a day.

"Earthquake restrainers were added in 1976 to secure trusses and girders at their support points.

"A crew of 50 painters works full time on the 8.4-mile long structure. It takes them seven years to completely repaint 13.6 million square feet of metal."¹⁰

Notable individuals connected with the project were Charles H. Purcell, chief engineer; Charles E. Andrew, bridge engineer; Glenn B. Wooddruff, design engineer; T. L. Pflueger, Arthur Brown, Jr., and John J. Donovan, consulting architects.

The San Francisco-Oakland Bay Bridge, designated a National Historic Civil Engineering Landmark by the American Society of Civil Engineers appears to meet National Register Criteria A, B and C at the national level.

Attachments

Footnotes

¹R. R. Bridwell and J. M. Yee, "Revised Bridge Report, Bridge No. 34-118R", California Department of Transportation, Sacramento, June 1982.

²R. R. Bridwell and J. M. Yee, "Revised Bridge Report, Bridge No. 34-118L", California Department of Transportation, Sacramento, June 1982.

³R. R. Bridwell and J. M. Yee, "Revised Bridge Report, Bridge No. 34-117S", California Department of Transportation, Sacramento, June 1982.

⁴R. R. Bridwell and J. M. Yee, "Revised Bridge Report, Bridge No. 34-116F", California Department of Transportation, Sacramento, June 1982.

⁵R. R. Bridwell and R. White, "Bridge Report, Bridge No. 34-03", California Department of Transportation, Sacramento, December 1980.

⁶R. R. Bridwell and R. White, "Bridge Report, Bridge No. 34-04", California Department of Transportation, Sacramento, December 1980.

⁷R. R. Bridwell and R. White, "Bridge Report, Bridge No. 33-25", California Department of Transportation, Sacramento, December 1980.

⁸F. C. Heggli, "Bridge Report, Bridge No. 34C-58", California Department of Transportation, Sacramento, October 27, 1977.

⁹F. C. Heggli, "Bridge Report, Bridge No. 34C-59", California Department of Transportation, Sacramento, October 27, 1977.

¹⁰"The San Francisco-Oakland Bay Bridge", P. G. & E. Progress, August 1979.

But the danger to ships, especially in the frequent fogs, ruled out a low-level structure. So chief engineer Charles H. Purcell, bridge engineer Charles E. Andrew and design engineer Glenn B. Woodruff agreed upon a high-level design.

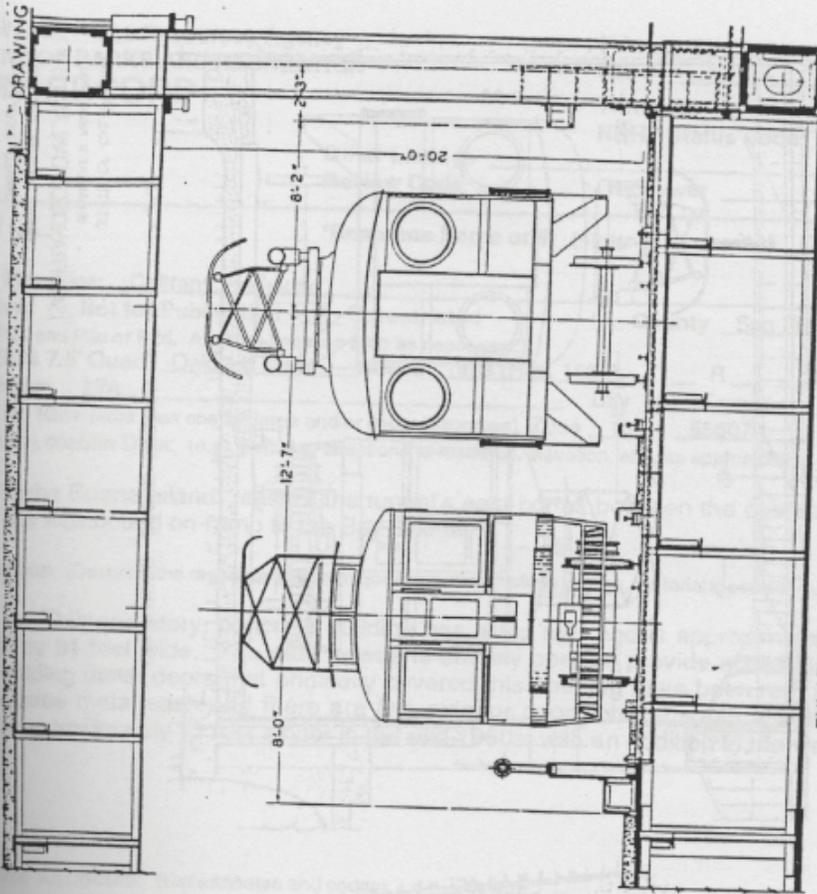
"This called for two structures connected on Yerba Buena Island by a tunnel, which was the first double-decked highway tunnel in the U.S.

"The San Francisco side of the bridge is really two suspension bridges joined by a common center pier. The Oakland side combines two types of truss design: a cantilever channel span of 1,400 feet--a distance that remained a record for more than 20 years.

"The outstanding engineering feature of the bridge is the center pier between the two 2,310-foot suspension spans of the western half. The pier extends 220 feet below the water surface to bedrock. A special caisson of steel cylinders balanced by compressed air ballast was used to position it at this record-breaking depth.

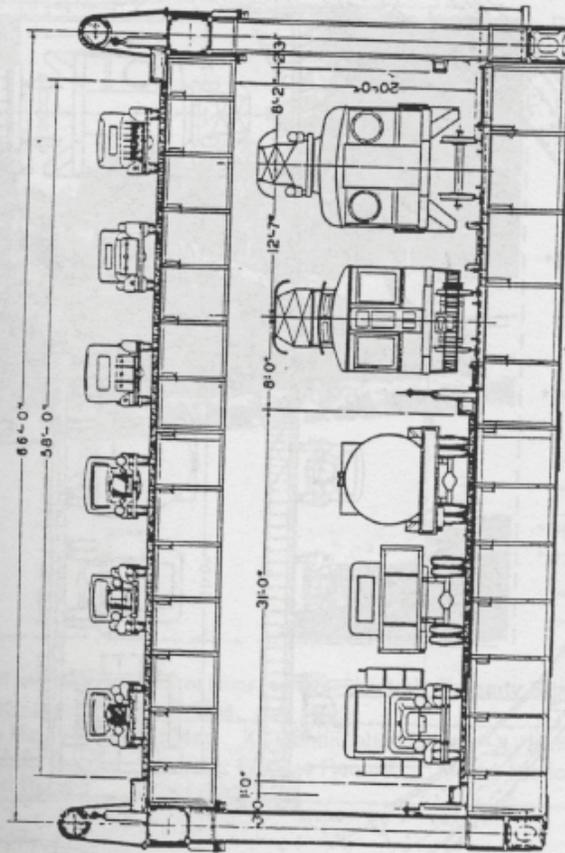
"When the bridge opened in 1936, three years after construction began, its top deck carried six lanes of auto traffic. The lower deck had three lanes for trucks and a double-track rapid transit line.

DRAWING



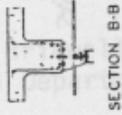
ENLARGED CROSS SECTION SHOWING TRACKS

STATE OF CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 SAN FRANCISCO-OAKLAND BAY BRIDGE
 WEST BAY CROSSING
 TYPICAL SECTION

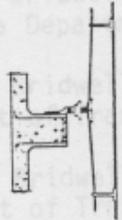


CROSS SECTION THRU BRIDGE

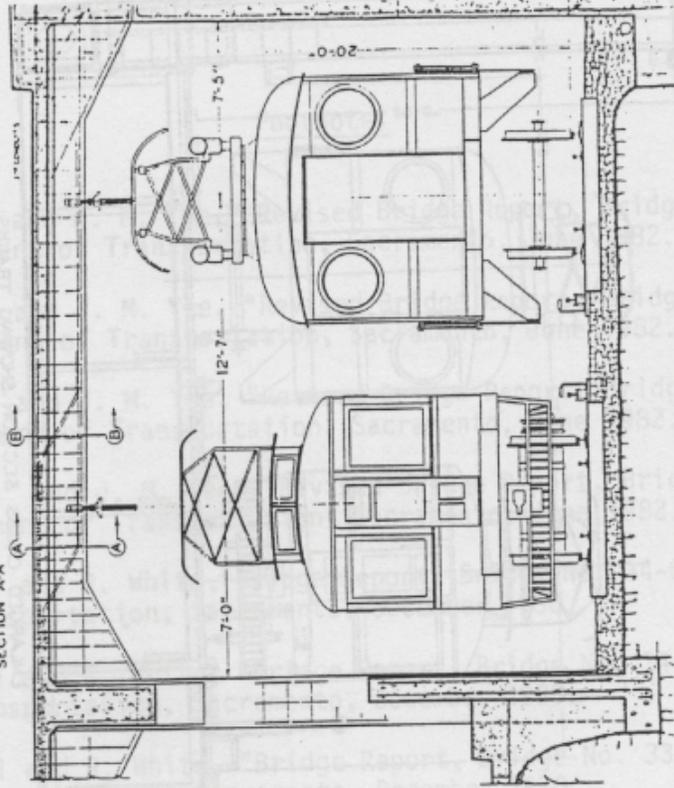
DRAWN



SECTION B-B

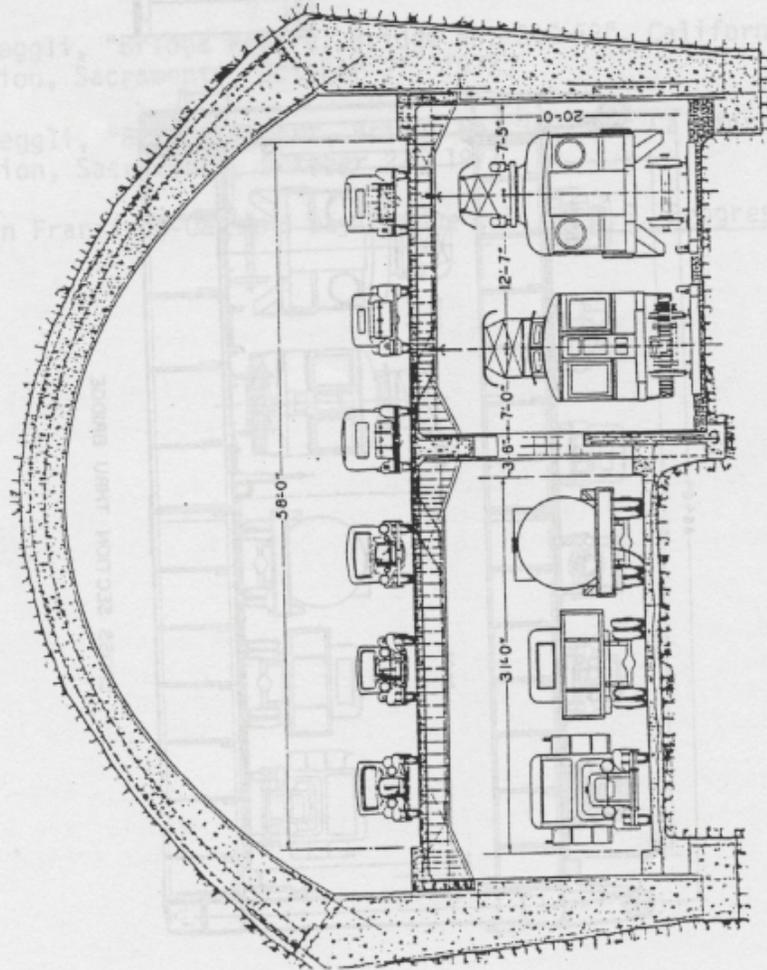


SECTION A-A



ENLARGED CROSS SECTION SHOWING TRACS

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
SAN FRANCISCO-OAKLAND BAY
YERBA BUENA CROSSING
TUNNEL SECTION



CROSS SECTION THRU TUNNEL

ATTACHMENT D

Archaeological Survey Report

FINDING OF EFFECT

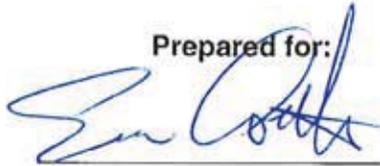
Yerba Buena Island Ramps Improvement Project

San Francisco, California

04-SF-80, PM 12.3-13.2/7.6-8.1

EA 04-3A64OK

Prepared for:



Eric Cordoba, Project Manager
SFCTA

100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102

Approved by:



Elizabeth Kruse, Branch Chief, South Counties
Office of Cultural Resource Studies
Caltrans District 4
111 Grand Avenue
Oakland, California 94623

Prepared By:



Toni Webb, Architectural Historian
JRP Historical Consulting, LLC
1490 Drew Avenue, Suite 110
Davis, CA 95618

October 2009

TABLE OF CONTENTS

1. INTRODUCTION..... 1

2. DESCRIPTION OF THE UNDERTAKING 2

 2.1. Project Description 2

 2.2. Area of Potential Effects (APE) 4

3. PUBLIC PARTICIPATION..... 6

4. DESCRIPTION OF HISTORIC PROPERTIES..... 7

 4.1. Efforts to Identify Historic Properties 7

 4.1.1. Efforts to Identify: Built Environment 7

 4.2. Description of Historic Properties 8

 4.2.1. Description: 8

 4.2.2. Archaeological Site CA-SFr-04/H 11

5. APPLICATION OF THE CRITERIA OF ADVERSE EFFECT 11

 5.1. Criteria of Adverse Effect 11

 5.2. Analysis of Effect to Historic Properties..... 13

 5.2.1. No-Build Alternative 13

 5.2.2. Alternative 2B 13

 5.2.3. Alternative 4 15

 5.2.4. Noise Effects 17

 5.2.5. Cumulative Effects 17

6. ALTERNATIVES CONSIDERED BUT REJECTED 20

 6.1. Non-Viable Alternatives..... 20

 6.1.1. Alternative 1 20

 6.1.2. Alternative 1A 21

 6.1.3. Alternative 2 22

 6.1.4. Alternative 2A 23

 6.1.5. Alternative 3 23

 6.1.6. Alternative 5 24

7. Proposed Mitigation 25

 7.1. Efforts to Avoid or Minimize Adverse Effects 25

 7.2. Proposed Mitigation Measures 25

8. CONCLUSIONS 29

9. REFERENCES 30

10. PREPARERS’ QUALIFICATIONS..... 31

ATTACHMENTS

- Appendix A: Project Maps
- Appendix B: Visual Simulations and Renderings
- Appendix C: Project Public Participation
- Appendix D: National Register of Historic Places Correspondence

1. INTRODUCTION

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA is the Lead Agency under CEQA while Caltrans is the lead agency under NEPA. JRP Historical Consulting, LLC (JRP) prepared this Finding of Effect (FOE) as part of the environmental compliance for the Project. The purpose of this document is to comply with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) as these pertain to federally funded undertakings and their impacts on historic properties.

The Historic Property Survey Report (HPSR) prepared for this project identified five historic properties within the Focused APE for this Project: Senior Officers' Quarters Historic District; Quarters 10 (which includes Building 267); Quarters 8; a portion of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB); and prehistoric site CA-SFr-04/H. The Focused APE and plan views of the historic properties and the proposed project alternatives are provided in Appendix A, with existing and simulated views of the proposed alternatives in Appendix B.

The Senior Officers' Quarters district, Quarters 10, and the SFOBB are listed in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). Quarters 8 has been determined eligible for listing in the NRHP and CRHR. The State Historic Preservation Officer (SHPO) concurred (August 1998) that the prehistoric component of CA-SFr-04/H was a contributing element to the site's NRHP eligibility but that the historic-era components consisting of various structure remains and refuse deposits and elements of the U.S. Naval Training Station were non-contributing elements. Even though no column footings are proposed within or near CA-SFr-04/H for any alternative, an ESA will be established for this site.

All of the historic properties are also considered historical resources for the purposes of CEQA. Although a portion of the East Span of the SFOBB is located within the Focused APE, this historic property was documented as part of the SFOBB East Span Seismic Safety (Earthquake Retrofit) Project, which was completed in 2001. Because the current project proposes the construction of new ramps that would connect to the new East Bay Span currently under construction, the proposed project has no potential to affect the existing SFOBB historic property. No further study of the SFOBB as a historic resource was required for this project. These properties are further described in Section 4.

This FOE concludes that construction of Project Alternative 2B and Alternative 4 would cause an Adverse Effect to the Senior Officers' Quarters Historic District (including Quarters 1) and Quarters 10 (and Building 267). Caltrans has determined that the undertaking will have an Adverse Effect on historic properties pursuant to Section 106 Programmatic Agreement (Section 106 PA) Stipulation X.C. and, is consulting SHPO regarding the resolution of adverse effects, pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a), and 800.6(b)(1).

2. DESCRIPTION OF THE UNDERTAKING

2.1. Project Description

Yerba Buena Island (YBI) is located in the San Francisco Bay approximately halfway between Oakland and San Francisco.¹ YBI is only accessible to vehicular traffic via the San Francisco Oakland Bay Bridge (SFOBB) stretch of I-80. The SFOBB is considered a “lifeline structure” and is a critical link between the East Bay and San Francisco. It provides the only vehicle access to YBI, the active U.S. Coast Guard (USCG) facilities located on the south side of the island, and Treasure Island, located immediately north of YBI. See Maps 1-5, Appendix A.

The proposed project would replace the existing westbound on- and off-ramps located on the east side of YBI with new westbound on- and off-ramps. The proposed project would not change the existing exit and entrance ramps on the west side of the YBI tunnel. The new ramps would maintain the functional role of the current ramps while satisfying seismic requirements, highway design standards, traffic operations, and improve safety. Although the APE maps appear to show the ramps impacting CA-SFr-04/H (ESA-1a, 1b), the ramp is actually an elevated structure and no support columns are planned within or near ESA 1a or 1b. The YBI Ramps Improvement Project is independent of both the SFOBB East Span Seismic Safety Project, currently under construction, and the Treasure Island and Yerba Buena Island (TI/YBI) Redevelopment Plan, currently undergoing its own environmental review process.

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

Alternatives have been proposed to address the geometric deficiencies of the existing on- and off-ramps. In addition to the no-build alternative, the proposed build alternatives would analyze the effects to the SFOBB (I-80) mainline structure and YBI. The proposed project is located between post-mile (PM) 7.6 and 8.1² beginning at the east portal of the YBI tunnel and ending at the east side of the Transition Structure portion of the new SFOBB. The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span.³

No Build Alternative

This Alternative assumes that the existing on- and off-ramps would remain in place and no further action or improvements would occur.

Alternative 2B

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

¹ The project description was prepared by EDAW/AECOM.

² Kilometer Post (KP) 12.3 and 13.2.

³ The SFOBB Transition Structure is the name of a section of the new Bay Bridge. The Transition Structure will connect the Self-Anchored Suspension (SAS) span to Yerba Buena Island, and will transition the East Span’s side-by-side road decks to the upper and lower decks of the YBI tunnel and West Span.

Alternative 2B is the locally preferred alternative. Alternative 2B is shown in the first sheet of Map 3, as well as in plan view in Map 4, Appendix A. Views showing existing and proposed conditions for Alternative 2B appear in Figures 6-13, Appendix B.

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

- Westbound on-ramp on the east side of YBI – This ramp would begin at a “T” intersection at Macalla Road, loop right with a tight radius, and merge on to the north side of the Bay Bridge. The length of this ramp would be approximately 876 feet (267 meters). This ramp would have two traffic lanes, merging into one as it connects to the SFOBB. One lane would be a high occupancy vehicle (HOV) lane and the other a mixed-flow⁴ lane.
- Westbound off-ramp on the east side of YBI – This ramp would diverge from the new SFOBB Transition Structure between bents W3 and W4 curving around the Nimitz House and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,115 feet (340 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on- and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The stairway adjacent to the Caltrans Substation would be relocated to the west side of the building to make room for the new retaining wall. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.
- Under Alternative 2B, the westbound on- and off-ramps would terminate at Macalla Road where Quarters 10 and Building 267 are currently located, requiring their removal.⁵

Alternative 4

Alternative 4 would include the removal of the existing westbound on- and off-ramps on the east side of YBI, construction of westbound on-ramp from South Gate Road, and construction of westbound off-ramp to Macalla Road on the east side of YBI. Alternative 4 is shown in the second sheet of Map 3, as well as in plan view in Map 5, Appendix A. Views showing existing and proposed conditions for Alternative 4 appear in Figures 14-21, Appendix B.

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

- Westbound on-ramp on the east side of YBI. This ramp would begin at South Gate Road, proceed east paralleling the eastbound on-ramp, loop under the new SFOBB Transition

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

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

Structure near its eastern end to provide adequate merging distances, and cross over the westbound off-ramp at the north side of the SFOBB. The ramp would be approximately 2,883 ft (879 meters) long. An HOV lane would not be provided under Alternative 4.

- Westbound off-ramp on the east side of YBI. This ramp would diverge from the new SFOBB Transition Structure between bents W2 and W3, parallel the Transition Structure, cross under the westbound on-ramp and terminate at a “T” intersection at North Gate Road. The length of this ramp would be approximately 1,168 feet (356 meters). A stop sign is proposed at the ramp terminus.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on-and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.
- Under Alternative 4, Quarters 10 and Building 267 and its associated landscaping would remain in place.

2.2. Area of Potential Effects (APE)

JRP Historical Consulting, LLC (JRP), in consultation with the California Department of Transportation (Caltrans), developed the architectural Area of Potential Effects (APE) for this project in October 2008. Caltrans signed the APE on October 23 and 24, 2008. The APE is composed of two areas: a General APE and Focused APE. The General APE was developed to encompass both the project area, and the contributing elements of the large, linear, multi-component SFOBB historic property that extend outside of the project area. The Focused APE encompasses only the project area; therefore, those portions of the SFOBB property that may be potentially affected by the Project are included.

The Focused APE maps for historic architecture are shown in Map 2 and Map 3 (first two sheets), in Appendix A. Consistent with Caltrans policies and general cultural resource practices, the APE for the built environment encompassed areas that might be either directly or indirectly affected by construction; i.e., those areas within which the project could cause a change in character or use of historic properties. A small segment of the westernmost portion of the East Span is extant within the Focused APE. Besides the SFOBB, there are three other resources within the Focused APE: the Senior Officers’ Quarters Historic District, Quarters 10 (which includes Building 267), and Quarters 8, see Maps 4–5, Appendix A. Only those resources located within the architectural APE were included in the survey. Because the current project proposes the construction of new ramps that would connect to the new East Bay Span currently under construction, the proposed project has no potential to affect any components of the existing SFOBB historic property and it did not require further study under this FOE. The Focused APE for archaeological resources is depicted on Map 3 (last two sheets of Map 3) and includes all areas that could be subject to ground-disturbing activities under Alternative 2B or Alternative 4.

The archaeological APE was developed in consultation with Caltrans and includes only the project area and not elements of the SFOBB property. This does not include areas containing standing historic buildings and structures such as the Senior Officer's Quarters Historic District, Quarters 10 and Quarters 8. The archaeological APE only includes areas that would be potentially subject to ground disturbances related to activities such as project construction, equipment staging, and materiel storage. This APE was also developed considering the location of CA-SFr-04/H. While no ground-disturbing activities are planned that would impact this site, the site could be subject to unintended disturbances related to project construction.

3. PUBLIC PARTICIPATION

This section presents the environmental and Section 106 process activities that have been completed and those taking place concurrently with the preparation of this Draft FOE. To date, efforts to involve the public in the Section 106 process have included:

- SFCTA issued a Notice of Preparation (NOP) on September 5, 2008.
- Caltrans issued a Notice of Intent (NOI) to prepare a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) on September 5, 2008.
- A Public Scoping meeting was held at the Port of San Francisco office, Bayside Conference Room, Pier 1, San Francisco, on September 24, 2008. The consultant for historic architectural resources attended the meeting. No comments or questions were received regarding historic architectural resources.
- San Francisco Bay Conservation and Development Commission (BCDC) – Design Review Board held a public hearing on April 6, 2009. SFCTA gave an informational presentation on the project and its progress. No comments or questions were received regarding historic architectural resources.
- EDAW sent a contact letter to the Native American Heritage Commission (NAHC) on November 7, 2008 requesting a search of the Sacred Lands File and a list of suitable Native American tribal organizations and individuals that might have an interest in or concerns with the Project. EDAW sent contact letters to the NAHC-suggested Ohlone/Costanoan representatives on December 17, 2008 and followed up with phone calls approximately two weeks later. No responses were received.
- JRP, on behalf of SFCTA, sent letters to interested parties on December 11, 2008, to inform area planning agencies, local governments, historical societies, museums, and other interested parties of the proposed project. No responses were received. Copies of the transmittal letters are included in Appendix C. The following organizations received this letter:

San Francisco Architectural Heritage
San Francisco Landmark Preservation Advisory Board
Preservation Coordinator, San Francisco Planning Department
San Francisco History Association
San Francisco Museum and Historical Society
California Historical Society
San Francisco Beautiful
California Heritage Council
California Preservation Foundation
National Trust for Historic Preservation Western Office
National Park Service, Pacific West Region Office
Oakland Heritage Alliance
Oakland Landmarks Preservation Advisory Board
Oakland Cultural Heritage Survey
Alameda County Historical Society
Alameda County Parks, Recreation and Historical Commission

4. DESCRIPTION OF HISTORIC PROPERTIES

4.1. Efforts to Identify Historic Properties

4.1.1. Efforts to Identify: Built Environment

Previous projects have identified, evaluated, and in some cases listed in the National Register, four historic properties that are located within the Focused APE for the current project:

- Senior Officers' Quarters Historic District (a multi component property)
- Quarters 10 (a property that includes Building 267)
- Quarters 8
- a portion of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB).

All four historic properties were previously evaluated, and although they did not require re-evaluation for the current project, the properties were field checked and update forms were prepared for the District and the individual quarters buildings. The updates forms were included in the HPSR for this project. A summary of identification efforts conducted to date is as follows:

The Senior Officers' Quarters Historic District is listed in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). JRP inventoried and evaluated the district in 1997 as part of the report entitled "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." The State Historic Preservation Officer (SHPO) generally concurred with the finding of this report in October 1997 (OHP Reference USN 970708A) and requested some clarifications for the district property. Final SHPO concurrence was obtained in 1998.⁶ Five years later, in 2003, JRP completed a NRHP nomination for the district, as well as Historic American Building Survey (HABS No. CA-1793-A through -K) documentation. The district was listed in the NRHP and CRHR on February 26, 2008.⁷

Quarters 10 and Building 267 are listed in the NRHP and the CRHR. Caltrans inventoried and evaluated Quarters 10 in 1998 as part of the report entitled "Historic Architecture Survey Report for the Construction of a New East Span for the San Francisco-Oakland Bay Bridge." As a result of that survey, Caltrans found that Quarters 10 and its associated garage (Building 267) appeared to be eligible for listing in the NRHP at the local level of significance under Criterion C, as significant example of mid twentieth century residential architecture. SHPO concurred with those findings in 1998. JRP prepared a NRHP nomination for the district in 2003, and on February 26, 2008, this property was listed in the NRHP and CRHR.⁸

Quarters 8 has been determined eligible for listing in the NRHP and CRHR. JRP inventoried and evaluated Quarters 8 in 1997 as part of the report entitled "Cultural Resources Inventory and Evaluation Investigations: Yerba Buena Island and Treasure Island Naval Station Treasure Island, San Francisco, California." SHPO generally concurred with the finding of this report in

⁶ Caltrans, "Historic Property Survey Report, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project," EA 01200 (September 1998).

⁷ National Register Information System Reference Nos. 08000085 and 91001380; HABS No. CA-233-A (1998); and see correspondence in Appendix D.

⁸ National Register Information System Reference No. 08000084; and see correspondence in Appendix D.

October 1997 (SHPO Reference USN 970708A) and requested clarification for some buildings. Final concurrence was obtained in 1998.⁹

SFOBB is a multi-component property listed in the NRHP and the CRHR. This historic property was inventoried, evaluated, and documented as part of the SFOBB East Span Seismic Safety (Earthquake Retrofit) Project in 2000–2001. The historic bridge property was listed in the NRHP and CRHR on August 13, 2001.¹⁰ A portion of the East Span of the SFOBB is located within the Focused APE; however, the current project proposes construction of new ramps that will connect to the new East Bay Span structure currently under construction and the proposed project has no potential to affect the existing SFOBB historic property. No further study of the SFOBB as a historic property was required for this project.

The detailed background information for these properties and previous identification efforts were provided in the Historic Resources Evaluation Report (HRER) prepared for this project. The HRER provides updates of the previous inventory and evaluation of the three historic properties identified above: Senior Officers' Quarters Historic District, Quarters 10, and Quarters 8. The HRER concluded that the Senior Officers' Quarters Historic District, Quarters 10/Building 267, and Quarters 8 have remained relatively unchanged since they were listed or determined eligible for listing in the NRHP and changes to their listing or eligibility were not warranted. All of these properties remain historical resources for the purposes of CEQA.

4.2. Description of Historic Properties

4.2.1. Description:

This section describes three historic architectural properties within the project APE that are listed in the National Register or have been determined eligible for listing in the National Register and that have the potential to be affected by the proposed project. The location of these properties in relation to the two alternatives is shown in Map 4 and Map 5, Appendix A.

Quarters 8

Map Reference 1

Quarters 8, a symmetrical three-story, wood-frame, Mediterranean style residence constructed in 1905, has been determined eligible for the National Register at the local level of significance. The building is significant under Criterion A within the context of military history, and under Criterion C, as an unusual example of Mediterranean-style architecture and as the work of the master architectural firm of the Reid Brothers. The period of significance extends from 1905 to 1947. Character-defining features of Quarters 8 include its massing, recessed third floor, symmetrical façade, smooth stucco and wood siding, parapets, full-width front porch with square columns and solid railing, second-floor balcony, hip roof with box cornice and block modillions, and original fifteen-over-one, twelve-over-one, and eight-over-one double hung wood windows, exterior brick chimneys, and triangular-shaped property.

Quarters 10 (and Building 267)

Map Reference 2

Quarters 10, a 1948 Moderne/International/Bay Region residence and its contributing garage (Building 267), are listed in the National Register. The property is significant at the local level

⁹ Caltrans, "HPSR, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project," (September 1998).

¹⁰ National Register Information System Reference No. 00000525; and see correspondence in Appendix D.

under Criterion C, as significant example of mid twentieth century residential architecture. The property boundary includes Quarters 10, Building 267 and the landscape immediately adjacent to these buildings including lawn, garden, driveway and the northern retaining wall. The period of significance for this property is 1948, the year of its construction. Character-defining features of Quarters 10 include its setting and landscape, and those distinctive architectural characteristics of the International, Moderne and Bay (Regional) Tradition styles: flat roof with overhanging eaves supported by slender pipe columns; exposed rafters; corner windows; casement windows with horizontal muntins; curved east wall; board formed concrete wall surface; and lap wood siding. Character-defining features of Building 267 are similar to Quarters 10 and include the lap wood siding, board formed concrete wall surface, flat roof with overhanging eaves, and exposed rafter tails.

Senior Officers' Quarters Historic District (and Quarters 1)

Map Reference 3

The Senior Officers' Quarters Historic District is listed in the National Register. The district includes eleven contributing elements: seven residences (Quarters 1 through 7), two apartments/garages (Buildings 83 and 230), a five-car garage (Building 205), and the landscape that surrounds the district. The district is generally bounded by North Gate Road on the west and north, the greensward on the east, the SFOBB and hillside on the south, and the southern edge of the informal landscaping south of Building 230 and directly west of Quarters 1. The property is significant at the local level under Criterion A, for its association with the early development of military facilities on the West Coast, and under Criterion C, as significant examples of Classical Revival/Colonial Revival residential architecture. The period of significance for the district extends from 1900, when the first building was constructed, to 1947, when the station was decommissioned as a "Receiving Ship" facility and ceased its operations as a naval training and distribution center.



Figure 1. View of historic district looking north, with Quarters 1 in left foreground.

[Treasure Island Museum Collection, unnumbered.]

The character-defining features of the district include its setting: relationship between each contributing building, size and massing of buildings, landscaping (greensward in front of Quarters 1–3, formal terraced garden behind Quarters 1, central terraced garden behind Quarters 2–5, planting beds adjacent to each building, and hardscape, such as walkways, patios, masonry walls, and roadways); historic integrity of individual contributors (Quarters 1 through 7, Quarters 10, Buildings 267, 83, 205, and 230, and the landscape within the district boundary); the

Classical Revival/Colonial Revival architecture; and view shed from Quarters 1–5. Additionally, Quarters 1 is listed in the National Register as an individual property and is significant under Criterion A, for its association with the development of West Coast military facilities, and under Criterion C, as an important example of Classical Revival architecture. Its period of significance is identified as 1898–1916. The character-defining features of this building consist of those architectural features that contribute to its Classical Revival style including, but not limited to, its size and massing, symmetrical façade, brick foundation, porch with portico, dormers, weatherboard siding with decorative cornerboards, stringcourse between first and second floors, flared eaves with box cornices and frieze, brick chimneys, and multi-light wood windows.

**Figure 2. View of
Quarters 1 looking
southwest**
[Treasure Island
Museum Collection,
Unit 1, Shelf A, Yerba
Buena Island Folder.]



San Francisco-Oakland Bay Bridge

Map Reference 4

The SFOBB is listed in the National Register with a period of significance of 1936, as identified on the National Register nomination form. The property is significant at the national level under Criterion A, for its important influence on transportation in San Francisco Bay Area and the state as a whole. The bridge is also significant for its engineering design (Criterion C). The SFOBB consists of fifteen contributing elements. Six contributing elements are buildings: Transbay Transit Terminal Building (San Francisco), Key System Electrical Substation (San Francisco), Key System Electrical Substation (Yerba Buena Island), SFOBB Firehouse (also known as the Caltrans Garage, Yerba Buena Island), Bay Bridge Substation (also known as the Caltrans substation, Oakland), and the Key Pier Substation (Oakland). The Firehouse and Key System Electrical Substation, which were once located within the Focused APE, have been demolished. The other nine contributing structures consist of individual components of the bridge itself: bridge approaches, San Francisco approach on- and off-ramps, street overcrossings (bus ramps in San Francisco), the main bridge spans (West and East Bay spans) and the Yerba Buena Tunnel.¹¹ Of these structures, only a short, westernmost portion of the East Bay Span (Bridge No. 33-025) is located within the Focused APE. A new East Span of the SFOBB has been under construction since 2002 and construction activity continues within the Focused APE.

4.2.2. Archaeological Site CA-SFr-04/H

The prehistoric component of CA-SFr-04/H is a well-defined shell midden site with a mortuary complex and a diversified assemblage of flaked, ground and polished stone, modified bone and shell, floral and faunal remains, and cultural features. The prehistoric component of this site was determined eligible for listing in the National Register by the SHPO in 1998. The historic component of the site, the U.S. Naval Training Station, was determined not to be a contributing element to National Register eligibility.

5. APPLICATION OF THE CRITERIA OF ADVERSE EFFECT

5.1. Criteria of Adverse Effect

The NHPA Section 106 regulations state that if there are historic properties in the APE which may be affected by a federal undertaking, the agency official shall assess adverse effects, if any, in accordance with the Criteria of Adverse Effect defined in 36 CFR 800.5. An “adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.” Application of the criteria of adverse effect is largely an assessment of an undertaking’s impacts on the historic integrity of a historic property and how an undertaking will affect those features of a historic property that contribute to its eligibility for listing in the NRHP. Effects can be direct, indirect, and cumulative. Direct effects include physical destruction or damage. Indirect effects include the introduction of visual, auditory, or vibration

¹¹ The nine contributing structures have individually been assigned Caltrans Bridge numbers: Bridge Nos. 34-118R, 34-118L, 34-117S, 34-116F, 34-003, 34-004, 33-025, 34-119Y, 34-120Y.

impacts, as well as neglect of a historic property, or cumulative effects. Cumulative effects are the impacts of the project taken into account with known past or present projects along with foreseeable future projects. This FOE assesses whether the proposed project will have an adverse effect on historic properties located within the Focused APE.

Table 1. Examples of Adverse Effects provided in 36 CFR 800.5(a)(2)

<i>Adverse effects on historic properties include, but are not limited to:</i>	
(i)	Physical destruction of or damage to all or part of the property;
(ii)	Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
(iii)	Removal of the property from its historic location;
(iv)	Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;
(v)	Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
(vi)	Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
(vii)	Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance. ¹²

Of the seven types of effects listed above, 36 CFR 800.5(a)(2) (vi) and (vii) are not applicable to this project. This project would not result in the neglect of a historic property (vi) or the transfer, lease, or sale of property out of Federal ownership or control (vii).

¹² 36 CFR 800.5, "Assessment of adverse effects," incorporating amendments effective August 5, 2004.

5.2. Analysis of Effect to Historic Properties

This section assesses the effects of each project alternative on the historic properties. Because the new East Bay Span of the SFOBB is currently under construction and would lead to removal of the existing East Span structure, none of the alternatives has any potential to have an adverse effect on any components of the existing SFOBB historic property. This section, therefore, focuses upon the other three historic properties in the Focused APE which the project has a potential to affect. The assessment provided below identifies the direct, indirect, and cumulative effects as defined in 36 CFR 800.5 (a)(2). The section is arranged by Project alternative. Existing views, and renderings and simulations of both alternatives appear in Appendix B.

5.2.1. No-Build Alternative

The No-Build Alternative would have no effects on historic properties because it represents the existing YBI interchange condition with no project-related activities. As such, effects analysis results in no historic properties affected for this alternative, as outlined in 36 CFR 800.4(d)(1).

5.2.2. Alternative 2B

Project actions for this alternative would include the construction of elevated westbound on-ramp and off-ramp immediately adjacent to Quarters 1, in the Senior Officers' Quarters Historic District, and would require the relocation of Quarters 10/Building 267. In addition, under this alternative Macalla Road would be widened and a retaining wall would be constructed along the south side of the road. Please see Map 4, in Appendix A, for a plan view of Alternative 2B and the historic properties within the Focused APE. Visual Simulations and renderings of Alternative 2B illustrating the appearance of the alternative for all view points, as well as renderings, are provided in Figures 6-13, Appendix B.

Alternative 2B would result in indirect and direct adverse effects to the Senior Officers' Quarters Historic District under 36 CFR 800.5(a)(2)(i), (ii), (iv) and (v); and to Quarters 1 under 36 CFR 800.5(a)(2)(i), (iv) and (v); and to Quarters 10/Building 267 under 36 CFR 800.5(a)(2)(i), (ii), (iii), (iv) and (v).

Quarters 8

All construction for the on- and off-ramps for Alternative 2B would be conducted on the north side of the new SFOBB East Span. Because all construction would be more than 400 feet from Quarters 8, this alternative would not cause any direct or indirect effects to this historic property. See Map 4, Appendix A.

Quarters 10 (and Building 267)

Alternative 2B would cause a direct adverse effect to Quarters 10 by the removal of the property from its historic location. Under this alternative, Quarters 10 and its associated garage (Building 267) would be removed to accommodate the construction of both on- and off- ramps and an abutment along the south side of Macalla Road, see Figures 6-6a, Appendix B.

Senior Officers' Quarters Historic District and Quarters 1

Alternative 2B would cause a direct adverse effect to the Senior Officers' Quarters Historic District by physically destroying or damaging contributing elements and character-defining features of the district. See Figures 7-13, Appendix B. The westbound off-ramp proposed for

this alternative would be constructed directly through the southeastern boundary of the historic district. Bent W7 would be constructed immediately southeast of Quarters 1 and would remove and/or damage a portion of the district's historic landscape, including grass and border hedge of the greensward in front of Quarters 1–3, and paved driveway and curbing southeast of Quarters 1. Bent W8 would be constructed within the formal terraced garden behind Quarters 1 and would destroy much of the third level of the terrace garden. This project action could include removing or altering plantings and trees, the gradual upward slope of the land, and brick retaining walls, planters, and stairs that lead to this third garden tier. Construction activities for the westbound on-ramp under this alternative would be conducted outside of the boundaries of the historic district.

Alternative 2B may also cause an indirect adverse effect on the historic district and Quarters 1 by introducing a potential risk of damage to the historic properties significant features from construction vibration. Specific potential vibration impacts for the proposed project are unknown; however, Caltrans guidance for this type of effect is to use criteria to evaluate severity of continuous vibrations (from traffic, train and most construction vibrations). Caltrans recommends that to reduce risk of damage to ruins, ancient monuments, and historic buildings, continuous vibrations should not exceed 2.0 mm/s (0.08 in/sec).¹³ This assessment of continuous vibrations does not address temporary vibrations from pavement breaking, pile driving, blasting, or other types of demolition or construction. Caltrans advises that if these types of activities would take place within 7.5 m (25 feet) or less from “normal” buildings, or within 15-30 meters (50–100 feet) of historic buildings or structures, damage is likely to occur.¹⁴ Using this standard, there is a potential for indirect adverse effects from construction vibration to the historic district and Quarters 1. For the off-ramp structure, construction activities for Bent W7 and W8 would be approximately 4.5 meters (15 feet) and 11.5 meters (35 feet), respectively, from Quarters 1 and construction activities for Bent W9 would be located approximately 22 meters (75 feet) from Building 230. Similarly, on-ramp Bents W8 and W7 would be approximately 30 meters (100 feet) and 25 meters (82 feet), respectively, from Quarters 1 and Bents W6 and W7 would be approximately 30 meters (100 feet) from Building 230. Although Caltrans will select a pile type and construction method for bents near Quarters 1 that would minimize vibration impacts to the historic property, because the ramp structural members would be located less than 30 meters (100 feet) from Quarters 1 and Building 230, as well as the historic landscape, all of which are contribute to the historic district's significance, the project has the potential to cause damage to those buildings and structures. Quarters 1, an individual historic property, if affected by vibrations, would be adversely affected in the same way.

Alternative 2B would also cause an indirect adverse effect on the historic district by the introduction of visual or atmospheric elements that diminish the integrity of the property's significant historic features. The construction of the ramps, which would rise between approximately 55 and 100 feet above the historic district, and its structural members that would be built immediately adjacent to contributing features, would alter the view of the historic property (see Visual Simulation Nos. 3 and 4). The size, scale, and massing of such a structure is not consistent with historic design, setting, location, feeling, or setting of the historic district and

¹³ Rudy Hendricks, Caltrans Technical Advisory, Vibration, TAV-02-01-R9601, “Transportation Related Earthborne Vibrations,” February 20, 2002, p10-11; URS, et al., “Noise & Vibration Study, SFOBB East Span Seismic Safety Project,” September 21, 1998.

¹⁴ Hendricks, Caltrans Technical Advisory, “Transportation Related Earthborne Vibrations,” February 20, 2002, 18.

would diminish the historic integrity of the historic property. Additionally, because the on- and off-ramps would be elevated above the historic district, this alternative has the potential to cause new shade and shadows in those areas beneath and adjacent to the new ramp structures. This would include Quarters 1 and its adjacent planting beds, the formal terraced garden behind Quarters 1, and the greensward. This potential new shade may cause damage to, or alter the plantings, and may alter the use of the historic landscape areas, diminishing the integrity of these contributing features.

Archaeological Site CA-SFr-04/H

A prehistoric site, CA-SFr-04/H is located within the APE. No column footings are proposed within or near CA-SFr-04/H for Alternative 2b. However, an ESA will be established for this site using “G” markers to establish visual indicators in the field. This will allow for equipment movement and storage, but no ground-disturbing activities, i.e. post holes, fencing, etc. Therefore, there will be a no adverse effect with standard conditions.

5.2.3. Alternative 4

Project activities for this alternative would include the construction of elevated westbound on-ramp and off-ramps, widening of Macalla Road and the construction of a retaining wall along the south side of Macalla Road. Please see Map 5, in Appendix A, for a plan view of Alternative 4 and the historic properties within the Focused APE. Visual Simulations and renderings of Alternative 4 illustrating the appearance of the alternatives for all view points are provided in Figures 14-21, Appendix B.

Alternative 4 would result in indirect adverse effects to Quarters 10; the Senior Officers’ Quarters Historic District under 36 CFR 800.5(a)(2)(iv) and (v); and Quarters 1 under 36 CFR 800.5(a)(2)(iv) and (v).

Quarters 8

Alternative 4 would not cause any adverse effects to Quarters 8. The project proposes the construction of the westbound on-ramp in the immediate vicinity of this historic property. The entrance to the on-ramp would be located approximately 40 meters (131 feet) east of the historic property and would parallel (to the south) the eastbound on-ramp for the new SFOBB East Span project. See Map 5, Appendix A. The on-ramp would begin at grade and gently slope downward before it turned northward under the new SFOBB. This proposed alternative would not cause any direct effects Quarters 8 because it would not alter any of its character-defining features, nor would it diminish its historic integrity.

Alternative 4 would not cause any indirect effects from its construction. Construction activities would be more than 30 meters (100 feet) from the property, thus no damage to the historic structure from construction vibration is anticipated. While the new ramp would introduce a new visual element to the property, it would not diminish the historic integrity of the property because the new ramp would slope away from Quarters 8; therefore only a portion of the deck would be visible from the historic property. Furthermore, the viewshed (looking east) from Quarters 8 would not materially change from the existing conditions (before the proposed alternative’s construction) or after the construction of the new SFOBB East Span project and its eastbound on-ramp.

Quarters 10 (and Building 267)

Alternative 4 would not cause any direct adverse effects to the Quarters 10 (and Building 267) because all construction actions for the on- and off-ramps would be conducted at a distance greater than approximately 20 meters (65 feet) from the boundary of the historic property. See Figures 14–14b, Appendix B. All widening activity of Macalla Road (including the construction of a retaining wall) would be restricted to the south side of the road and at a distance of more than 6 meters (20 feet) from the historic property boundary. Neither the ramps nor the widening of Macalla Road would cause any damage or alteration to the physical features that contribute to the property’s significance, nor would it materially change the property’s use or setting.

Alternative 4 may cause an indirect adverse effect Quarters 10 and Building 267 by potentially causing damage to the historic properties’ significant features through construction vibration. Caltrans advises that construction activities, such as pavement breaking or extensive pile driving, within 15–30 meters (50–100 feet) of historic buildings or structures would likely cause damage to such buildings.¹⁵ Because construction to widen the transition structure for the on-ramp would be approximately 25 meters (82 feet) from Building 267, it would have potential to damage that historic property and/or damage hardscape features (driveway, concrete planters, retaining wall, etc.) within the property boundary. There would be no anticipated indirect adverse effects to this historic property from the introduction of new visual elements. The historic property is generally surrounded on all sides by dense shrubs and trees which would block the view of the on- and off-ramps when looking north from the historic property. While the widening of the transition structure for the on-ramp and Macalla Road retaining wall would be visible from Building 267, there would be relatively little change to the view looking east and south, respectively.

Senior Officers’ Quarters Historic District and Quarters 1

Alternative 4 would not cause any direct adverse effects to the Senior Officers’ Quarters Historic District or Quarters 1 because all construction activity for the ramp structures would be conducted outside of the historic district boundary. See Figures 15-21, Appendix B. The project would not cause any damage or alteration to the physical features that contribute to the property’s significance, nor would it change the property’s use or setting.

Alternative 4 may cause an indirect adverse effect on the historic district and Quarters 1 by causing potential damage to the historic properties’ significant features through construction vibration. For the off-ramp structure, Bent 1 would be constructed approximately 20 meters (65 feet) southeast of Quarters 1. Although Caltrans will select a pile type and construction method for bents near Quarters 1 that would minimize vibration impacts to the historic property, potential construction activities that may occur in this area (pavement breaking or extensive pile driving) has the potential to cause damage to historic buildings or structures.

Alternative 4 would also cause an indirect adverse effect on the historic district by the introduction of visual elements that diminish the integrity of the property’s significant historic features. The on-ramp structure would extend northwest approximately 20 meters (65 feet) from the new east span of SFOBB at Bent 2 (which is located just outside the historic district’s eastern boundary). It would be 30 meters (131 feet) wide at its widest location (near Bent 4) and would be elevated approximately 10 meters (32 feet) above Quarters 1 and approximately 150 feet above the greensward. The size, scale, and massing of such a structure is not consistent with

¹⁵ Hendricks, Caltrans Technical Advisory, “Transportation Related Earthborne Vibrations,” February 20, 2002, 18.

historic design, setting, location, feeling or setting, of Quarters 1 or the historic district and would constitute introduction of a new visual element.

Additionally, the ramp deck and bents would obstruct eastward view from Quarters 1 and because the view from this building is a character-defining feature, Alternative 4 would diminish the integrity of Quarters 1. The introduction of the ramp structures would thus cause an adverse effect to both the district and Quarters 1. Although the viewshed from Quarters 2 would be somewhat altered by the proposed ramps, it would not do so in an adverse manner as the view from this building is mostly obstructed by the row of eucalyptus trees that provide the eastern border to the historic property. Similarly, Quarters 3–5 would not be adversely affected because the new ramps would not be visible from these buildings.

Archaeological Site CA-SFr-04/H

A prehistoric site, CA-SFr-04/H is located within the APE. No column footings are proposed within or near CA-SFr-04/H for Alternative 4. However, an ESA will be established for this site resulting in a no adverse effect with standard conditions.

5.2.4. Noise Effects

The noise levels of the proposed Alternative 2B are expected to be approximately 68 dBA L_{eq} at the Nimitz House (Quarters 1), within the District.¹⁶ This is a level of change from the existing baseline that may be detectable to the human ear in an exterior setting. This change represents an approximately 2 dBA reduction in noise levels and is not expected to further impair integrity of the setting of the building or District, which has experienced high levels of traffic noise since the original SFOBB was constructed in the 1930s. The proposed Alternative 2B, therefore, would not cause an indirect adverse effect on the District or its contributors because it would not introduce auditory elements that would diminish the integrity of the property (36 CFR 800.5[a][2][v]).

The noise levels of the proposed Alternative 4 are expected to be approximately 68 dBA L_{eq} at the Nimitz House (Quarters 1) within the District, and approximately 72 dBA L_{eq} at the Quarters 10 / Building 267 property.¹⁷ The level of change from the existing baseline at Quarters 10 / Building 267 may be detectable to the human ear in an exterior setting, however, the SFOBB had already been in place for about a decade when Quarters 10 and Building 267 were built and the bridge and traffic noise have always been a part of the setting of this property. The proposed Alternative 4 would not cause an indirect adverse effect on either the District or the Quarters 10 / Building 267 property because it would not introduce auditory elements that would diminish their integrity (36 CFR 800.5[a][2][v]).

5.2.5. Cumulative Effects

Construction of either of the build alternatives for this project would not cause adverse cumulative effects to the historic properties within the Focused APE. Cumulative effects analysis takes into consideration that “adverse effects may include reasonably foreseeable effects

¹⁶ EDAW-AECOM, “Draft Noise Study Report, Yerba Buena Island Ramps Improvement Project, San Francisco, California, 04-SF-80, PM 12.3-13.2/7.6-8.1, EA 04-3A64OK,” August 2009. Quarters 1 was evaluated as Receiver 2, at 69 dBA, land use category C (commercial).

¹⁷ EDAW-AECOM, “Draft Noise Study Report. Quarters 10 has predicted noise level of 72dBA, data provided via personal communication, from Bill Maddux, EDAW-AECOM, August 12, 2009.

caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative” (36 CFR 800.5 (a)(1)). Previous projects in the vicinity of the Focused APE, specifically the SFOBB East Span Seismic Safety Project (currently underway), have been subject to Section 106 effects analysis and CEQA impacts analysis. The SFOBB East Span project includes removal of a portion of the SFOBB and construction of a new East Bay span. Adverse effects to historic properties and their character-defining features identified for that project, including the removal of the East Span structures, the Caltrans Garage, and the Yerba Buena Electrical Substation.¹⁸ Caltrans, SHPO and ACHP developed a memorandum of agreement (MOA) to mitigate these effects.¹⁹ The construction of the SFOBB East Span project, when considered in conjunction with the YBI Ramps Project, would not adversely affect the other historic properties in the Focused APE for this project. The SFOBB East Span project would not cause an adverse cumulative effect.

No reasonably foreseeable adverse effects of future projects have been identified. Projects in the planning process include:

1. Transfer of YBI and Treasure Island (TI) from the US Navy to the City and County of San Francisco (CCSF), and the redevelopment of TI/YBI. CCSF and the US Navy have been negotiating the transfer of the property for several years. The US Navy has prepared environmental compliance documents regarding historic properties to meet its responsibilities under Section 106 and Section 110 of the NHPA.²⁰ It is assumed that the transfer of TI/YBI will provide for the treatment of historic properties in a manner that is consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (36 CFR part 68).
2. In December of 2006, the San Francisco Board of Supervisors and Treasure Island Development Authority (TIDA) endorsed a Development Plan for the redevelopment of TI/YBI.²¹ The plan generally provides for the restoration and reuse of historic buildings structures, and the Senior Officers’ Quarters Historic District has been identified as a potentially commercial and cultural mixed-use area. It is assumed that the Development Plan would be executed in a manner consistent with the Secretary of the Interior’s *Standards for the Treatment of Historic Properties* (36 CFR part 68).
3. San Francisco Bay Plan, by the San Francisco Bay Conservation and Development Commission. It is assumed that this plan will be executed in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties (36 CFR part 68). BCDC San Francisco Bay Plan presents the following policies for TI and/or YBI:

¹⁸ Caltrans District 4, “Finding of Adverse Effect: Buildings and Structures, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000,” September 1998; Caltrans District 4, “Addendum Finding of Adverse Effect, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000,” October 1999.

¹⁹ “Memorandum of Agreement among the FHWA, the US Coast Guard, the California SHPO, and the ACHP for the San Francisco Oakland Bay Bridge East Span Seismic Safety Project ...,” May 2000.

²⁰ “Memorandum of Agreement between the Department of the Navy and the California State Historic Preservation Officer for the Layaway, Caretaker Maintenance, Interim Leasing, Sale, Transfer, and Disposal of Historic Properties on the Former Naval Station Treasure Island, San Francisco, California,” June 2003.

²¹ Treasure Island Development Authority, “Transfer and Redevelopment of former Naval Station Treasure Island,” accessed May 17, 2009 at http://www.sfgov.org/site/treasureisland_page.asp?id=96594, ©2000-2009.

- **Yerba Buena Island - South of Bay Bridge** – redevelopment for recreational use.
- **Yerba Buena and Treasure Islands – Clipper Cove** – shoreline improvements.
- **Yerba Buena Island North of Bay Bridge** – public open space development.
- **Treasure Island Redevelopment.**²²

²² BCDC, “San Francisco Bay Plan, Amended September 2006, Reprinted January 2007,” accessed online on May 17, 2009 at http://www.bcdc.ca.gov/pdf/planning/plans/bayplan/Plan_Map_5.pdf.

6. ALTERNATIVES CONSIDERED BUT REJECTED

CEQA Guidelines Section 15126.6 requires the lead agency to identify the alternatives that were considered but rejected, and to briefly explain the reasons why the lead agency found them to be infeasible.²³ A Conceptual Feasibility Report for the YBI interchange was prepared in March 2002. The project development team, in close cooperation with Caltrans, evaluated the alternatives identified in this report and used them to develop nine build alternatives and one no-build alternative.

Stakeholders were invited to several meetings with the project development team to provide their input on the design alternatives. During these meetings, the alternatives were discussed in detail, including any non-standard features of the design. A decision matrix was presented, and the stakeholders were asked to designate a high, medium, or low rating for each alternative based on their respective interests. The results were tabulated and used to compare the alternatives.

The Project Study Report (PSR), prepared by SFCTA in December 2007, summarized the results of the alternatives evaluation. The PSR recommended that two of the alternatives, Alternatives 2B and 4, be carried forward. The remaining six build alternatives were determined to be non-viable and were eliminated from further study. These alternatives and the reasons for their elimination are discussed below.

The range of alternatives discussed in the PSR was limited to the design and reconstruction of the ramps on the east side of the YBI tunnel. The ramps west of the YBI tunnel have not been considered for reconstruction because the space available is insufficient to provide enough room for the ramps to be designed and reconstructed to meet current geometric standards.

6.1. Non-Viable Alternatives

6.1.1. Alternative 1

This alternative proposes to design and reconstruct two of the six existing on- and off-ramps at the I-80/YBI interchange. All of the on- and off-ramps proposed would provide a single traffic lane with standard shoulder widths, as well as the following features:

- Eastbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the West Tie-in structure, loop left under the Transition Structure and terminate in a “T” intersection at Macalla Road.
- Eastbound on- ramp on the east side of Yerba Buena Island – This ramp would begin at Hillcrest Road, curve left and climb to merge with the Transition Structure.
- Westbound on- ramp on the east side of Yerba Buena Island – This ramp would begin in a “T” intersection at Hillcrest Road, parallel the Eastbound on-ramp, loop left under the Transition structure near its east end, cross over both the westbound on- and off-ramps, and merge with the West Tie-in structure.
- Westbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the Transition Structure near its eastern end, cross over the westbound onramp,

²³ This section was prepared by EDAW/AECOM.

cross under the westbound on-ramp, curve right, then terminate in a “T” intersection at Macalla Road.

This alternative was removed from consideration for the following reasons:

- The eastbound and westbound off-ramps are isolated off-ramps, terminating at the same location at Macalla Road. This is an uncommon situation which would possibly create driver confusion resulting in potential wrong way movements from Macalla Road onto the ramps. In addition, the added vehicle volumes from both off-ramps at the intersection would negatively impact traffic operations on Macalla Road and YBI.
- The hook-shaped eastbound off-ramp is undesirable for traffic safety reasons.
- The westbound on-ramp would cause additional environmental impacts to the BCDC 100’ shoreline band and would impair accessibility to the U.S. Coast Guard property at the south side of the SFOBB.
- The westbound off-ramp would need to span over structures within the historic district creating additional environmental impacts, risk, and construction cost.
- The multiple weaving of structures under and over other structures creates additional risk and construction cost.
- The eastbound and westbound off-ramps would adversely affect the Nimitz House, a historic building north of the SFOBB. The Nimitz House would need to be relocated.

6.1.2. Alternative 1A

This alternative is similar to Alternative 1 except for the following:

- Eastbound off-ramp on the east side of Yerba Buena Island – In this alternative the ramp would loop under the Transition Structure farther east and terminate in a “T” intersection at Macalla Road south of the termination location of Alternative 1.
- Eastbound on-ramp on the east side of Yerba Buena Island – This ramp would begin at Hillcrest Road south of the location of Alternative 1, curve left, cross over the eastbound off-ramp, and merge with the Transition Structure.
- Westbound on-ramp on the east side of Yerba Buena Island – This ramp would begin in a “T” intersection at Hillcrest Road, travel east, loop left under the Transition Structure near its east end, cross over both the westbound on- and off-ramps, and merge with the West Tie-in structure.
- Westbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the Transition Structure near its eastern end, curve right and terminate in a “T” intersection at Macalla Road. This ramp would terminate at Macalla Road south of the termination location of Alternative 1.

This alternative would provide several benefits over Alternative 1. It would require less aerial easement, would avoid direct impact on the Nimitz House, and would eliminate the isolated ramps scenario. However, this alternative would still impair accessibility to the USCG facilities in a manner similar to Alternative 1.

This alternative was removed from consideration because:

- The eastbound off-ramp would disturb the archeologically sensitive area underneath the future SFOBB.
- The hook shape eastbound off-ramp is undesirable for traffic safety reasons.
- The terminus of the westbound off-ramp and eastbound off-ramp at similar locations on Macalla Road would negatively impact the traffic operations of the road and YBI.
- The westbound on-ramp would cause additional environmental impacts to the BCDC 100' shoreline band and would impair accessibility to the US Coast Guard property at the south side of the SFOBB.
- .The multiple weaving of structures under and over other structures creates additional risk and construction cost.

6.1.3. Alternative 2

This alternative is similar to Alternative 1A except for the following:

- Eastbound on-ramp on the east side of Yerba Buena Island – The ramp in this alternative would merge with the Transition Structure west of the merge location of the ramp in Alternative 1, resulting in a shorter ramp length.
- Westbound on-ramp on the east side of Yerba Buena Island – This ramp would begin in a “T” intersection at Macalla Road, travel east, loop right, cross over the eastbound off-ramp, and merge with the Transition Structure.
- Westbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the Transition Structure near its eastern end, curve right, merge with the westbound on-ramp, and terminate in a “T” intersection at Macalla Road.

This alternative would elevate the westbound on- and off-ramps through the historic district and may adversely affect the historic district. It would require additional right-of-way north of the existing SFOBB mainline. This alternative would require an aerial easement for the eastbound off-ramp, but would have minimal impact to USCG operations since most of the work and modification would occur outside the USCG property.

This alternative was removed from consideration because:

- The multiple weaving of structures under and over other structures creates additional risk and construction cost.
- The hook shape off-ramp is undesirable for traffic safety reasons.
- The westbound on-ramp and off-ramp would have adverse effects on the Nimitz House and the other historical buildings.
- The westbound on and off-ramps would need to span over structures within the historic district creating additional environmental impacts, risk, and construction cost.

6.1.4. Alternative 2A

This alternative is similar to Alternative 2 except for the following:

- Eastbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the West Tie-in structure, hook right, and terminate at Hillcrest Road.
- Eastbound on-ramp on the east side of Yerba Buena Island – This ramp would begin at Hillcrest Road, curve right and merge with the Transition Structure.

This alternative would elevate the westbound on- and off-ramps through the historic district and may have an environmental impact on the historic district. It would require additional right-of-way north of the existing SFOBB mainline. This alternative would have minimal impact to USCG operations, since most of the work and modification would occur outside of the USCG property.

This alternative was removed from consideration because:

- The westbound on and off-ramps would need to span over structures within the historic district creating additional environmental impacts, risk, and construction cost.
- The westbound on-ramp and off-ramp would adversely affect the historic buildings adjacent to the Nimitz House.
- The westbound on-ramp and off-ramp would adversely affect the other historical buildings adjacent to the SFOBB.
- The location of the westbound off-ramp join with the mainline would negatively affect the seismic design and potentially cause added stress to the SAS structure.

6.1.5. Alternative 3

This alternative is similar to Alternative 2 except for the following:

- Eastbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the West Tie-in structure, loop right over the USCG property, and terminate at a “T” intersection at Hillcrest Road.
- Eastbound on-ramp on the east side of Yerba Buena Island – This ramp would begin at Hillcrest Road south of the ramp location in Alternative 2.
- Westbound on-ramp on the east side of Yerba Buena Island – This ramp would begin at a “T” intersection at Macalla Road, merge with the westbound off-ramp, curve right near the shoreline, travel over the western side of the historic district, diverge from the westbound off-ramp, curve left and merge with the Transition Structure.
- Westbound off-ramp on the east side of Yerba Buena Island – This ramp would diverge from the West Tie-in structure, curve left, merge with the westbound off-ramp, travel over the west side of the historic district property, curve left near the shoreline, then terminate at a “T” intersection at Macalla Road.
- The eastbound on-ramp would be reconfigured to allow vertical clearance under the eastbound off-ramp.

This alternative was removed from consideration because:

- The westbound off and on-ramp would cause additional environmental impacts to the BCDC 100' shoreline band.
- The eastbound off-ramp would cause significant impacts to the US Coast Guard facility with the structure spanning over their property.
- It would result in adverse impacts to biological resources north of I-80.
- The eastbound on-ramp would encroach into an archaeologically sensitive area.
- The length of the structures required to go around the historic district would increase construction cost significantly.
- It would adversely affect the Nimitz House and the other historical buildings.

6.1.6. Alternative 5

This alternative proposes a standard tight diamond intersection with minimal nonstandard design features and would have minor impacts on USCG access and operations. However, this alternative would require excavating and daylighting the existing YBI tunnel to allow for the construction of the westbound on-ramp and eastbound off-ramp.

This alternative was removed from consideration because the approximate cost to modify the existing YBI tunnel is between \$500 million and \$1 billion, which is substantially higher than the estimated costs for the other build alternatives.

7. PROPOSED MITIGATION

As discussed in Section 6, both project build alternatives would have an adverse effect on historic properties. The SFCTA, in conjunction with Caltrans and FHWA, is continuing consultation with SHPO following 36 CRF 800.6, to arrive at resolution of the adverse effect(s). Caltrans, in accordance with Stipulation XI of the Section 106 PA, will prepare a draft Memorandum of Agreement (MOA) to memorialize measures that would mitigate adverse effects. The MOA signatory parties will be Caltrans, SHPO, and the Advisory Council on Historic Preservation (ACHP), should the ACHP decide to participate. SFCTA, the US Navy, TIDA, and others are anticipated to be concurring parties.

SFCTA sent a letter to interested parties on December 11, 2008, notifying interested individuals and organizations that the project is anticipated to have an adverse effect on these properties and to solicit the input of these parties (Appendix C). No responses to this letter have been received to date; however, any responses will be appended to this document and included in the environmental document if any are forthcoming. Revisions to proposed mitigation measures resulting from these responses will also be incorporated in the development of MOA stipulations if received prior to execution of the MOA.

7.1. Efforts to Avoid or Minimize Adverse Effects

The alternatives development evaluation process described in the previous section includes efforts to develop alternatives that could avoid and/or minimize adverse effects to the District, Quarters 10/267, and Quarters 8. The main design constraint for Alternative 2B was the difficult topography, as well as the existing roadway geometrics and historic buildings in the vicinity of the intersection of Alternative 2B and Macalla Road. Alternative 4, therefore, was developed in order to identify a way to construct the ramps without directly affecting the historic properties; however, Alternative 4 causes its own indirect adverse effects (see Section 5), and the alternative development process did not identify any other feasible alternatives that could completely avoid adverse effects to historic properties within the Focused APE (see Section 6).

7.2. Proposed Mitigation Measures

Caltrans will prepare a draft Memorandum of Agreement (MOA) for the project in coordination with the project proponent and Office of Historic Preservation (OHP). The MOA will stipulate various mitigation activities that will be conducted to address adverse effects that the proposed build alternatives would have on historic properties as presented in Section 5. The goal of the mitigation under development for the YBI Ramps project is to add to and compliment both previous and on-going mitigation measures being undertaken as part of the East Span project. Caltrans will ensure that SFCTA carries out these measures, insuring that: a) the historic properties are properly recorded through photography, written documentation, and/or educational/interpretive material; b) that this material is appropriately distributed; and c) that historic properties within the Focused APE are protected and monitored before and during construction. SFCTA will not authorize project-related activities that could result in an adverse effect to the historic property until these stipulations are completed. Mitigation measures proposed for the project include the following:

Relocation of Historic Structures. Alternative 2B would require the removal of Quarters 10 and Building 267. To help minimize the adverse effect of the removal, if Alternative 2B is chosen as the Preferred Alternative, the two buildings would be relocated prior to construction of the ramps at Macalla Road. Two potential relocation sites, both within the general vicinity of the original location of the property on the east side of Yerba Buena Island, are being developed. The relocation of the buildings will take into account the site layout (i.e., the orientation of the buildings to the cardinal directions and proximity to a hillside), as well as their potential reuse. As part of this effort, SFCTA is coordinating with Caltrans, SHPO, and JRP consulting architectural historians, as well as the current and future land-owning agencies: the U.S. Navy and the City and County of San Francisco. Quarters 10/Building 267 will be thoroughly recorded in a Historic Structure Report (see below), and the relocation plan will provide for project and stabilization of the building before, during, and after the move.

Screening. A planting plan could be designed to help provide visual screening between the new ramp structures and the historic properties. OHP has indicated that they would support this potential mitigation measure and SHPO has requested that illustrations of how landscaping around the Nimitz House would look over a period of time as it matured. This mitigation will be coordinated with the land-owning agencies and Caltrans prior to the start of construction to ensure that the YBI Ramps project screening plan takes into account similar landscaping mitigation projects underway for properties within the Focused APE.

Interpretive signs. Signs that incorporate narrative historic context and images could be established along the new multipurpose pathway component of the project. The signs could utilize photographs of the historic district, Quarters 10 / Building 267, as well as views from the historic properties or views from the pathway. These images could include both before and after construction of the original SFOBB and before the construction of the new ramps. The signs could also utilize historical data from HABS or HSR documentation of the properties within the Focused APE for this project.

NRHP Nomination. Quarters 8 was determined eligible for listing in the NRHP, and as part of the mitigation for the current project, SFCTA will complete and submit a nomination for Quarters 8, to the NRHP Program at the National Park Service. The photographs used in the nomination will be made prior to the start of construction; however, the nomination document may also use current and/or historic images prepared as part of other mitigation activities.

Historic American Buildings Survey (HABS) Documentation. The District and Quarters 10/Building 267 have already been the subject of HABS recordation, therefore recordation conducted as mitigation for this project will be designed to augment the previous work through HABS recordation of Quarters 8. Prior to the start of construction, large-format (four by five inch, or larger, negative size) black and white photographs will be taken showing Quarters 8 in context, as well as details of its character-defining features. The views will specifically include views of and from the building, both towards and away from the SFOBB structures. The photographs will be processed for archival permanence in accordance with HABS photographic specifications. Each view will be fully captioned, and if necessary, perspective corrected. Oblique aerial photography will be considered as a photographic recordation option in these coordination efforts.

The recordation will follow the National Park Service HABS Guidelines and the report format, views, and other documentation details will be coordinated with the Western Regional Office of

the NPS, Oakland, CA. It is anticipated that the recordation of Quarters 8 will be completed to Level I or Level II HABS written data standards, and will include archival and digital reproduction of historic images, plans, and drawings. Copies of the documentation will be offered to the San Francisco Public Library, Oakland Museum of California, Environmental Design Archives (U.C. Berkeley), Caltrans District 4 Office of Cultural Resource Studies, and the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento. The documentation will also be offered in printed and electronic form to any repository or organization upon which SFCTA, Caltrans, and SHPO, through consultation, may agree. The electronic copy of the report could be placed on an agency or organization's web site.

Historic Structure Report (HSR). Prior to the start of construction, SFCTA will prepare HSRs for the contributing elements of the District and for Quarters 10/Building 267. The HSRs will follow the general guidelines for such reports and as described in the OHP publication, "Historic Structure Report Format," http://ohp.parks.ca.gov/?page_id=1069. The scope of the HSRs will be developed in consultation with Caltrans, OHP, and the landowning agencies, and copies of the reports will be provided to the same. The HSR for Quarters 10/Building 267 will include documentation of the properties existing landscaping. The landscape elements of the District, will be documented in a Historic Landscape Report, described below. Caltrans will provide copies of photographs and/or plans prepared as part of previous mitigation activities at these buildings for use in the HSRs. The HSRs will be used in the on-going planning process and reuse of the properties.

Historic Landscape Report (HLR). Prior to the start of construction, SFCTA will prepare an HLR for the contributing landscape elements of the District. The HLR will be informed by the general guidelines for the Historic American Landscape Survey (HALS), as described in the NPS online publication, "HALS Guidelines," <http://www.nps.gov/hdp/standards/halsguidelines.htm>. The scope of the HLR will be developed in consultation with Caltrans, OHP, and the landowning agencies, and copies of the reports will be provided to the same. Caltrans will provide copies of photographs and/or plans prepared as part of previous mitigation activities within the district that may be relevant to the contributing landscape elements. The HLR documentation will be used in the on-going planning for and reuse of the District.

Protection and Stabilization. SFCTA and Caltrans, prior to the start of construction and in consultation with the land-owning agencies, will develop and implement measures to protect the Nimitz House (Quarters 1) from damage by any aspect of the project. Such measures will include, but not necessarily be limited to, vibration monitoring during pile driving or general construction of the pier structures in the vicinity of this building. If Alternative 4 is selected as the Preferred Alternative, SFCTA and Caltrans, prior to the start of construction and in consultation with the land-owning agencies, will develop and implement measures to protect Quarters 10/Building 267 from damage by any aspect of the project. If Alternative 2B is selected as the Preferred Alternative, such measures will include, but are not limited to, stabilization of the buildings before, during, and after relocation, as well as protection during storage at the new site and during its subsequent rehabilitation. In addition, although historic-era site P-38-04322 is currently situated outside the Area of Direct Impact construction activities could inadvertently disturb or destroy portions of the is feature that is presently listed on the CRHR. In order to reduce chances that this feature could be inadvertently damaged during Project construction activities, it should be clearly delineated using orange "cyclone" fencing or other similar suitable materials and designated as a restricted area within which no ground-

disturbing activities could occur. The protective and stabilization measures will be included in the contract specifications.

Repair of Inadvertent Damage. SFCTA will ensure that any damage to any of the historic properties within the Focused APE resulting from the project will be repaired in accordance with the Secretary of the Interior's *Standards for Rehabilitation*. The HSR, HLR, and/or HABS recordation will photographically document the condition of the buildings prior to the start of construction to establish the baseline condition for assessing damage. A copy of this photographic documentation will be provided to Caltrans and the land-owning agencies. Prior to implementation, SFCTA shall provide the plans for any repairs to Caltrans and SHPO for review and comment to ensure conformance with the Secretary of the Interior's *Standards for Rehabilitation*.

Environmental Sensitive Area. An ESA will be established for CA-SFr-04/H (ESA 1a and 1b) to insure that no ground-disturbing activities take place within the boundaries of the site.

8. CONCLUSIONS

Caltrans finds that there are historic properties affected by the Project pursuant to Section 106 PA Stipulation IX.B. Caltrans proposes that the undertaking will have an Adverse Effect for the Senior Officers' Quarters Historic District, Quarters 1 and Quarters 10 (including Building 267). Caltrans is consulting to resolve adverse effects pursuant to Section 160 PA Stipulation XI, 36 CFR 800.6(a) and 800.6(b)(1). At this time, this document serves only to obtain SHPO concurrence that the undertaking will have an Adverse Effect on a historic property and that mitigation measures will be discussed in a separate consultation document along with a draft MOA.

Table 2. Summary Effect Table

Historic Property	Alternative 2B Effects (see Section 5.2.2)	Alternative 4 Effects (see Section 5.2.3)
Quarters 8	No Effect	No Effect
Quarters 10 (and Building 267)	Adverse - Direct	Adverse - Indirect
Senior Officers' Quarters Historic District (including Quarters 1)	Adverse - Direct & Indirect	Adverse - Indirect
CA-SFr-04/H	No Adverse Effect with Standard Conditions	No Adverse Effect with Standard Conditions
SFOBB	No Effect	No Effect

9. REFERENCES

- BCDC. "San Francisco Bay Plan, Amended September 2006, Reprinted January 2007." As of May 17, 2009. http://www.bcdc.ca.gov/pdf/planning/plans/bayplan/Plan_Map_5.pdf.
- Caltrans District 4. "Addendum Finding of Adverse Effect, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000." October 1999.
- Caltrans District 4. "Finding of Adverse Effect: Buildings and Structures, San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, EA 012000." September 1998.
- EDAW / AECOM. "Draft Noise Study Report, Yerba Buena Island Ramps Improvement Project, San Francisco, California, 04-SF-80, PM 12.3-13.2/7.6-8.1, EA 04-3A64OK," August 2009.
- HABS No. CA-233-A.
- HABS No. CA-1793-A through M.
- Hendricks, Rudy. Caltrans Technical Advisory, Vibration, TAV-02-01-R9601, "Transportation Related Earthborne Vibrations (Caltrans Experiences)." February 20, 2002.
- "Memorandum of Agreement among the Federal Highway Administration, the United States Coast Guard, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation for the San Francisco Oakland Bay Bridge East Span Seismic Safety Project in San Francisco and Alameda Counties, California." May 2000.
- "Memorandum of Agreement between the Department of the Navy and the California State Historic Preservation Officer for the Layaway, Caretaker Maintenance, Interim Leasing, Sale, Transfer, and Disposal of Historic Properties on the Former Naval Station Treasure Island, San Francisco, California." June 2003.
- Treasure Island Development Authority. "Transfer and redevelopment of former Naval Station Treasure Island," http://www.sfgov.org/site/treasureisland_page.asp?id=96594. Accessed May 17, 2009.
- URS / Greiner / Woodward-Clyde. "Noise & Vibration Study, San Francisco – Oakland Bay Bridge East Span Seismic Safety Project, Caltrans 04A0148, EA 012000," September 21, 1998.

10. PREPARERS' QUALIFICATIONS

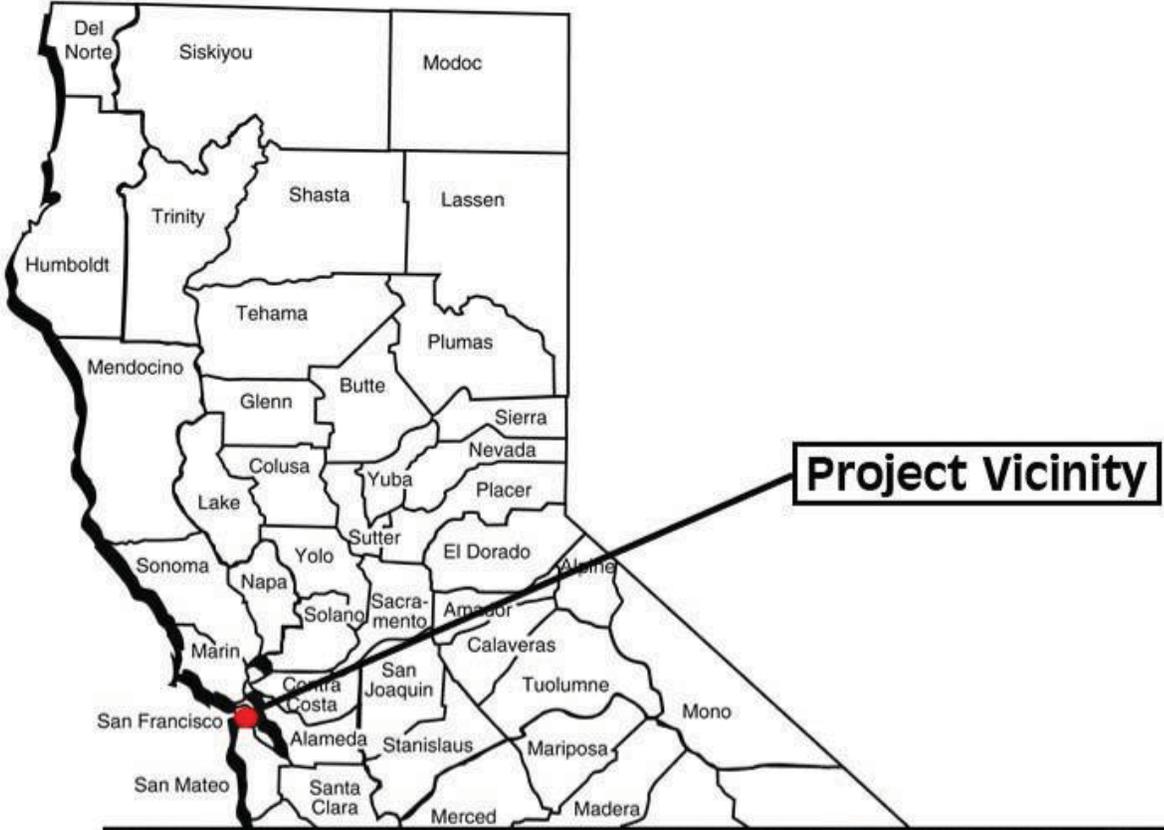
This document was conducted under the general direction of Rebecca M. Bunse (M.A. in Public History, California State University, Sacramento), a partner at JRP with more than nineteen years experience conducting these types of studies. Ms. Bunse consulted on the development of the APE, provided overall effects analysis guidance, and edited the report. Based on her level of experience and education, Ms. Bunse qualifies as a historian/architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

JRP architectural historian Toni Webb was the lead historian for this project. Ms. Webb prepared the contextual statement and evaluations, as well as conducted fieldwork, prepared updated DPR forms, and conducted effects analysis. Ms. Webb received a B.F.A. in Historic Preservation from the Savannah College of Art & Design and has more than ten years of experience in public history and historic preservation. Based on her level of experience and education, Ms. Webb qualifies as an architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

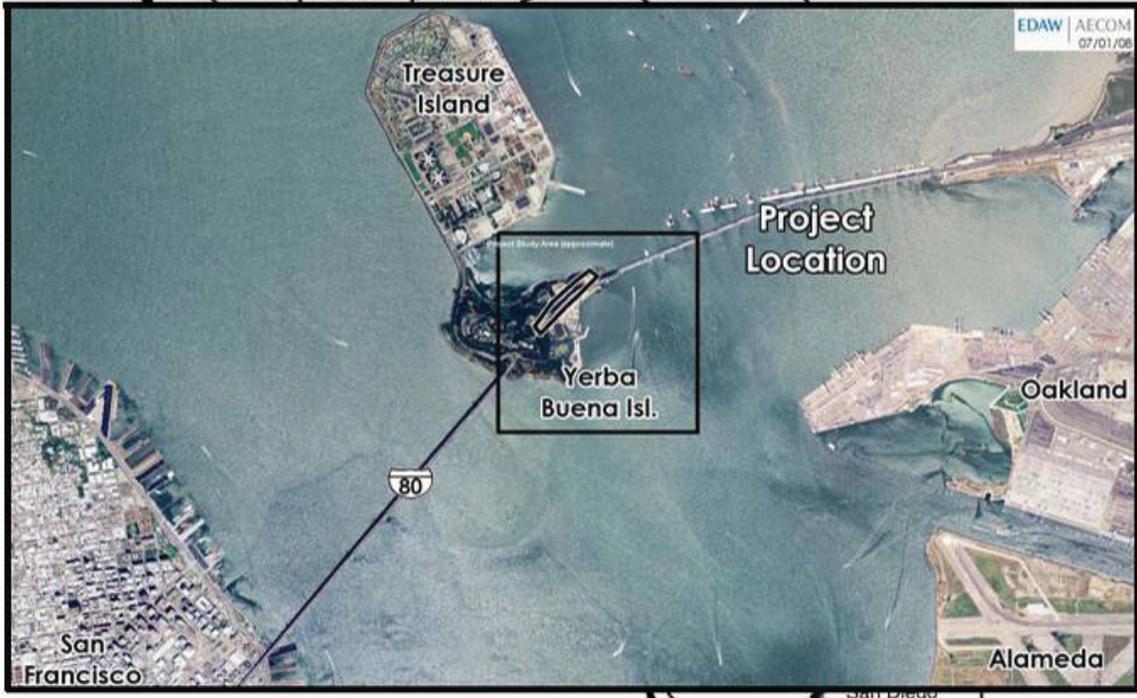
EDAW Senior Archaeologist Brian Ludwig (Ph.D. anthropology/archaeology, Rutgers University) meets the Secretary of the Interior's Qualification Standards and has more than twenty-seven years experience in academic and Cultural Resources Management fields. Dr. Ludwig participated in the development of the Archaeological APE for the Project and directed the archaeological investigations.

Appendix A

Maps

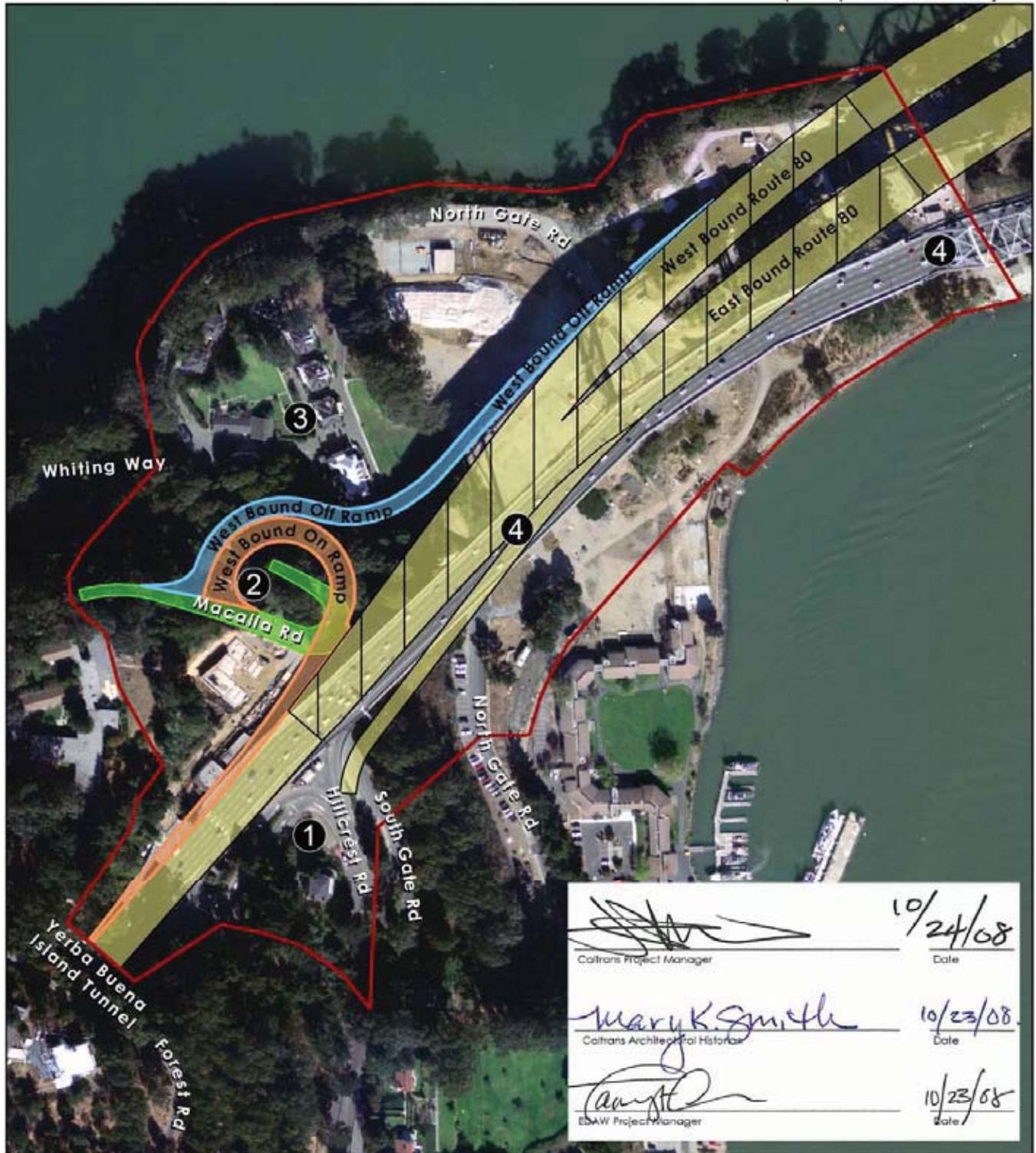


Project Vicinity



Map 1. Project Location and Vicinity





- Alternative 2b Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

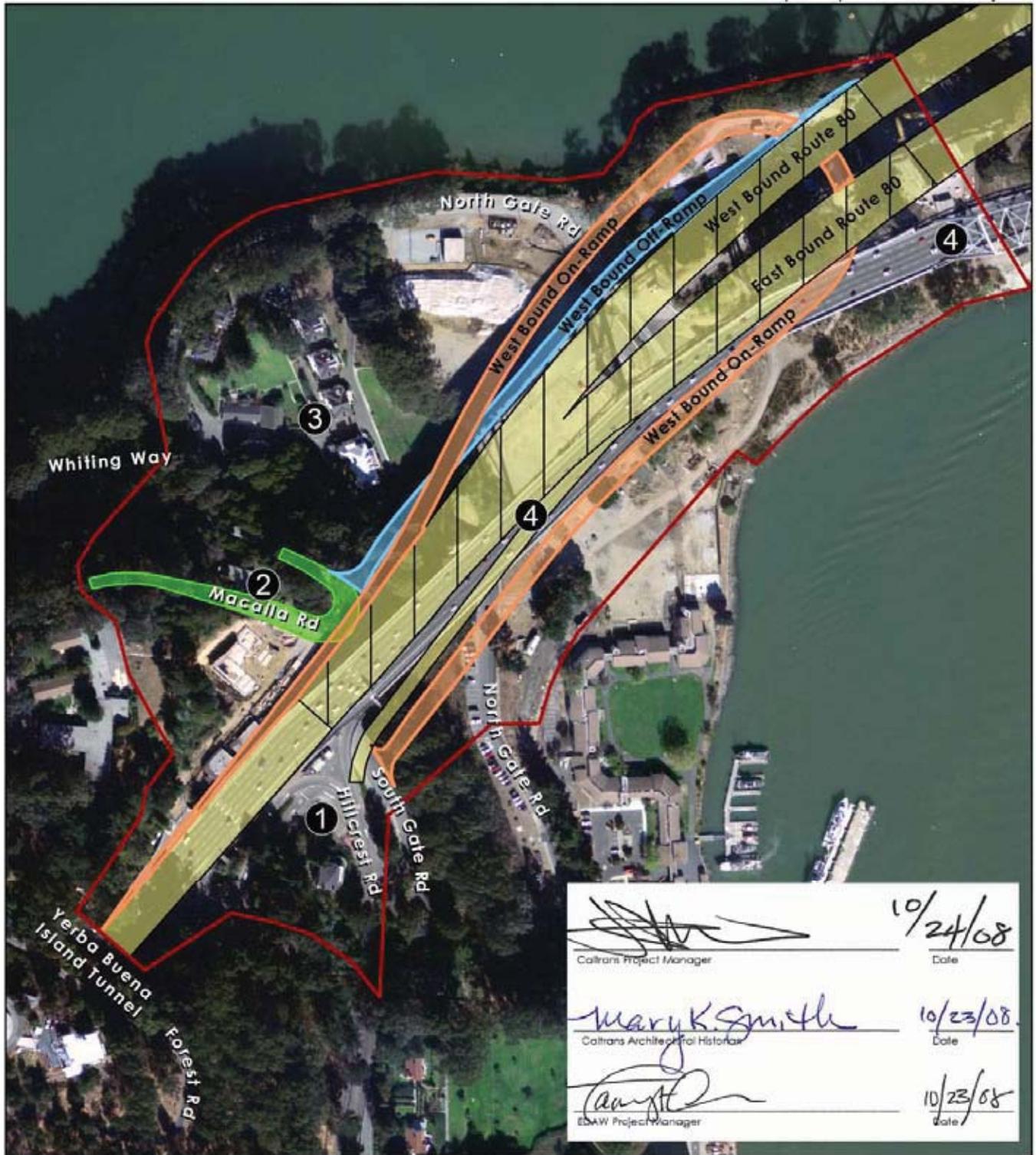
- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB
- #** Map Reference

Image: Nima/USGS 2004
Data: DWJM Hark, EDAW
5/09

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

0 100 200 300 Feet

Map 3. Focused APE



- Alternative 4 Proposed Ramps**
- Proposed West Bound Off-Ramp
 - Proposed West Bound On-Ramp
 - Proposed Macalla Road Improvements

- Area of Potential Effect
- Separate Project Currently Under Construction**
- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB
- # Map Reference

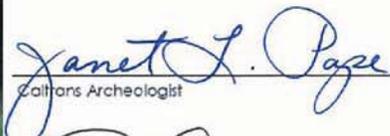
Image: Nrirol/USGS 2004
Data: DVM/Harris, EDAW
5/08

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

0 100 200 300 Feet

Map 3. Focused APE



	10/21/08
Caltrans Project Manager	Date
	10/21/08
Caltrans Archeologist	Date
	10/21/08
S&AW Project Manager	Date

- Alternative 2b Proposed Ramps**
-  Proposed West Bound Off-Ramp
 -  Proposed West Bound On-Ramp
 -  Proposed Macalla Road Improvements

-  Area of Potential Effect
- Separate Project Currently Under Construction**
-  San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
-  Transition Structure Portion of SFOBB

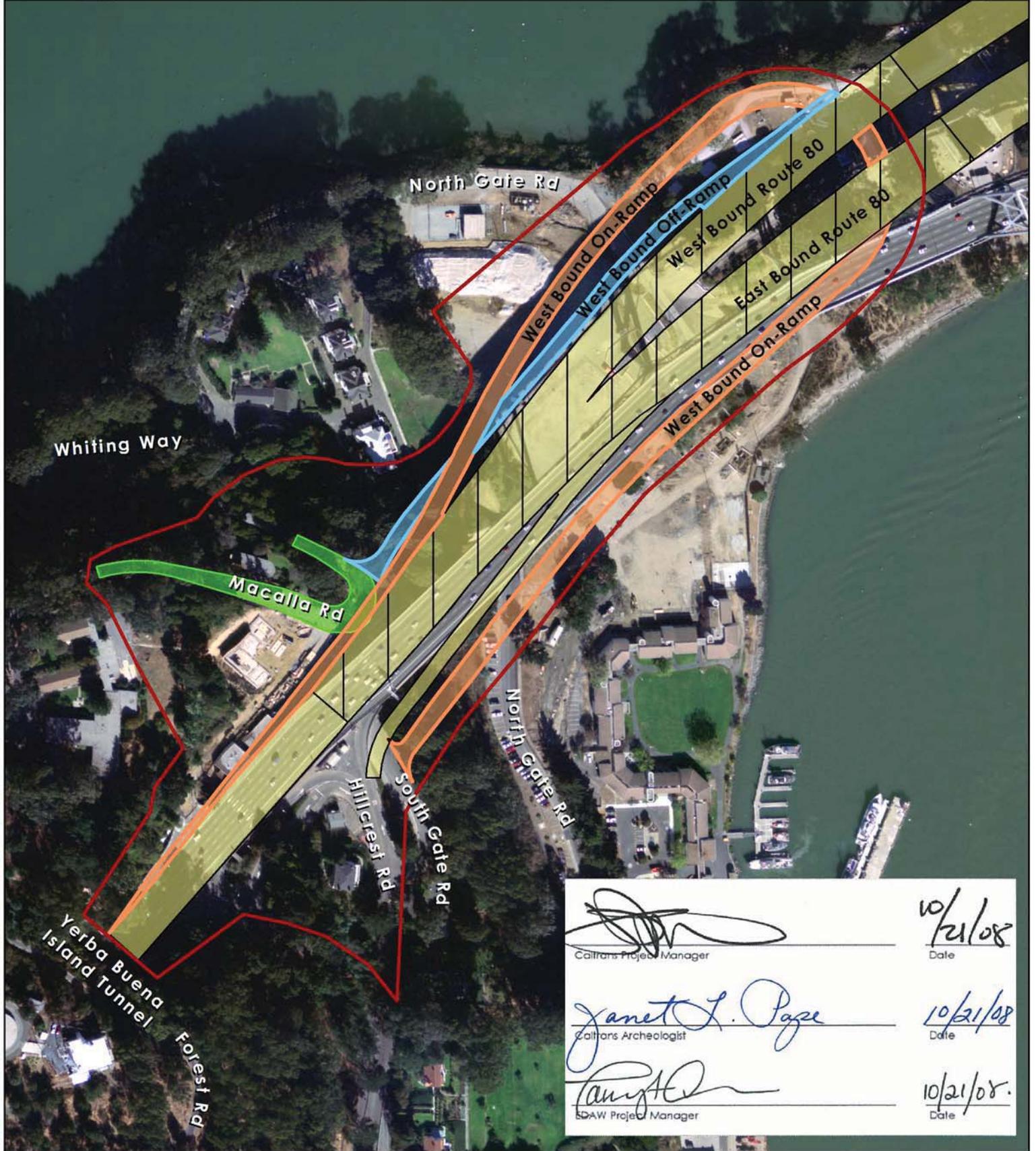
Image: Nima/ USGS 2004
 Data: DMJM Harris, EDAW

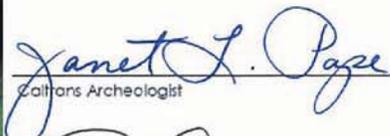
This map is a graphical representation and for general locating purposes only.

9/09

0 100 200 300 Feet

N



	10/21/08
Caltrans Project Manager	Date
	10/21/08
Caltrans Archeologist	Date
	10/21/08
SDAW Project Manager	Date

- Alternative 4 Proposed Ramps**
-  Proposed West Bound Off-Ramp
 -  Proposed West Bound On-Ramp
 -  Proposed Macalla Road Improvements

-  Area of Potential Effect
- Separate Project Currently Under Construction**
-  San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
-  Transition Structure Portion of SFOBB

Image: Nima/ USGS 2004
 Data: DMJM Harris, EDAW
 9/09

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

0 100 200 300 Feet

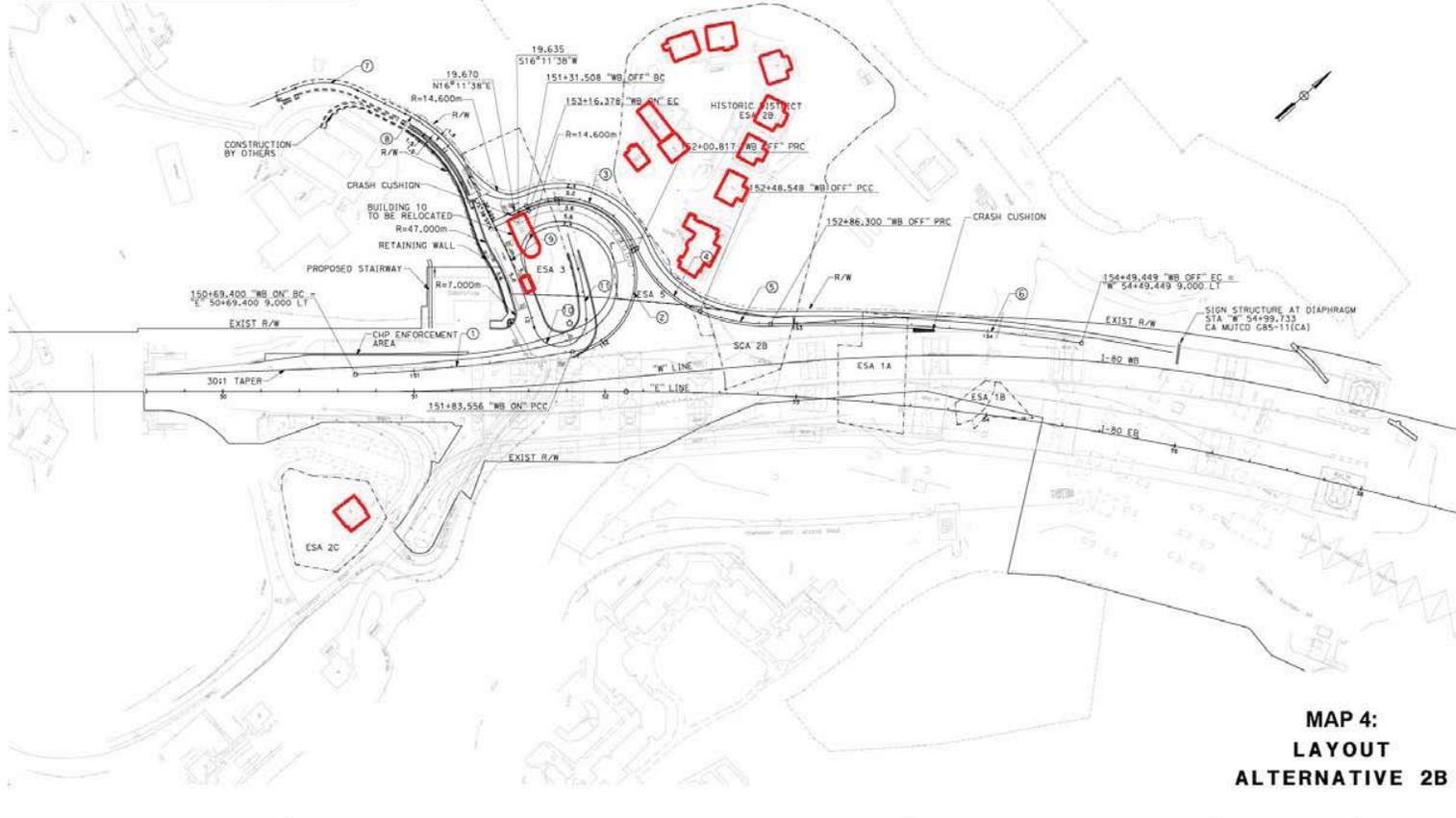
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 CONSULTANT FUNCTIONAL SUPERVISOR
 CONSULTANT
 Caltrans

REVIEWED BY
 DATE REISED

CALCULATED/
 DESIGNED BY
 CHECKED BY

CURVE DATA TABLE

	RADIUS	DELTA	TANGENT	LENGTH
1	1000.000	6°32'26"	57.140	114.156
2	38.800	196°08'15"	-	132.822
3	43.000	92°21'02"	44.801	89.308
4	61.000	44°49'59"	25.163	47.732
5	91.000	23°46'10"	19.151	37.752
6	909.000	10°17'01"	81.794	163.149
7	39.700	48°23'51"	17.841	33.534
8	75.000	36°40'20"	24.856	48.004
9	269.000	11°38'47"	27.434	54.679
10	13.900	166°09'07"	114.461	40.309
11	100.000	15°15'38"	13.397	26.835



Dist COUNTY ROUTE KILOMETER POST SHEET TOTAL
 TOTAL PROJECT NO. SHEETS

REGISTERED CIVIL ENGINEER DATE
 RODNEY PRINCE
 No. 46702

PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

AECOM TRANSPORTATION
 2101 WEBSTER ST. #1900
 OAKLAND, CA 94612



**MAP 4:
 LAYOUT
 ALTERNATIVE 2B**

BORDER LAST REVISED 3/1/2007



USERNAME -> RUSER
 DON FILE -> REQUEST

CU 00000 EA 000000

DATE PLOTTED -> 00-00-00
 TIME PLOTTED -> 0:00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

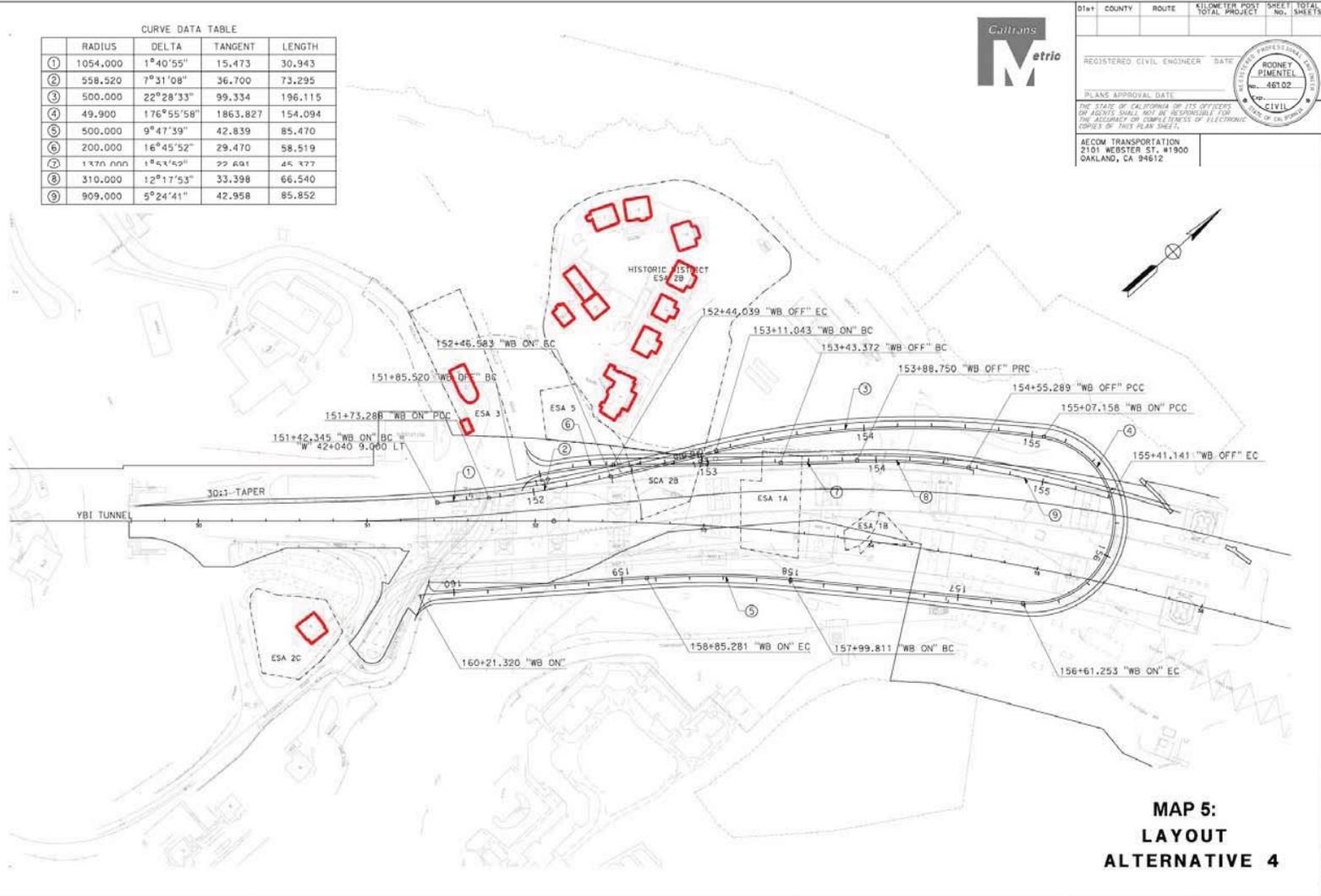
REVISIONS
 REVISION NO. DATE REVISION BY

CALCULATED/DESIGNED BY
 CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR

DATE PLOTTED: 00-00-00
 TIME PLOTTED: 00:00:00

CURVE DATA TABLE				
	RADIUS	DELTA	TANGENT	LENGTH
①	1054.000	1°40'55"	15.473	30.943
②	558.520	7°31'08"	36.700	73.295
③	500.000	22°28'33"	99.334	196.115
④	49.900	176°55'58"	1863.827	154.094
⑤	500.000	9°47'39"	42.839	85.470
⑥	200.000	16°45'52"	29.470	58.519
⑦	1370.000	1°45'45"	22.691	45.377
⑧	310.000	12°17'53"	33.398	66.540
⑨	909.000	5°24'41"	42.958	85.852



Sheet COUNTY ROUTE KILOMETER POST TOTAL SHEET TOTAL
 PROJECT NO. SHEETS

REGISTERED CIVIL ENGINEER DATE
 RODNEY PIMENTEL
 46102
 CIVIL

PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

AECOM TRANSPORTATION
 2101 WEBSTER ST. #1900
 OAKLAND, CA 94612

**MAP 5:
 LAYOUT
 ALTERNATIVE 4**

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS

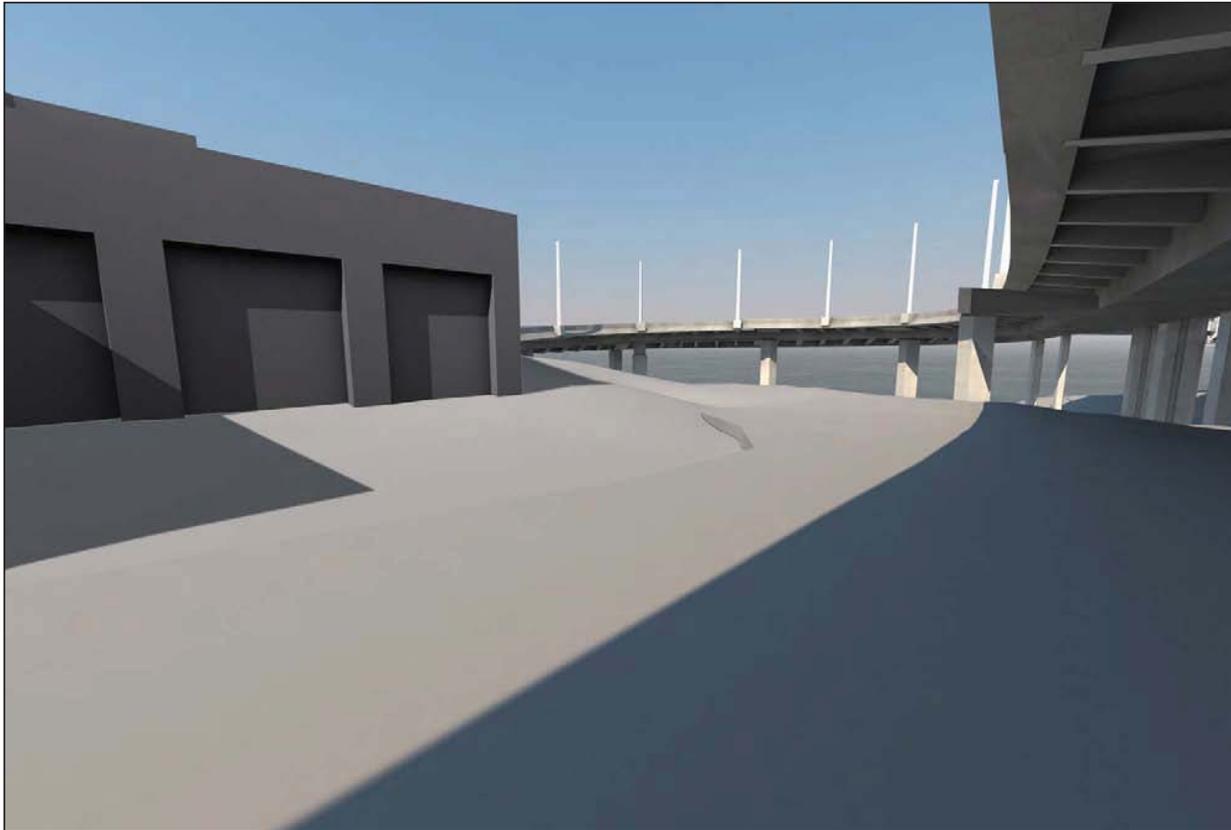
USERNAME -> USER
 DON FILE -> REQUEST

CU 00000 EA 000000

DATE PLOTTED: 00-00-00
 TIME PLOTTED: 00:00:00

Appendix B
Visual Simulations and Renderings

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



Rendered View

Yerba Buena Island
 Ramps Improvement Project



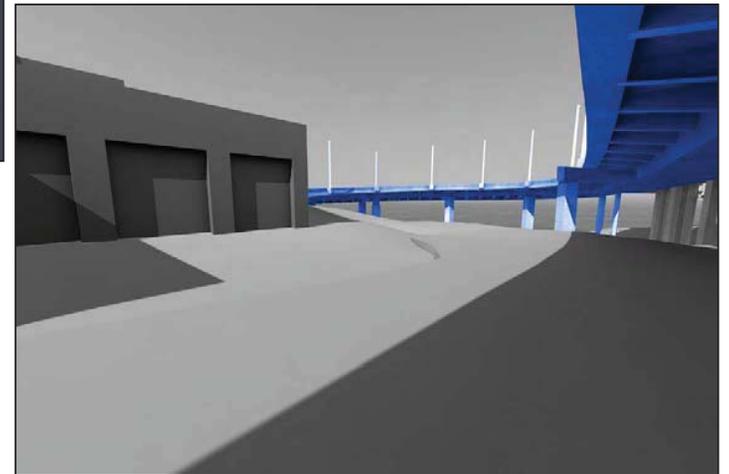
Quarters 10
 to be relocated as part of Alt. 2B



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



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



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

Figure 6a: Existing view, looking northeast
Near Key Viewpoint 1: Macalla Road at North Gate Road Intersection

Yerba Buena Island
Ramps Improvement Project



Quarters 10 and Building 267 (garage): white buildings with blue trim partly visible north of Macalla Road.

Structures at right are existing SFOBB components.

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



Simulated View



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

Yerba Buena Island
Ramps Improvement Project



Existing View



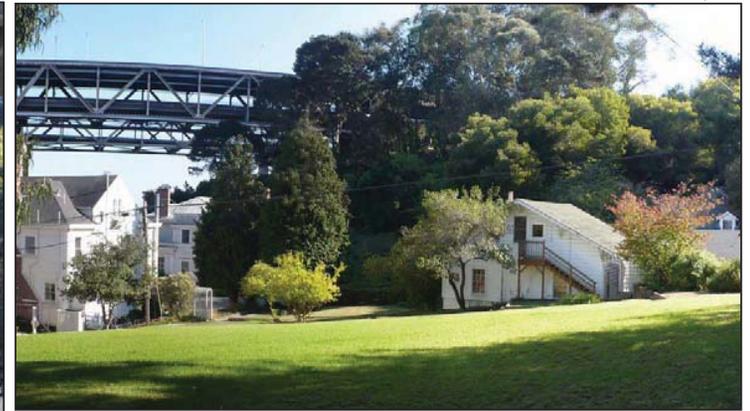
Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp
components from SFOBB East Span project components

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



Simulated View

Yerba Buena Island
Ramps Improvement Project



Existing View



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



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

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



Simulated View



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



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



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

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



Simulated View



Existing View



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



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

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

Yerba Buena Island
Ramps Improvement Project



Simulated View



Existing View



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



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

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



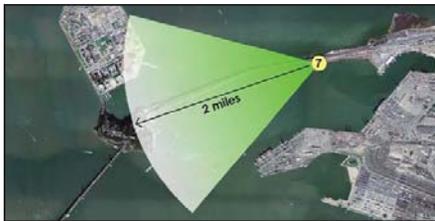
Simulated View



View prior to SFOBB east span and Alternative 2B construction



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



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

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

Yerba Buena Island
Ramps Improvement Project



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

Rendered View

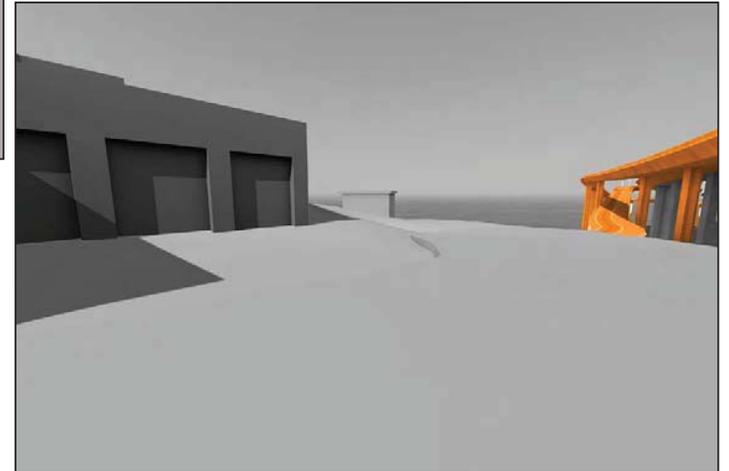


Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components

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



Rendered View



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Figure 14a: Existing view, looking northeast
Near Key Viewpoint 1: Macalla Road at North Gate Road Intersection

Yerba Buena Island
Ramps Improvement Project



Quarters 10 and Building 267 (garage): white buildings with blue trim partly visible north of Macalla Road.

Structures at right are existing SFOBB components.

Figure 15: Alternative 4
Key Viewpoint 2: Nimitz House



Simulated View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Yerba Buena Island
Ramps Improvement Project



Existing View

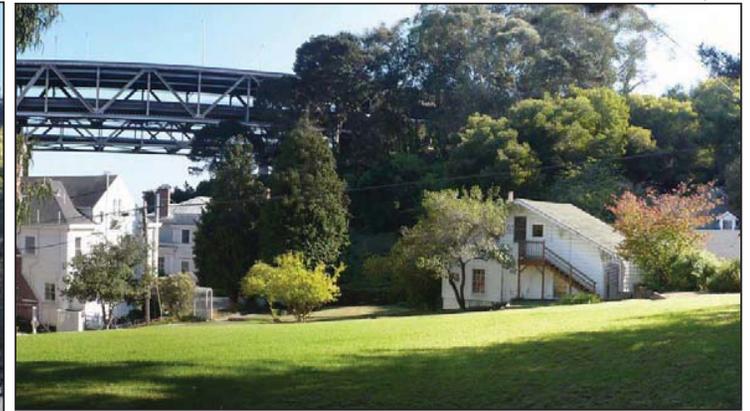


Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

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



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



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

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



Simulated View



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



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Figure 18: Alternative 4
Key Viewpoint 5: Treasure Island



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



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

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



Simulated View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Yerba Buena Island
Ramps Improvement Project



Existing View



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

Figure 20: Alternative 4
Key Viewpoint 7: Oakland Touchdown

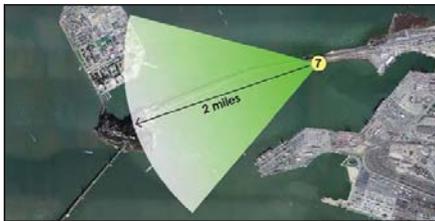
Yerba Buena Island
Ramps Improvement Project



Simulated View



View prior to SFOBB east span and Alternative 4 construction



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



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

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

Yerba Buena Island
Ramps Improvement Project



Rendered View



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



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Appendix C
Project Public Participation

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Jack Gold, Executive Director
San Francisco Architectural Heritage
2007 Franklin Street
San Francisco, CA 94109

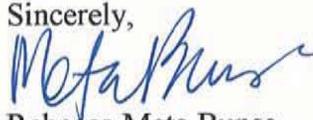
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner



Figure 1. Project Location



Figure 2. Project Vicinity

Note: map included with each letter, but not repeated here in Appendix C.

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

M. Bridget Maley, President
San Francisco Landmark Preservation Advisory Board
1660 Mission Street, Ste. 500
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Mark Luellen, Preservation Coordinator
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Ron Ross, President
San Francisco History Association
PO Box 31907
San Francisco, CA 94131

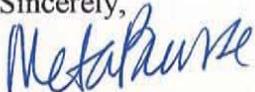
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Erik Christoffersen, Executive Director
San Francisco Museum and Historical Society
P.O. Box 420470
San Francisco, CA 94142-0470

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

David Crosson, Executive Director
California Historical Society
678 Mission Street
San Francisco CA 94105

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Leigh Ann Baughman, Executive Director
San Francisco Beautiful
564 Market Street, Suite 709
San Francisco, CA 94104

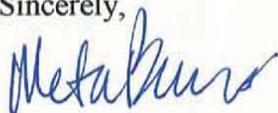
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

William Applegate, President
California Heritage Council
P.O. Box 475046
San Francisco, CA 94147

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Cindy Heitzman, Executive Director
California Preservation Foundation
5 Third St., Ste 424
San Francisco, CA 94103

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Anthea Hartig Ph.D., Director
National Trust for Historic Preservation Western Office
5 Third Street, Suite 707
San Francisco, California 94103

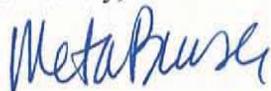
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

John J. Reynolds, Director
National Park Service, Pacific West Region Office
1111 Jackson Street, Suite 700
Oakland, California 94607

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners

Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Valerie Garry, President
Oakland Heritage Alliance
446 17th Street, Suite 301
Oakland, CA 94612

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Joann Pavlinec, Secretary & Historic Preservation Planner
Oakland Landmarks Preservation Advisory Board
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Betty Marvin, Planner
Oakland Cultural Heritage Survey
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94612

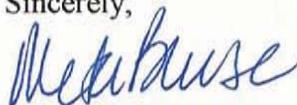
RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Winton "Mac" McKibben, President
Alameda County Historical Society
PMB 307
484 Lake Park Ave.

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Partners
Rand F. Herbert
Stephen R. Wee
Meta Bunse
Christopher McMorris

December 11, 2008

Alameda County Parks, Recreation and Historical Commission
224 West Winton Ave., #111
Hayward, CA 94544

RE: Yerba Buena westbound on- and off-ramps, San Francisco-Oakland Bay Bridge

Dear Sir or Madam:

San Francisco County Transportation Authority (SFCTA) proposes the replacement of westbound on- and off-ramps to the San Francisco-Oakland Bay Bridge (SFOBB) on the east side of Yerba Buena Island. The proposed project would improve the seismic, traffic safety requirements, and design standards of the current ramps. SFCTA, in cooperation with the Caltrans, is preparing an Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the project, in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). SFCTA is the Lead Agency under CEQA, while Caltrans is the lead agency under NEPA. Maps depicting the project location and vicinity are attached.

SFCTA has formed a consultant team to perform preliminary engineering and environmental technical studies to meet these state and federal environmental requirements. JRP Historical Consulting, LLC, is part of this team and is preparing a technical study of the historic architectural and engineering resources in the proposed project area. Historical resources are those properties potentially eligible, determined eligible, or listed in the National Register of Historic Places or the California Register of Historical Resources. There are four historic properties within the proposed project area, three of which are currently listed in the National Register and California Register: the SFOBB, the Senior Officers Quarters Historic District, and Quarters 10 (including its garage, Building 267). The fourth historic property, Quarters 8, has been determined eligible for both the National Register and California Register. If you or your organization has any concerns regarding specific historic resources within the project area, please respond in writing to me at the address below citing your concerns within the next thirty days, or call me at (530) 757-2521.

Sincerely,



Rebecca Meta Bunse
Partner

Appendix D

National Register of Historic Places Correspondence

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION

BOX 942996
SACRAMENTO, CA 94298-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



Paul Hensley CR file

01 DEC 13 AM 10:22
EXECUTIVE OFFICE

December 5, 2001

HARRY TAHATA
CALIFORNIA DEPARTMENT OF TRANSPORTATION
POST OFFICE BOX 23660
OAKLAND, CA 94623-0660

RE: SAN FRANCISCO—OAKLAND BAY BRIDGE
OAKLAND, ALAMEDA COUNTY, CALIFORNIA
SAN FRANCISCO, SAN FRANCISCO COUNTY, CALIFORNIA

On August 13, 2001, the property listed above was placed on the National Register of Historic Places. On that date, this property was also placed on the California Register of Historical Resources, pursuant to Section 5024.1(d) of the Public Resources Code.

Placement on the National Register affords a property the honor of inclusion in the nation's official list of cultural resources worthy of preservation and provides a degree of protection from adverse effects resulting from federally funded or licensed projects. Registration provides a number of incentives for preservation of historic properties, including special building codes to facilitate the restoration of historic structures, and certain tax advantages.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property listed in the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have questions or require further information, please contact the Registration Unit at (916) 653-6624.

Sincerely,

Dr. Knox Meilon
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



May 1, 2008

Douglas E. Gilkey
1485 Frazee Road, Suite 900
San Diego, California 92108-4310

RE: Senior Officers Quarters Historic District, Yerba Buena Island Listing on the
National Register of Historic Places

Dear Mr. Gilkey:

I am pleased to notify you that on February 26, 2008, the above-named property was placed on the National Register of Historic Places (National Register). As a result of being placed on the National Register, this property has also been listed in the California Register of Historical Resources, pursuant to Section 4851(a)(2) of the Public Resources Code.

Placement on the National Register affords a property the honor of inclusion in the nation's official list of cultural resources worthy of preservation and provides a degree of protection from adverse affects resulting from federally funded or licensed projects. Registration provides a number of incentives for preservation of historic properties, including special building codes to facilitate the restoration of historic structures, and certain tax advantages.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property listed in the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have any questions or require further information, please contact the Registration Unit at (916) 653-6624.

Sincerely,

A handwritten signature in black ink that reads "Stephen A. Mitchell Sr".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov



May 1, 2008

Douglas E. Gilkey
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

RE: Quarters 10 and Building 267, Yerba Buena Island Listing on the
National Register of Historic Places

Dear Mr. Gilkey:

I am pleased to notify you that on February 26, 2008, the above-named property was placed on the National Register of Historic Places (National Register). As a result of being placed on the National Register, this property has also been listed in the California Register of Historical Resources, pursuant to Section 4851(a)(2) of the Public Resources Code.

Placement on the National Register affords a property the honor of inclusion in the nation's official list of cultural resources worthy of preservation and provides a degree of protection from adverse affects resulting from federally funded or licensed projects. Registration provides a number of incentives for preservation of historic properties, including special building codes to facilitate the restoration of historic structures, and certain tax advantages.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property listed in the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have any questions or require further information, please contact the Registration Unit at (916) 653-6624.

Sincerely,

A handwritten signature in black ink that reads "Milford Wayne Donaldson".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

April 25, 2008

The Director of the National Park Service is pleased to send you the following announcements and actions on properties for the National Register of Historic Places. For further information contact Edson Beall via voice (202) 354-2255, or E-mail: <Edson_Beall@nps.gov> This and past Weekly Lists are also available here: <http://www.nps.gov/history/nr/nrfist.htm>

Our physical location address is:

National Park Service 2280, 8th floor
National Register of Historic Places
1201 "I" (Eye) Street, NW,
Washington D.C. 20005

Please have any Fed Ex, UPS packages sent to the above address. Please continue to use alternate carriers, as all mail delivered to us via United States Postal Service is irradiated and subsequently damaged.

Landscape Architecture Month:
<http://www.nps.gov/history/nr/feature/landscape/index.htm>

WEEKLY LIST OF ACTIONS TAKEN ON PROPERTIES: 4/14/08 THROUGH 4/18/08

KEY: State, County, Property Name, Address/Boundary, City, Vicinity, Reference Number, NHL, Action, Date, Multiple Name

CALIFORNIA, SAN FRANCISCO COUNTY,
Administration Building, Treasure Island, SE Corner of Avenue of the Palms and California Ave., Treasure Island, 08000081, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Hall of Transportation, Treasure Island, SE Side of California Ave. between Avenue D and Avenue F, Treasure Island, 08000082, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Palace of Fine and Decorative Arts, Treasure Island, SE Side of California Ave. between Avenue F and Avenue I, Treasure Island. 08000083, LISTED, 2/26/08

CALIFORNIA, SAN FRANCISCO COUNTY,
Quarters 10 and Building 267, Yerba Buena Island, Jct. Northgate & Macalla Rds., North Shore of Yerba Buena Island, Yerba Buena Island, 08000084, LISTED, 2/26/08