

RESOLUTION NO. 59-2010

Adopted June 3, 2010

ADOPTING ENVIRONMENTAL FINDINGS PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, INCLUDING THE ADOPTION OF A MITIGATION MONITORING AND REPORTING PROGRAM AND A STATEMENT OF OVERRIDING CONSIDERATIONS, FOR THE CANDLESTICK POINT – HUNTERS POINT SHIPYARD PHASE II DEVELOPMENT PLAN PROJECT; BAYVIEW HUNTERS POINT AND HUNTERS POINT SHIPYARD REDEVELOPMENT PROJECT AREAS

BASIS FOR RESOLUTION

1. The Redevelopment Agency of the City and County of San Francisco (“Agency”), the Planning Department of the City and County of San Francisco (“Department”), the Mayor’s Office, and other City Departments have been working on the proposed Candlestick Point – Hunters Point Shipyard Phase II development plan project (the “Project”), which is located in two Redevelopment Project Areas governed by two redevelopment plans: the Hunters Point Shipyard Redevelopment Plan for the Hunters Point Shipyard Phase II portion of the Project site and the Bayview Hunters Point Redevelopment Plan for the Candlestick Point portion of the Project site.
2. The Project is located on approximately 702-acres east of U.S. Highway 101 in the southeastern portion of the City and County of San Francisco consisting of 421 acres at Hunters Point Shipyard and 281 acres at Candlestick Point.
3. The Project includes a development project component that would create a mixed-use community with a wide range of residential, retail, office, research and development, civic and community uses, parks and recreational open space, and the possible development of a new 49ers stadium on Hunters Point Shipyard, via the proposed amendments of the Bayview Hunters Point Redevelopment Plan and the Hunters Point Shipyard Redevelopment Plan and Design for Development, as well as revisions to the San Francisco *General Plan*, *Planning Code*, and the Zoning Maps.
4. The Agency has prepared proposed amendments to the Hunters Point Shipyard Redevelopment Plan and the Bayview Hunters Point Redevelopment Plan, Designs for Development for Hunters Point Shipyard Phase II and Candlestick Point, and associated Project-related documents.
5. The proposed Redevelopment Plan amendments and Designs for Development will facilitate implementation of the development plan component. The Redevelopment Plan amendments establish Goals and Objectives and basic land use standards for the Project. The Designs for Development set urban design framework plan and specific development controls and design guidelines for the Project.

6. The Agency shall utilize the Design for Development, along with the Redevelopment Plan amendments in consideration of entitlements for the future development of the Project, and will follow the design review procedure described therein.
7. The Agency and the Department determined that an Environmental Impact Report ("EIR") was required for the proposed Project, and provided for appropriate public hearings before the Agency Commission and the Planning Commission.
8. The Agency and the Department released for public review and comment the Draft EIR for the Project (Agency File No. ER06.05.07) on November 12, 2009. The period for acceptance of written comments on the Draft EIR ended January 12, 2010.
9. The Agency Commission held a public hearing on the adequacy of the Draft EIR on December 15, 2009 and January 5, 2010. The Planning Commission held a public hearing on the adequacy of the Draft EIR on December 17, 2009.
10. The Agency and the Department published a Comments and Responses document ("C&R") on May 13, 2010, that included responses to substantive comments on environmental issues received at the public hearing and in writing during the 60-day public review period for the Draft EIR, and revisions to the Draft EIR text in response to comments received or based on additional information that became available during the public review period, and correction of errors in the Draft EIR.
11. The EIR files and other Project-related Agency files have been available for review by the Agency Commission and the public, and those files are part of the record before the Agency Commission.
12. The Agency Commission reviewed and considered the Final EIR consisting of the Draft EIR together with the C&R and determined, by Resolution No. 58-2010, that the contents of the Final EIR complied with the provisions of the California Environmental Quality Act ("CEQA"), the State CEQA Guidelines, and the Agency-adopted CEQA guidelines. Further, the Agency Commission found, by Resolution No. 58-2010, that the Final EIR was adequate, accurate and objective, and reflected the independent judgment and analysis of the Commission, and that the C&R contained no significant revisions to the Draft EIR.
13. On June 3, 2010, the Agency Commission adopted Resolution No. 58-2010, certifying the completion of the Final EIR for the Project in compliance with CEQA and the State CEQA Guidelines. Copies of the Final EIR are on file with the Agency.


14. The Agency and the Department prepared Findings, as required by CEQA, regarding the alternatives, mitigation measures, and significant environmental impacts analyzed in the Final EIR, and overriding considerations for approving the proposed Project, including all of the actions listed in Attachment A hereto, and a proposed Mitigation Monitoring and Reporting Program, attached as Attachment B hereto, which material was made available to the public and this Agency Commission for its review, consideration, and action.

RESOLUTION

ACCORDINGLY IT IS RESOLVED by the Redevelopment Agency of the City and County of San Francisco that:

1. The Agency Commission certified the Final EIR as adequate, accurate, and objective, and reflecting the independent judgment of the Agency in Resolution No. 58-2010.
2. The Agency Commission finds, based on substantial evidence in light of the whole record, that: (1) modifications incorporated into the Project will not require important revisions to the Final EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) no substantial changes have occurred with respect to the circumstances under which the Project is undertaken that would require major revisions to the Final EIR due to the involvement of new significant environmental effects, or a substantial increase in the severity of effects identified in the Final EIR; and (3) no new information of substantial importance to the Project has become available that would indicate (a) the Project will have significant effects not discussed in the Final EIR; (b) significant environmental effects will be substantially more severe; (c) mitigation measures or alternatives found not feasible, which would reduce one or more significant effects, have become feasible; or (d) mitigation measures or alternatives, which are considerably different from those in the Final EIR, would substantially reduce one or more significant effects on the environment.
3. The Agency Commission has reviewed and considered the Final EIR and hereby adopts the Findings attached hereto as Attachment A and the Mitigation Monitoring and Reporting Program attached hereto as Attachment B, and incorporates the same herein by this reference.

APPROVED AS TO FORM:



James B. Morales
Agency General Counsel

ATTACHMENT A

Candlestick Park – Hunters Point Shipyard Phase II Development Plan Project

California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations

SAN FRANCISCO REDEVELOPMENT AGENCY COMMISSION

In determining to approve the Candlestick Park – Hunters Point Shipyard Phase II Project ("Project") the San Francisco Redevelopment Agency Commission ("Agency Commission" or "Agency") makes and adopts the following findings of fact and decisions regarding mitigation measures and alternatives, and adopts the statement of overriding considerations, based on substantial evidence in the whole record of this proceeding and under the California Environmental Quality Act ("CEQA"), California Public Resources Code Sections 21000 et seq., particularly Sections 21081 and 21081.5, the Guidelines for Implementation of CEQA ("CEQA Guidelines"), 14 California Code of Regulations Sections 15000 et seq., particularly Sections 15091 through 15093, and Agency adopted CEQA guidelines.

This document is organized as follows:

Section I provides a description of the Project proposed for adoption, the environmental review process for the Project, the approval actions to be taken and the location of records;

Section II identifies the impacts found not to be significant that do not require mitigation;

Sections III and IIIA identify potentially significant impacts that can be avoided or reduced to less-than-significant levels through mitigation and describe the disposition of the mitigation measures;

Sections IV and IVA identify significant impacts that cannot be avoided or reduced to less-than significant levels and describe any applicable mitigation measures as well as the disposition of the mitigation measures;

Section V evaluates the different Project alternatives and the economic, legal, social, technological, and other considerations that support approval of the Project and the rejection of the alternatives, or elements thereof, analyzed; and

Section VI presents a statement of overriding considerations setting forth specific reasons in support of the Agency Commission's actions and its rejection of the alternatives not incorporated into the Project.

The Mitigation Monitoring and Reporting Program ("MMRP") for the mitigation measures that have been proposed for adoption is attached with these findings as **Attachment B**. The MMRP is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. **Attachment B** provides a table setting forth each mitigation measure listed in the Final Environmental Impact Report for the Project ("Final EIR" or "FEIR") that is required to reduce or avoid a significant adverse impact. **Attachment B** also specifies the agency responsible for implementation of each measure and establishes monitoring actions and a monitoring schedule. The full text of the mitigation measures is set forth in **Attachment B**.

These findings are based upon substantial evidence in the entire record before the Agency Commission. The references set forth in these findings to certain pages or sections of the Draft Environmental Impact Report ("Draft EIR" or "DEIR") or the Comments and Responses document ("C&R") in the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

I. APPROVAL OF THE PROJECT

A. Project Description

By this action, the Agency Commission adopts and takes action to implement substantially the Project identified in Chapter II of the FEIR as modified by Variant 3D ("the Candlestick Tower Variant D") and Variant 5 ("the 49ers/Raiders Shared Stadium Variant") as described in Chapter IV of the FEIR. In addition, the Project proposed for approval will allow an alternative land use development at the stadium site in the event the 49ers do not avail themselves of the stadium site at HPS Phase II. In this event, in lieu of the stadium and related uses proposed for the Project at the stadium site (including the 49ers/Raiders Shared Stadium Variant), two alternative uses will be allowed at the stadium site, either Variant 1, which provides for a research and development use at the stadium site, (the "R&D Variant") or Variant 2A, which provides for a mix of housing and research and development at the stadium site (the "Housing/R&D Variant"). If either the R&D Variant or Housing/R&D Variant is implemented, it will be modified by implementation of Candlestick Tower Variant D.

Subalternative 4A, as described in Chapter VI of the FEIR, which would preserve four structures identified as historic resources, may be incorporated into the Project as explained below in Section I.A.3. The Project as described in Chapter II of the FEIR together with the Candlestick Tower Variant D, and the 49ers/Raiders Shared Stadium Variant as described in Chapter IV of the FEIR constitute the Project if the stadium is constructed. If the stadium is not constructed, the Project as described in Chapter II of the FEIR together with the Candlestick Tower Variant D and either the R&D Variant or the Housing/R&D variant constitute the Project. In addition, under the circumstances explained in Section I.A.3, below, the Project would include Subalternative 4A.

The land uses that will be implemented under the Project with the stadium or, without the stadium are shown in Table A.

Table A – Comparison of Land Use Development Scenarios (Stadium and Non-Stadium Options)						
Land Use Plan Components	Project with stadium and Candlestick Tower Variant D, 49ers/Raiders Shared Stadium Variant		Project without stadium, with R&D Variant, Candlestick Tower Variant D		Project without stadium, with Housing/R&D Variant, Candlestick Tower Variant D	
	<i>Candlestick Point</i>	<i>HPS</i>	<i>Candlestick Point</i>	<i>HPS</i>	<i>Candlestick Point</i>	<i>HPS</i>
Residential units	7,850	2,650	7,850	2,650	6,225	4,275
Office (gsf)	150,000		150,000		150,000	
Hotel (gsf)	150,000		150,000		150,000	
Research & Development (gsf)		2,500,000		5,000,000		3,000,000
Regional Retail (gsf)	635,000		635,000		635,000	
Neighborhood Retail (gsf)	125,000	125,000	125,000	125,000	125,000	125,000
Artists' Studios/Art Center (gsf)	N/A	255,000	N/A	255,000	N/A	255,000
Community Services (gsf)	50,000	50,000	50,000	50,000	50,000	50,000
Football Stadium (seats)		70,000		0		0
Arena (seats)	10,000		10,000		10,000	
Marina (slips)	N/A	300	N/A	300	N/A	300
Yosemite Slough Bridge	Auto/BRT/Ped		BRT/Ped		BRT/Ped	
Parking (spaces)	18,917		22,912		20,062	
- Residential	7,850	2,650	7,850	2,650	6,225	4,275
- Commercial	2,346	4,028	2,346	7,028	2,346	4,428
- General and Commercial (on-street)	1,360	683	1,360	1,678	1,360	1,428
Total Park & Rec Space	104.8	231.6	104.8	222.2	104.8	221.8
- New Parks	8.1	140	8.1	152.4	8.1	150.9
- Active Recreation	N/A	91.6	N/A	69.8	N/A	70.9
- State Parkland (acres)	96.7	N/A	96.7	N/A	96.7	N/A

The Project contemplates that the Agency and a private developer, CP Development Company, LP (“Developer” or “Project Applicant”) will assemble an approximately 702 acre area of property in the southeast portion of the City and County of San Francisco (“City”) consisting of 281 acres at Candlestick Point (“Candlestick”) and 421 acres at Hunters Point Shipyard (“HPS Phase II”), collectively referred to as the “Project Site.” The Agency will convey to Developer for improvement, property at the Project Site that it owns or will acquire for the purposes of alleviating blight in the Project area.

1. Project with Stadium

The Project with the stadium contemplated for development and described in Chapter II of the FEIR, as modified by Variants 3D and 5 contains these key elements:

- (1) up to 10,500 residential units, approximately 32% of which (3,345) will be offered at below market rates, with 7,850 on Candlestick and 2,650 on HPS Phase II. Towers will be located either at specifically identified locations or within specified tower zones (Candlestick Tower Variant D);
- (2) approximately 336 acres of new or improved public parks and open space, including waterfront trails and plazas. New parks will total 148.1 acres, new dual-use sports fields and multi-use lawn and stadium parking and waterfront recreation will consist of 91.6 acres, improvements of existing State parkland will cover 91 acres, and 5.7 acres of new State parkland will be added;
- (3) 885,000 square feet of regional and neighborhood-serving retail space, with approximately 635,000 gross square feet of regional retail located at the Candlestick and 250,000 square feet of neighborhood retail split evenly between Candlestick and the HPS Phase II;
- (4) 255,000 square feet of new and renovated replacement space for the Shipyard artists, including an arts education center within a new “Arts District” supporting the Shipyard artist community;
- (5) 2,650,000 square feet of commercial, light industrial, research and development and office space; 150,000 square feet of office would be located on Candlestick and 2,500,000 square feet of research and development would be developed on HPS Phase II;
- (6) new public and community facilities space on the Shipyard and Candlestick Point to be used for a new fire station and an expanded police station and other public uses;
- (7) improved land and supporting infrastructure for a new football stadium for the San Francisco 49ers, including necessary parking areas and transportation improvements; the stadium scenario would allow for the stadium site to be used also by the Raiders football team, should the NFL support the construction of one new stadium for both teams (e.g. 49ers/Raiders Shared Stadium Variant in the FEIR);

(8) a 300-slip marina on HPS Phase II; and

(9) a Yosemite Slough bridge to be used only for game-day automobiles, bus rapid transit, bicyclists and pedestrians.

2. Non-Stadium Variants

If the 49ers do not avail themselves of the opportunity to build a new stadium in the Project site, the Project alternatively includes other allowable uses at the stadium location. The non-stadium scenarios would include all of the elements of the stadium scenario, except there would not be a stadium use and associated stadium parking and 49ers/Raiders Shared Stadium Variant, providing for use of the stadium by another football team, would not apply. The uses that would be allowed at the stadium site in lieu of the stadium and associated parking are set out below.

a. Housing/R&D Variant.

Housing/R&D Variant is the preferred non-stadium scenario and includes these elements in lieu of the stadium:

(i) of the 10,500 housing units proposed for the stadium scenario, 625 units would be shifted to the HPS Phase II area from the Candlestick Point area, reducing the number of residential towers at Candlestick and reducing the heights of some other towers in the Candlestick Point area. As a result, of the 10,500 housing units, 6,225 units would be located at Candlestick Point and 4,275 units at HPS Phase II;

(ii) an additional 500,000 square feet of research and development space would be located at HPS Phase II in addition to the 2,500,000 square feet called for under the stadium scenario, for a total of 3,000,000 square feet of research and development space;

(iii) the total amount of new or improved open space would decrease by 9.8 acres; Housing/R&D Variant would provide a total of 326.6 acres of parkland, which is 9.8 acres less than the Project with the stadium. Park acreage on Candlestick (13.8 acres of new State parkland plus 91 acres of improved existing State parkland) would remain the same as the Project with the stadium. On HPS Phase II, 221.8 acres of new or improved open space would be included – 150.9 acres of new parks plus 70.9 acres of sports and multi-use fields (compared to 231.6 acres on HPS Phase II for the Project with the stadium); and

(iv) the Yosemite Slough bridge would be used only for bus rapid transit, bicyclists and pedestrians; automobile use would be prohibited at all times.

b. R&D Variant

R&D Variant is an alternative non-stadium scenario that would be implemented in the event regulatory agencies overseeing the environmental remediation of HPS Phase II do not

authorize residential uses on the stadium site as called for by Housing/R&D Variant. The R&D Variant non-stadium scenario includes these elements in lieu of the stadium:

- (i) an additional 2,500,000 square feet of research and development space at HPS Phase II for a total of 5,000,000 square feet of research and development uses;
- (ii) an approximately 9.4 acre reduction in park and open space acreage as compared with the stadium scenario; a total of 327 acres of parks and open space would be provided, consisting of 160.5 acres of new parks, 69.8 acres of sports and multi-use fields, and 96.7 acres of new and improved State parklands; and
- (iii) the Yosemite Slough bridge would be used only for bus rapid transit, bicyclists and pedestrians; automobile use would be prohibited at all times.

3. Subalternative 4A.

Subalternative 4A provides for the same development scenario as the Project and non-stadium variants except that it would preserve four historic structures identified in the proposed research and development area of the HPS Phase II site that under the Project analyzed in Chapter II of the DEIR are proposed for demolition. To accommodate the same amount of research and development space as proposed for the Project and non-stadium variants, Subalternative 4A calls for shifting to the adjacent research and development area some of the development space that would otherwise be located in the area of the existing historic buildings. The result of this shift is that the height limit in the adjacent research and development area would be higher as compared to the Project without Subalternative 4A.

A detailed analysis of preserving the four historic structures was undertaken by the Agency and the Mayor's Office of the City assuming the Project with the stadium is developed at HPS Phase II. This analysis showed that under the Project with the Stadium, preserving all four historic structures would not allow the project to obtain a rate of return determined by the Agency and Mayor's Office to be reasonable for this project. The analysis also considered preserving some but not all of the buildings. The financial analysis showed that none of these options are financially viable under the stadium scenario. The financial analysis conducted by the Agency and the Mayor's Office is included in the record before the Agency Commission and incorporated by reference into these findings.¹

A detailed analysis of preserving one or more of the four historic structures has not been undertaken assuming the Housing/R&D Variant or R&D Variant is implemented. Such an analysis is proposed to be undertaken if and when the 49ers choose not to avail themselves

¹ *Candlestick Point-Hunters Point Shipyard Phase II Historic Preservation Feasibility Study, prepared by Page & Turnbull, July 1, 2009 and Revised May 18, 2010; Candlestick Point-Hunters Point Shipyard Phase II Historic Preservation Landscape and Sea Level Rise Study, prepared by Royston Hanamoto Alley & Abey ("RHAA"), May 18, 2010; and Proposed Candlestick Point-Hunters Point Shipyard Phase II Development: Financial Feasibility Analysis of Historic Retention Options, prepared by CBRE Consulting, May 20, 2010.*

of the stadium use at HPS Phase II and after uncertainties are resolved over whether the Developer will be able to pursue the Housing/R&D Variant in lieu of the R&D Variant. Therefore, Subalternative 4A is being adopted at this time as to the Housing/R&D Variant and the R&D Variant so that the feasibility of this subalternative under these development scenarios can continue to be evaluated. If the Agency and Developer proceed with development under Housing/R&D Variant or the R&D Variant instead of the stadium, the Agency's agreement with Developer provides that the four identified structures cannot be demolished or materially altered unless additional findings are adopted in compliance with CEQA that determine it is infeasible to preserve the structures.

B. Project Objectives

In May 2007, the Board of Supervisors and the Mayor approved Resolution 264-07, endorsing a conceptual framework for the integrated planning of both the Hunters Point Shipyard and the Candlestick Point areas of San Francisco. The conceptual framework called for the further planning and environmental review of a mixed-use development on Candlestick Point and Hunters Point Shipyard that includes the possibility of a new state-of-the-art stadium for the San Francisco 49ers and that will provide parks and open space, jobs, affordable housing and other tangible economic and public benefits for the Bayview Hunters Point community.

In June 2008, the voters of San Francisco approved Proposition G, called the Bayview Jobs, Parks and Housing Initiative ("2008 Initiative" or "Proposition G"). Proposition G repealed two earlier propositions, Propositions D and F approved by the voters in 1997, which had established a special use district for the Candlestick Point portion of the site. The 2008 Initiative spells out the elements that an integrated development plan for the area should include and states that the development of the area must be consistent with these objectives:

(1) The integrated development should produce tangible community benefits for the Bayview and the City and in so doing should:

- Improve the Candlestick Point State Recreation Area to enhance public access to the waterfront and enjoyment of the Bay.
- Create new public recreational and public open spaces in the Project Site.
- Preserve the shoreline of the Project Site primarily for public park and public open space uses, including an extension of the Bay Trail along the Project Site's waterfront.
- Afford a range of job and economic development opportunities for local, economically disadvantaged individuals and business enterprises, particularly for residents and businesses located in the Bayview.
- Include neighborhood-serving retail.
- Subsidize the creation of permanent space on HPS Phase II for the existing artists.
- Transform the contaminated portions of HPS Phase II into economically productive uses or public open space, as appropriate.

- Encourage the timely development of the Project Site and its public benefits, whether or not the 49ers decide to remain in San Francisco, including developing alternate uses for the stadium site on the Shipyard Property that are consistent with the other objectives set forth in Proposition G, but recognizing that the overall financial feasibility of the development of the Project Site and the phasing of the integrated development depends on the 49ers' vacating the current site of Monster Park, whether to a new stadium on HPS Phase II or elsewhere outside of the Project Site.

(2) The integrated development should reunify the Project Site with the Bayview and should protect the character of the Bayview for its existing residents, and in so doing should:

- Foster the creation of strong commercial, institutional, cultural and urban design ties between the development in the Project Site and the Bayview in particular and the City in general.
- Provide automobile, public transportation and pedestrian connections between HPS Phase II and Candlestick to facilitate the integration of the Project Site and reunification with the Bayview.
- Afford substantial affordable housing, jobs and commercial opportunities for existing Bayview residents and businesses.
- Prohibit, in implementing the Project, the use of eminent domain to acquire any property that is currently residentially zoned, is improved with a building that contains one or more legally occupied dwelling units, is a church or other religious institution, or is publicly owned, including, without limitation, property owned by the Housing Authority of the City and County of San Francisco.

(3) The integrated development should include substantial new housing in a mix of rental and for-sale units, both affordable and market-rate, and encourage the rebuilding of Alice Griffith Housing, and in so doing should:

- Provide substantial opportunities for new affordable housing that is targeted to the lower income levels of the Bayview population, including new units that are suitable for families, seniors and young adults.
- Include housing at levels dense enough to: create a distinctive urban form and at levels sufficient to make the development of the Project Site financially viable, consistent with the objectives stated in (6) below; attract and sustain neighborhood retail services and cultural amenities; create an appealing walkable urban environment served by transit; help pay for transportation and other infrastructure improvements; and achieve economic and public benefits for the Bayview in particular and the City generally.
- Subject to consultation with Alice Griffith Housing residents and the receipt of all required governmental approvals, rebuild Alice Griffith Housing to provide at least one-for-one replacement units targeted to the same income levels as those of the existing residents and ensure that eligible Alice Griffith Housing residents have the opportunity to move to the new, upgraded units directly from their existing Alice Griffith Housing units without having to relocate to any other area.

- Include a mix of stacked flats, attached town homes and—in appropriately selected locations—low-rise, mid-rise and high-rise towers, to help assure the economic feasibility of the development and provide a varied urban design.
- (4) The integrated development should incorporate environmental sustainability concepts and practices, and in so doing should:
- Apply sustainability principles in the design and development of public open spaces, recreation facilities and infrastructure, including wastewater, storm water, utility and transportation systems.
 - Apply green building construction practices.
 - Include energy efficiency and the use of renewable energy.
 - Encourage green development projects, such as green office, research and development or industrial projects, including a green technology, biotechnology or digital media campus.
- (5) The integrated development should encourage the 49ers—an important source of civic pride—to remain in San Francisco by providing a world-class site for a new waterfront stadium and supporting infrastructure, and in so doing should:
- Provide parking, transportation, transit and other infrastructure necessary for the operation of the stadium, including automobile, public transit and pedestrian connections between HPS Phase II and Candlestick in order to facilitate the efficient handling of game day traffic.
 - Prohibit the issuance by the City of lease revenue bonds or other debt that will be secured by or repaid from revenues on deposit in the City's General Fund to finance development of the new stadium.
- (6) The integrated development should be fiscally prudent, with or without a new stadium, and in so doing should:
- Minimize any adverse impact on the City's General Fund relating to the development of the Project Site by relying to the extent feasible on the development to be self-sufficient.
 - Promote financial self-sufficiency by: encouraging substantial private capital investment; leveraging land value created through the entitlement process for the Project Site; allowing the City or the Agency to contribute real property in the Project Site, so long as the contribution is linked to the provision of public benefits consistent with the objectives in Proposition G or to the grant of rights to the City or the Agency to share in surplus revenues from development of the Project Site; and permitting the use of certain tax exempt financing tools such as the allocation of property tax-increment from the Project Site, the issuance of tax allocation bonds based on such increment and the issuance of community facilities (Mello-Roos) bonds secured by private property in the Project Site.

- Allow the Agency to use its city-wide Affordable Housing Fund to help finance affordable housing projects in the Project Site.
- Except as provided immediately above, prohibit the use of property tax increment from any part of a redevelopment area outside of the Project Site to finance construction of improvements in the Project Site.
- To the extent feasible, use state and federal funds to pay for environmental remediation on the Project Site and help pay for transportation and other infrastructure improvements, and provide ways for other development projects outside the Project Site to pay their fair share for new infrastructure improvements.

C. Environmental Review

The Planning Department and San Francisco Redevelopment Agency initiated environmental review of the Project upon the filing by Lennar Urban of an environmental evaluation application with the Planning Department on August 27, 2007. In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the San Francisco Planning Department and the Agency, as joint lead-agencies, prepared a Notice of Preparation ("NOP") of an EIR and conducted scoping meetings (see Draft EIR, Appendix A). The NOP was circulated to local, state, and federal agencies and to other interested parties on August 31, 2007, initiating a public comment period that extended through September, 2007.

The NOP included the India Basin Shoreline planning area because at that time it was thought that plans had proceeded to the point where a programmatic analysis of rezoning of Area C of the BVHP Survey Area could be done as part of the Project. However, since publication of the NOP, the Agency and the Planning Department, who are undertaking the development of a land use plan for the area, have conducted numerous community workshops on Area C but have not reached consensus on a rezoning proposal. Accordingly, they decided to remove the India Basin Shoreline area from the Project in order to allow more time for the community planning effort. Since that time, the Agency and Planning issued a Notice of Preparation of an Environmental Impact Report for the "India Basin Shoreline Redevelopment Program" on March 23, 2010, and the Environmental Impact Report for the India Basin Shoreline Redevelopment Program is in preparation.

As indicated in the NOP, the EIR addresses the full range of environmental impacts of the Project. The NOP included the following list of the probable environmental effects that would be addressed in the EIR:

- Land Use and Zoning
- Visual Resources
- Population and Housing
- Cultural Resources
- Transportation and Circulation

- Noise
- Air quality
- Wind
- Shadow
- Recreation
- Public Services and Utilities
- Biological Resources
- Geology and Soils
- Hydrology and Water Quality
- Hazards and Hazardous Materials
- Energy
- Growth Inducement

The NOP provided a general description of the proposed action, the need for the Project and Project benefits, the proposed development and the Project location.

Pursuant to CEQA Guidelines Section 15083, the San Francisco Planning Department and Agency held public scoping meetings on September 17, 2007, and September 25, 2007. The purpose of the meetings was to present the proposed Project to the public and receive public input regarding the proposed scope of the EIR analysis. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the Project.

In response to the NOP, the Planning Department and Agency received nine comment letters from public agencies, organizations and individuals, which are summarized in the Draft EIR at pages I-8 to I-9 and included in Appendix A of the Draft EIR. In addition, at two public scoping meetings, the Planning Department and Agency received oral comments from approximately ten speakers. The oral comments are recorded in official scoping meeting transcripts, which are part of the administrative record. The comments that were received, both orally and in writing, referenced the following topics:

- Public notice and process
- Toxins on site, groundwater contamination, and shipyard cleanup
- Global warming and sea level rise
- Earthquake hazards
- Yosemite Slough bridge
- Yosemite Slough Restoration Project
- Transportation issues
 - Connectivity

- Traffic volumes on local and regional streets and highways
- Access
- Transportation improvements, including financing, scheduling, and implementation responsibilities
- Traffic study should include trip generation, distribution, and assignment; analyze impacts on pedestrians and bicyclists, sidewalk crowding, intersection crossing distances
- Density and intensity of housing
 - High-rises inappropriate
- Importance of maintaining views of the Bay
- Importance of maintaining neighborhood character
- Expansion of natural areas
- Stormwater discharge
- No roads should go through state parks
- Need for transitional uses along the water for safety
- Public transit and the streetcar
- Need for initial study to help public better understand the issues
- Importance of environmental justice, economic, and social issues
- Environmental review of India Basin development
- Alternatives needed
 - Must provide for active public participation in their formation
 - Need full, rather than abbreviated environmental analysis
 - Must bracket the uncertainties and conflicting views about main features of the project
- Avoid overly restricting area of impact
- Should separate out Candlestick
- Police and fire services
- Housing/jobs balance; availability of better jobs
- Provision of affordable housing for working residents
- Consistency with Candlestick Point SRA General Plan
- Importance of community involvement in planning process
- Unclear project boundaries
- BCDC jurisdictional area should be shown on map

- Consistency with ABAG Bay Trail Plan and policies
 - Provide description of Bay Trail improvements
- Noise
- Air Quality
- Rail safety and removal of unused track

The Planning Department and Agency then prepared the Draft EIR, which describes the Project and the environmental setting for the proposed Project, identifies potential impacts, presents mitigation measures for impacts found to be significant or potentially significant, and evaluates project alternatives. At the request of the Project Applicant, the Draft EIR also includes an analysis of five variants, including variants on uses for the stadium site, (R&D Variant and Housing Variant) tower locations, including three sub-variants, (Candlestick Tower Variants A, B, C), utilities infrastructure (Variant 4, the "Utilities Variant"), and the option of use of the stadium site by two NFL teams (49ers/Raiders Shared Stadium Variant). The Final EIR includes two additional sub-variants, one concerning uses for the stadium site (Housing/R&D Variant) and one concerning tower locations (Candlestick Tower Variant D).

The EIR evaluates the direct, indirect and cumulative impacts resulting from planning, construction and operation of the Project. In preparing the EIR, pertinent City policies and guidelines, existing EIRs and background documents prepared by the City or the Applicant were evaluated for applicability to the Project and used where appropriate. In assessing impacts, significance criteria were based on guidance from the Planning Department and the Agency, which in turn was based on Appendix G to the CEQA Guidelines and Planning's Initial Study checklist, with some modifications. In cases where potential environmental issues associated with the Project are identified but not clearly addressed by the guidance listed above, additional impact significance criteria are presented. The significance criteria used for each environmental resource area are presented at the beginning of the impact discussion in each section of Chapter III of the Draft EIR.

The Draft EIR was circulated to local, state and federal agencies and to interested organizations and individuals for review and comment on November 12, 2009 for a 45 day comment period, which was extended once to January 12, 2010 for a total of 60 days. During the public review period, the Planning Department and Agency received 115 letters containing written comments through the mail or by hand-delivery, fax or email. There were a total of 151 people that spoke at the three hearings on the Draft EIR held in December 2009 and January 2010, including 60 speakers at the first Agency Commission hearing; 28 speakers at the second Agency Commission hearing; and 63 speakers at the Planning Commission hearing. A court reporter was present at each of the public hearings, transcribed the oral comments verbatim, and prepared written transcripts.

The Comments and Responses ("C&R") document was published on May 13, 2010, and it provides copies of the comments received on the Draft EIR as well as individual responses to those comments. In some cases, the responses to individual comments are presented as

master responses, which consist of comprehensive discussions of issues that received numerous comments.

In addition, the C&R includes minor refinements to the Project, two of the Variants (Housing/R&D Variant and Candlestick Tower Variant D) and one of the Alternatives (Subalternative 4A) analyzed in the Draft EIR. The refinements respond to public comments, reduce impacts, provide additional flexibility for Project implementation or respond to changing construction technologies, community priorities, site-specific urban design goals and real estate market demands. The C&R also provides additional, updated information and clarification on issues raised by commenters as well as by City staff. Staff revisions to text of the Draft EIR are included in Section F [Draft EIR Revisions] of the C&R document. The Project and Variant refinements do not affect the overall maximum development envelope, including the total amount of development or building heights or footprints as compared to what was described and analyzed in the Draft EIR. As substantiated by the analysis provided in Section F, master responses and response to individual comments in the C&R document, the Project and Variant refinements and the text revisions do not result in new significant environmental impacts or a substantial increase in the severity of impacts compared to the information provided in the Draft EIR, but rather provide further details and clarifications in response to comments or staff review. The Agency Commission reviewed and considered the Final EIR and all of the supporting information. The Final EIR provided augmented and updated information on many issues presented in the Draft EIR, including (but not limited to) the following topics:

- Revised development schedule
- Consultation with Native American tribes and representatives
- Biological resources and the Yosemite Slough
- Air quality analysis under proposed BAAQMD guidelines
- Analysis of an additional hybrid variant (Housing/R&D Variant)
- Analysis of a subalternative to Alternative 4 (Subalternative 4A)
- Further description and explanation of certain traffic mitigation measures
- Additional scientific information pertaining to sea level rise and seismic hazards, including liquefaction, and naturally occurring asbestos
- More detailed information concerning the HPS remediation process
- Additional information on remediation process for HPS
- Revisions to certain mitigation measures
- Health issues in the Bayview Hunters Point community

In certifying the Final EIR, the Agency Commission finds that the Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA because the Final EIR contains no information revealing (1) any new significant environmental impact that would result from the Project (including the variants

to the project proposed for adoption) or from a new mitigation measure proposed to be implemented, (2) any substantial increase in the severity of a previously identified environmental impact, (3) any feasible project alternative or mitigation measures considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project but that was rejected by the Project Applicant, or (4) that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

D. Environmental Analysis of the Project, with Variants and Subalternative 4A

The environmental analysis of the Project is detailed in Chapter III of the EIR, contained in Volumes II and III. The analysis of Project Variants 1 (R&D Variant), 2 (Housing Variant), 3 (Candlestick Tower Variants A, B, and C), 4 (Utilities Variant), and 5 (49ers/Raiders Shared Stadium Variant) are contained in Chapter IV, Volume III of the EIR. Alternatives are analyzed in Chapter VI, also contained in Volume III of the EIR.

Analysis of Project refinements since publication of the Draft EIR, that is, retention of Building 208 and the updated development schedule is contained in text changes to the various technical sections of the document, as reflected in Section F (Draft EIR Revisions) of the C&R document. Retention of Building 208 would not reduce the significant impact on historic resources identified for the Project and would have no other effect on any of the analyses contained in the EIR. The revised development schedule is also reflected in text changes in Section F of the C&R document, and is substantiated by technical memoranda contained in Appendices A1 through A5. As reflected in the text changes, the revised development schedule does not change the significance conclusions contained in the EIR or result in new or more severe impacts.

Environmental analysis of the Housing/R&D Variant is contained in Section F (Draft EIR Revisions), Section F.25. As stated in that analysis, there would be no new significant environmental impacts or an increase in the severity of impacts compared to the impacts analyzed for the Project, R&D Variant, or Housing Variant as a result of the nonstadium variant presented by Housing/R&D Variant. The analysis demonstrates that in all technical areas, the impacts of the Housing/R&D Variant have been bracketed by the impact analyses for the Project, R&D Variant, or Housing Variant, as each of these development scenarios represent a range of development intensity that is larger or smaller than the Project, “bookending” the Housing/R&D Variant. Thus, the impacts of the Housing/R&D Variant are either essentially the same as or less than the impacts previously analyzed in the Draft EIR for the Project, R&D Variant, or Housing Variant, as demonstrated in Section F.25 (Addition of Section IV.C (Variant 2A: Housing/R&D Variant [No Stadium—Relocation of Housing; Additional R&D]) [New Section])). The Housing/R&D Variant does not result in any new or more severe impacts not previously analyzed.

The refinement to Candlestick Tower Variants A, B, C consists of a fourth option, Candlestick Tower Variant D, which relocates a few of the proposed towers, enlarges the floor plates of the towers, and changes some tower heights. These changes are analyzed in Section F.26 (Changes to Section IV.D (Variant 3: Candlestick Point Tower Variants.)) The

analysis focuses on impacts to aesthetics and shadow from the tower locations, and determines that Candlestick Tower Variant D would not result in any change in the significance conclusions contained in the Draft EIR for the other tower options. While the floor plates would be slightly larger than under the Project, all towers would be placed on podia, which would remain unchanged from the size analyzed for the Project. The analysis in Section F.26 demonstrates that the addition of the fourth tower option does not result in any new or more severe impacts not previously analyzed.

A subalternative to Alternative 4—Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation)—has been included in the EIR to fully respond to comments. This is not a substantially different alternative from those alternatives considered in the Draft EIR, but one that combines the Project's development plan with preservation of the historically eligible buildings, both of which were analyzed in the Draft EIR. Similar to Alternative 4, (Draft EIR Chapter VI, pages VI-93 through -126), Subalternative 4A would retain the four historic buildings (Buildings 211, 224, 231, and 253) that would otherwise be demolished under the Project. In order to accommodate the historic preservation component in the Project's development plan, some adjustments in the location and intensity of some of the Project's land uses and a more cost-effective approach for providing sea level rise protection for the historic resources area have been included in this Subalternative. In all other respects, Subalternative 4A assumes a development plan that is identical to the Project. An analysis of Subalternative 4A is contained in Section F.30 (Changes to Chapter VI [Alternatives]). As demonstrated by that analysis, all of the components (with the exception of the treatment for sea level rise in the historic district and the raising of some heights in the adjacent R&D areas) are identical to the historic preservation component of Alternative 4 and the land use plan of the Project. An analysis of the difference in sea level rise protection is discussed in this section, and shows that this modification would not result in any new or more severe impacts than as previously analyzed in the EIR. Similarly, the minor change in heights in the R&D district to assure a total square footage development for Subalternative A that would be the same as the Project, is discussed in this section and the analysis shows that this adjustment in the distribution of square footage would not result in any new or more severe impacts compared to those previously analyzed in the Draft EIR. Thus, the significance conclusions for the Project and the significance conclusions for Alternative 4, with respect to historic preservation, are the same for Subalternative 4A.

In summary, none of the refinements to the Project with the stadium, Variants, or Alternatives change the significance conclusions in the Draft EIR, and do not result in any new or more severe impacts than analyzed in the Draft EIR.

E. Approval Actions

Local and state agencies will rely on the EIR for the approval actions listed below and in doing so will adopt CEQA findings, including a statement of overriding considerations and a mitigation monitoring and reporting program. In addition, below is a list of anticipated approval actions that federal agencies will take for the Project.

Local Agency Approvals

1. San Francisco Redevelopment Agency

- Certify the Final EIR
- Report to the Board of Supervisors on the amendments to the Hunters Point Shipyard and Bayview Hunters Point Redevelopment Plans
- Approve amendments to the redevelopment plans
- Approve amendments to the design for development documents for the redevelopment plans
- Approve land transfer agreements with the San Francisco Port, San Francisco Recreation and Park, State Lands Commission, California Department of Parks and Recreation and U.S. Navy
- Approve a development agreement with San Francisco Housing Authority for replacement of Alice Griffith public housing and funding approvals
- Approve disposition and development agreements and owner participation agreements with developers in the redevelopment areas.
- Approve an Interagency Cooperative Agreement with the Board of Supervisors and City agencies
- Approve a tax allocation agreement with the Board of Supervisors

2. Planning Commission

- Certify the Final EIR
- Adopt amendments to the General Plan to ensure consistency between the General Plan and the amendments to the Hunters Point Redevelopment Plan and the Bayview Hunters Point redevelopment Plan
- Find the Project in conformity with the General Plan, including Section 101.1 Priority Policies
- Recommend the redevelopment plan amendments to the Board of Supervisors
- Recommend amendments to the Planning Code and Zoning Maps for the Project
- Approve a cooperation agreement with the Redevelopment Agency for the Project
- Approve amendments to the design for development documents for the redevelopment plans
- Approve office allocations for the Project under the Planning Code
- Adopt Proposition K shadow impact findings related to shadow on Recreation and Park property

3. Board of Supervisors

- Affirm certification of the Final EIR
- Approve amendments to the General Plan
- Approve amendments to the Hunters Point Shipyard and Bayview Hunters Point Redevelopment Plans
- Approve amendments to the Planning Code and Zoning Maps for the Project
- Approve an Interagency Cooperation Agreement with the Redevelopment Agency
- Approve land transfer agreements with the San Francisco Port, Redevelopment Agency and State Lands Commission; and the Redevelopment Agency and San Francisco Recreation and Park
- Approve amendments to Health Code Article 31 and related amendments to the Health Code, Public Works Code and Building Code
- Approve amendments to the Subdivision Code
- Approve a tax allocation agreement with the Redevelopment Agency
- Approve street vacations

4. San Francisco Recreation and Parks Commission

- Recommend to the Board of Supervisors the approval of a land transfer to the Redevelopment Agency
- Recommend shadow determinations under Proposition K to the Planning Commission

5. San Francisco Port Commission

- Approve land transfer agreements with the Agency Commission and the State Lands Commission

6. San Francisco Health Commission

- Recommend to the Board of Supervisors the approval of amendments to Health Code Article 31

7. San Francisco Public Utilities Commission, San Francisco Municipal Transportation Commission, San Francisco Fire Commission

- Approve an Interagency Cooperation Agreement with the Redevelopment Agency

8. Department of Public Works

- Approve subdivision maps, public improvements and infrastructure

9. Department of Building Inspection

- Approve building permits

10. San Francisco Art Commission

- Approve public art and the design of public structures on City property

11. San Francisco Housing Authority

- Approve a development agreement with Redevelopment Agency for replacement of Alice Griffith public housing and funding approvals

Regional and State Agencies**1. Bay Conservation and Development Commission**

- Approve amendments of the Bay Plan and Seaport Plan
- Approve permits for activities within BCDC's jurisdiction
- Review Project land use plan for federal consistency under the Coastal Zone Management Act for activities not previously authorized in Consistency Determination No. CN-1-99

2. State Lands Commission

- Approve public trust land agreement with the Agency, Port and Board of Supervisors

3. California Department of Parks and Recreation

- Approve a land transfer agreement for the reconfiguration of the Candlestick Point State Recreation Area with the Agency
- Approve a General Plan Amendment for the Candlestick Point State Recreation Area

4. California Department of Transportation

- Approve encroachment permits for Project roadway improvements within its jurisdiction

5. Regional Water Quality Control Board

- Approve section 401 water quality certifications

6. Bay Area Air Quality Management district

- Approve air quality permits for individual uses and air quality construction management plans

Federal Agencies**1. US Navy**

- Approve land transfer agreements, leases and easements with the Redevelopment Agency for property at Hunters Point Shipyard

2. US Army Corps of Engineers

- Approve permits for fill related to Project construction
- Consult with USFWS or NMFS prior to carrying out its discretionary authority under Section 404 of the Clean Water Act, pursuant to Section 7 of the Endangered Species Act, Marine Mammal Protection Act and Magnuson-Stevens Act regarding federally listed species, harbor seals and California sea lions and essential fish habitat.

3. Department of the Interior

- Approve conversions of portions of Candlestick Point State Recreation Area reconfiguration improved with Land and Water Conservation Fund grants

4. US Coast Guard

- Issue determination regarding vessel navigability for the Yosemite Slough bridge

5. US Department of Housing and Urban Development

- Approve a land transfer agreement with Redevelopment Agency and San Francisco Housing Authority for replacement of Alice Griffith public housing and funding approvals

F. Contents and Location of Record

The record upon which all findings and determinations related to the Project are based includes the following:

- The draft EIR and all documents referenced in or relied upon by the EIR (The references in these findings to the EIR or FEIR include both the Draft EIR and the C&R documents.)
- All information including written evidence and testimony provided by City staff to the Agency Commission and Planning Commission relating to the EIR, the Project, and the alternatives set forth in the EIR.
- All information provided by the public, including the proceedings of the public hearings on the adequacy of the Draft EIR and the transcripts of the hearings, including the Agency Commission hearings on December 15, 2009 and January 5, 2010 and the Planning Commission hearing on December 17, 2009, and written correspondence received by the Agency and Planning Department staff during the public comment period of the Draft EIR.

The Agency Commission has relied on all of the documents listed above in reaching its decision on the Project, even if not every document was formally presented to the Agency Commission. Without exception, any documents set forth above not so presented fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the Agency Commission was aware in approving the Project. Other documents influenced the expert advice provided to Planning Department staff or consultants, who then provided advice to the Agency Commission. For that reason, such documents form part of the underlying factual basis for the Agency Commission's decisions relating to the adoption of the Project.

The public hearing transcript, a copy of all letters regarding the Draft EIR received during the public review period, the administrative record, and background documentation for the Final EIR, as well as additional materials concerning approval of the Project and adoption of these findings are contained in Planning Commission files, located at 1650 Mission Street, Suite 400, San Francisco, CA 94103. Linda Avery, Planning Commission Secretary, is the custodian of records for the Planning Commission. CEQA files are also available at the San Francisco Redevelopment Agency at One South Van Ness Avenue, Fifth Floor, San Francisco, CA 94103. Gina Solis, Redevelopment Agency Commission Secretary, is the Custodian of Records for the Agency. All files have been available to the Agency Commission and the public for review in considering these findings and whether to approve the Project.

G. Findings About Significant Environmental Impacts and Mitigation Measures

The following Sections II, III and IV set forth the Agency Commission's findings about the Final EIR's determinations regarding significant environmental impacts and the mitigation measures proposed to address them. These findings provide the written analysis and conclusions of the Agency Commission regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR and adopted by the Agency Commission as part of the Project. To avoid duplication and redundancy, and because the Agency Commission agrees with, and hereby adopts, the conclusions in the Final EIR, these findings will not repeat the analysis and conclusions in the Final EIR, but instead incorporates them by reference in these findings and relies upon them as substantial evidence supporting these findings.

In making these findings, the Agency Commission has considered the opinions of staff and experts, other agencies and members of the public. The Agency Commission finds that the determination of significance thresholds is a judgment decision within the discretion of the City and County of San Francisco; the significance thresholds used in the FEIR are supported by substantial evidence in the record, including the expert opinion of the FEIR preparers and City staff; and the significance thresholds used in the FEIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the Project. Thus, although as a legal matter, the Agency Commission is not bound by the significance determinations in the FEIR (see Pub. Resources Code Section 21082.2, subd. (e)), the Agency Commission finds them persuasive and hereby adopts them as its own.

These findings do not attempt to describe the full analysis of each environmental impact contained in the FEIR. Instead, a full explanation of these environmental findings and conclusions can be found in the FEIR and these findings hereby incorporate by reference the discussion and analysis in the FEIR supporting the FEIR's determination regarding the Project's impacts and mitigation measures designed to address those impacts. In making these findings, the Agency Commission ratifies, adopts and incorporates in these findings the determinations and conclusions of the FEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the Agency Commission adopts and incorporates all of the mitigation measures set forth in the FEIR and the attached MMRP to substantially lessen or avoid the potentially significant and significant impacts of the Project. In adopting these mitigation measures, the Agency Commission intends to adopt each of the mitigation measures proposed in the FEIR for the Project. Accordingly, in the event a mitigation measure recommended in the FEIR has inadvertently been omitted in these findings or the MMRP, such mitigation measure is hereby adopted and incorporated in the findings below by reference. In addition, in the event the language describing a mitigation measure set forth in these findings or the MMRP fails to accurately reflect the mitigation measures in the FEIR due to a clerical error, the language of the policies and implementation measures as set in the FEIR shall control. The impact numbers and mitigation measure numbers used in these findings reflect the impact and mitigation measure numbers used in the FEIR.

In the section II, III and IV below, the same findings are made for a category of environmental impacts and mitigation measures. Rather than repeat the identical finding dozens of times to address each and every significant effect and mitigation measure, the initial finding obviates the need for such repetition because in no instance is the Agency Commission rejecting the conclusions of the FEIR or the mitigation measures recommended in the FEIR for the Project.

II. IMPACTS FOUND TO BE LESS THAN SIGNIFICANT AND THUS REQUIRING NO MITIGATION

Under CEQA, no mitigation measures are required for impacts that are less than significant. (Pub. Resources Code, Section 21002; CEQA Guidelines, Section 15126.4, subd. (a)(3), 15091.) Based on substantial evidence in the whole record of this proceeding, the Agency Commission finds that implementation of the Project will not result in any significant impacts in the following areas and that these impact areas, therefore, do not require mitigation. In some instances, the Project would have no impact in a particular area; these instances are denoted below by "NI" for no impact.

A. Land Use and Plans

- 1. Impact LU-1 (NI), Impacts on an established community from physical division of the area. (DEIR III.B-34 -37)**

2. **Impact LU-2**, Consistency with plans, policies and regulations. (DEIR III.B-7-32, III.B-37-39; C&R 56-57, 60-61, 64, 66, 136, 138, 140, 148, 152, 345, 360, 381, 594-595, 597, 627, 764, 780-781, 783, 786, 790-791, 799, 833, 869, 888, 931, 945, 951, 1223, 1389, 1656, 1706, 1717, 1732, 1790, 1792-1793, 1797, 1881, 2148, 2150, 2186-2187)
3. **Impact LU-3**, Effects on existing land use character. (DEIR III.B-39-41; III.E-49-50; III.E-59 through 69; C&R 351, 735, 787-788, 1468-1469)

B. Population, Housing and Employment

1. **Impact PH-1**, Effects of construction activities on population growth. (DEIR III.C-14)
2. **Impact PH-2**, Effects of Project operations on population growth. Impact PH-2 includes Impacts PH-2a and PH-2b. (DEIR III.C-14-21, V-10-V-14; C&R 737, 1655-1656, 1732)
3. **Impact PH-3 (NI)**, Impacts on existing housing units or residents from displacement. Impact PH-3 includes Impacts PH-3a and PH-3b. (DEIR III.C-21-22; C&R 951, 1699, 2019)

C. Transportation and Circulation

1. **Impact TR-9**, Effects on LOS and traffic volume at these intersections: Cesar Chavez/Evans Avenue; Bayshore Boulevard and the intersections of Hester/US-101 Southbound off-ramp, Tunnel Avenue, Arleta Street, Leland Avenue, Silver Avenue, and Old County Road; San Bruno/Silliman Street/US-101 Southbound off-ramp; Sierra Point/Lagoon Way). (DEIR III.D-86; C&R 203, 628, 802-803, 1015, 2405-2406)
2. **Impact TR-19**, Effects on transit demand at Downtown Screenlines. (DEIR III.D-102; C&R 291, 2406)
3. **Impact TR-20**, Effects on transit demand at Regional Screenlines. (DEIR III.D-103-104; C&R 291, 2406)
4. **Impact TR-29**, Effects on transit demand on the 14X-Mission Express transit route when on I-280. (DEIR III.D-116; C&R 2406)
5. **Impact TR-31 (NI)**, Safety effects on conditions for bicyclists and effects on bicycle accessibility or the ability to accommodate bicycle demand associated with Project uses. (DEIR II-5, II-33, II-41-42, III.D-117; C&R 56-58, 66-67, 255, 269, 289-290, 345, 347-349, 360, 379, 381, 597-598, 602, 606-607, 627, 739, 757, 801-802, 893, 946, 1193-1194, 1394, 1397, 1469, 1652-1654, 1703, 1734, 1881-1882, 1884, 2013, 2137)

6. **Impact TR-33 (NI)**, Effects on pedestrian facilities. (DEIR II-7, II-28-29; II-43, III.D-118-119; C&R 56-58, 60, 64, 66-67, 289-290, 345, 348, 360, 627-628, 736, 739, 750-751, 757, 771, 781, 786, 788, 790, 801-802, 894, 905, 946, 948, 1468, 1473, 1615, 1652-1654, 1734, 1873)
7. **Impact TR-34**, Safety effects for pedestrians and effects on public sidewalk crowding or pedestrian accessibility. (DEIR III.D-119-120; C&R 148, 345, 381, 589, 602, 628, 802, 893, 949, 1028, 1072, 1193, 1213, 1394, 1397, 1427, 1651, 1654, 1733, 1881, 2137)
8. **Impact TR-35**, Effects on parking needs and ability to accommodate parking with alternative solutions. (DEIR II-7; II-43; III.D-120-125; C&R 290, 359, 361, 363, 380, 598, 781, 829, 833, 860, 932, 945, 1702, 1732, 1798, 1883, 2153, 2406)
9. **Impact TR-36**, Effects to on-street parking. (DEIR III.D-125-126; C&R 61, 148-149, 152, 156, 255, 360, 380, 597, 799, 869, 893, 933, 1653, 1733-1744, 1882-1884)
10. **Impact TR-37**, Effects on loading spaces. (DEIR III.D-126-127; C&R 61)
11. **Impact TR-40**, Effects on bicycle access on game days. (DEIR III.D-136; C&R 66, 348, 802, 1193, 1653, 2406)
12. **Impact TR-41**, Safety effects for pedestrians and effects on public sidewalk crowding or pedestrian accessibility on game days. (DEIR III.D-137; C&R 66, 348, 802, 1193, 1653)
13. **Impact TR-42**, Effects on pedestrian access to State Park facilities on game days. (DEIR III.D-137-138; C&R 66, 348, 802, 1193, 1403, 1468, 1652-1653)
14. **Impact TR-43**, Effects on parking needs on game days. (DEIR III.D-138-140; C&R 628, 835, 1798, 2153, 2406)
15. **Impact TR-44**, Effects on loading capacity on game days. (DEIR III.D-140-141)
16. **Impact TR-45**, Effects on emergency access on game days. (DEIR III.D-141; C&R 269, 1401, 2185)
17. **Impact TR-48**, Effects on bicycle circulation during secondary events. (DEIR III.D-145-146)
18. **Impact TR-49**, Effects on pedestrian accessibility during secondary events. (DEIR III.D-146)

19. **Impact TR-50**, Effects on parking supply for secondary events. (DEIR III.D-146)
20. **Impact TR-53**, Effects on bicycle circulation during arena events. (DEIR III.D-150; C&R 2406)
21. **Impact TR-54**, Safety effects for pedestrians and effects on public sidewalk crowding or pedestrian accessibility during arena events. (DEIR III.D-150)
22. **Impact TR-55**, Effects on arena parking needs. (DEIR III.D-150-151; C&R 2407)
23. **Impact TR-56 (NI)**, Effects on air traffic. (DEIR III.D-151)
24. **Impact TR-57**, Impacts from design features. (DEIR III.D-151; C&R 381, 1881, 1884)
25. **Impact TR-58**, Effects on emergency access to the Project area. (DEIR III.D-152; C&R 269, 1733, 2185)

D. Aesthetics

1. **Impact AE-1**, Effects of construction activities on scenic vistas or resources. (DEIR III.E-50-51; C&R 755-756)
2. **Impact AE-3**, Creation of new sources of light and glare during construction activities. (DEIR III.E-52; C&R 756)
3. **Impact AE-4**, Effects of Project operations on scenic vistas. (DEIR III.E-53-57; C&R 351-352, 750, 755, 789, 2408)
4. **Impact AE-5**, Effects of Project operations on scenic resources. (DEIR III.E-57-59; C&R 351-352, 755-757, 780-781, 787-789, 2408)
5. **Impact AE-6**, Effects on visual character or quality of the site or surroundings. Impact AE-6 includes Impacts AE-6a and AE-6b. (DEIR III.E-49-50; III.E-59-69; C&R 351, 787-789, 2408)

E. Shadows

1. **Impact SH-1**, New shadow effects on outdoor recreation facilities or other public areas under Project as described in DEIR Chapter II and Tower Variants 3A and 3B. Impact SH-1 includes Impacts SH-1a and SH-1b. (DEIR III.F-9-42; C&R 41, 43, 776-778, 793, 1218, 1649, 1703, 1733)

F. Air Quality

1. **Impact AQ-5**, Effects on air quality standards or creation of or worsening of air quality violations. (DEIR III.H-31-33; C&R 768, 1387)
2. **Impact AQ-7**, Effects on sensitive receptors from pollutant concentrations. (DEIR III.H-35; C&R 163-165 764-770, 2008, 2313-2316, 2318, 2402-2403)
3. **Impact AQ-8**, Creation of odors affecting a substantial number of people. (DEIR III.H-35-36; C&R 1028, 1643)
4. **Impact AQ-9**, Effects on implementation of the applicable air quality plan. (DEIR III.H-36-37; C&R 1387)

G. Noise and Vibration

1. **Impact NO-4**, Effects on ambient noise levels in the Project vicinity above levels existing without the Project. (DEIR III.I-40-41; C&R 46, 758-760, 762-763)
2. **Impact NO-5**, Effects of groundborne vibration or groundborne noise levels. (DEIR III.I-41; C&R 29, 37, 44-45, 51-52, 763, 795)
3. **Impact NO-8**, Effects of noise from airport operations on people residing or working in the area. (DEIR III.I-52)

H. Cultural Resources and Paleontological Resources

1. **Impact CP-1a**, Effects of construction activities on historical resources. (DEIR III.J-33; C&R 369)

I. Hazards and Hazardous Materials

1. **Impact HZ-13**, Effects caused by exposures to hazardous materials contamination during construction of off-site roadway improvements. (DEIR III.K-88-90)
2. **Impact HZ-16**, Effects caused by exposures to hazardous materials in buildings and structures. Impact HZ-16 includes Impacts HZ-16a and HZ-16b. (DEIR III.K-101-103; C&R 429)
3. **Impact HZ-20**, Effects of routine use, storage, transport, or disposal of hazardous materials during construction. (DEIR III.K-109; C&R 766, 966, 1021)
4. **Impact HZ-22**, Effects of routine use, storage, transport, or disposal of hazardous materials during Project operation. (DEIR III.K-111-114)

5. **Impact HZ-23**, Effects caused by exposures to hazardous materials via upset and accident conditions. (DEIR III.K-114-115; C&R 968)
6. **Impact HZ-25 (NI)**, Safety effects from conflicts with airport land use plans. (DEIR III.K-116)
7. **Impact HZ-26 (NI)**, Safety effects from proximity to private airstrips. (DEIR III.K-116)
8. **Impact HZ-27**, Effects caused by creation of fire hazards or conflicts with emergency response and evacuation plans. (DEIR III.K-117-118; C&R 83, 88, 107, 124, 887, 968, 2140)

K. Geology and Soils

1. **Impact GE-6b (NI)**, Effects caused by seismically induced landslides. (DEIR III.L-48; C&R 80-81)
2. **Impact GE-12 (NI)**, Effects caused by surface fault rupture. (DEIR III.L-62; C&R 79-80)
3. **Impact GE-13 (NI)**, Impacts to septic tanks or alternative wastewater disposal systems. (DEIR III.L-62)
4. **Impact GE-14 (NI)**, Effects on unique geologic features or from changes to topography. (DEIR III.L-62-63)

L. Hydrology and Water Quality

1. **Impact HY-2**, Effects on groundwater supplies and groundwater recharge during construction. (DEIR III.M-76)
2. **Impact HY-3**, Effects of erosion and siltation from changes to drainage during construction. (DEIR III.M-76-77; C&R 122, 908, 1029, 1217, 1392, 1641, 1650)
3. **Impact HY-6c**, Effects of Yosemite Slough bridge on water quality standards or waste discharge requirements. (DEIR III.M-92; C&R 115-116, 1214, 1216)
4. **Impact HY-8 (NI)**, Effects of Project operation on groundwater supplies and groundwater recharge. (DEIR III.M-94-95)
5. **Impact HY-13a**, Effects of structures at Candlestick Point on impeding or redirecting flood flows. (DEIR III.M-103; C&R 10, 91-107, 393, 858-859, 881-888, 906, 985, 1027-1028, 1393, 1649)

6. **Impact HY-13c**, Effect of Yosemite Slough bridge on impeding or redirecting flood flows. (DEIR III.M-104-105; C&R 394, 771, 783, 797, 1654)
7. **Impact HY-15**, Effects of inundation by seiche, tsunami, or mudflow on people or structures. (DEIR III.M-106-107; C&R 105)

M. **Biological Resources**

1. **Impact BI-1 (NI)**, Consistency with regional conservation plans. (DEIR III.N-50)
2. **Impact BI-2**, Effects of Project activities on common species and habitats. (DEIR III.N-50-55; C&R 37-38, 42, 52, 935)
3. **Impact BI-3a (NI)**, Effects of construction activities at Candlestick Point on candidate, sensitive or special status plant species. (DEIR III.N-55-56; C&R 32, 34, 37, 734, 1072)
4. **Impact BI-3b (NI)**, Effects of construction activities at Hunters Point Phase II on candidate, sensitive or special status plant species. (DEIR III.N-56; C&R 2020, 2419)
5. **Impact BI-5a (NI)**, Effects of construction activities at Candlestick Point on eelgrass beds. (Candlestick Point) (DEIR III.N-69; C&R 793-794, 1219, 1390)
6. **Impact BI-7a**, Effects of construction activities at Candlestick Point on foraging habitat for raptors. (DEIR III.N-76-77; C&R 934-935, 1221)
7. **Impact BI-8a**, Effects of construction activities at Candlestick Point on western red bat. (DEIR III.N-79-80; C&R 795)
8. **Impact BI-9a (NI)**, Effects of pile driving during construction at Candlestick Point on marine mammals or fish identified as candidate, sensitive or special status species. (DEIR III.N-80; C&R 37, 1073)
9. **Impact BI-10a**, Effects of construction activities at Candlestick Point on native oysters. (DEIR III.N-83; C&R 37, 795, 907, 1390,)
10. **Impact BI-10b**, Effects of construction activities at Hunters Point Phase II on native oysters. (DEIR III.N-84; C&R 37, 795, 907, 1391)
11. **Impact BI-10c**, Effects of construction of Yosemite Slough bridge on native oysters. (DEIR III.N-85)

12. **Impact BI-13a**, Effects of construction activities at Candlestick on native resident or migratory wildlife movements, corridors and nursery sites. (DEIR III.N-93-95)
13. **Impact BI-15a (NI)**, Effects on fish, wildlife and aquatic communities from disturbance of contaminated soils or sediments during construction at Candlestick Point. (DEIR III.N-99-100)
14. **Impact BI-16a**, Effects of Project operations at Candlestick on candidate, sensitive or special status species, native resident or migratory fish movements and use of native wildlife nursery sites. (DEIR III.N-101)
15. **Impact BI-16b**, Effects of Project operations at Hunters Point Phase II on aquatic candidate, sensitive or special status species, native resident or migratory fish and wildlife species movements and use of native wildlife nursery sites. (DEIR III.N-102-103)
16. **Impact BI-17a (NI)**, Effects of Project operations at Candlestick Point on nesting American peregrine falcons. (DEIR III.N-103; C&R 1221)
17. **Impact BI-17b (NI)**, Effects of Project operations at Hunters Point Phase II on nesting American peregrine falcons. (DEIR III.N-103; C&R 1221, 2008, 2020, 2151)
18. **Impact BI-18a (NI)**, Effects of Project operations at Candlestick Point on aquatic candidate, sensitive or special status species and designated essential fish habitat (EFH). (DEIR III.N-103-104; C&R 795-796, 2133)
19. **Impact BI-19a (NI)**, Effects on aquatic organisms from disturbance of contaminated soils or sediments during Project operations at Candlestick Point. (DEIR III.N-106)

N. Public Services

1. **Impact PS-5 (NI)**, Effects of construction activities on access to school services. (DEIR III.O-28-29)
2. **Impact PS-6**, Effects of Project operations on school services. (DEIR III.O-29-31)
3. **Impact PS-7 (NI)**, Effects of construction activities on access to library services. (DEIR III.O-36)
4. **Impact PS-8**, Effects of Project operations on library services. (DEIR III.O-36-37)

O. Recreation

1. **Impact RE-3**, Effects on existing recreational opportunities. (DEIR III.P-32-33; C&R 349, 605, 731, 735, 739, 744, 748-751, 753-754, 756-759, 776, 779-781, 783, 789, 797, 1071-1072, 1654, 1873-1874)

P. Utilities

1. **Impact UT-1**, Impacts on water supply facilities or entitlements. (DEIR III.Q-16-17, V-8; C&R 950-951, 1735, 2012, 2182)

2. **Impact UT-4**, Impacts on wastewater treatment facilities. (DEIR III.Q-34)

3. **Impact UT-6**, Impacts on hazardous waste transport, storage and disposal facilities from construction activities. Impact UT-6 includes Impacts UT-6a and UT-6b. (DEIR III.Q-47-49; C&R 766, 966,1061)

4. **Impact UT-8**, Impacts on hazardous waste transport, storage and disposal facilities from Project operations. Impact UT-8 includes Impacts UT-8a and UT-8b. (DEIR III.Q-54-56)

5. **Impact UT-10**, Impacts on dry utility service providers capacity to provide facilities. (DEIR III.Q-60-62; C&R 382, 1469, 2011, 2017, 2138-2139)

Q. Energy

1. **Impact ME-1**, Effects of energy use during construction activities. (DEIR III.R-16-17; V-6-V-7)

III. FINDINGS OF POTENTIALLY SIGNIFICANT IMPACTS THAT CAN BE AVOIDED OR REDUCED TO A LESS-THAN-SIGNIFICANT LEVEL

CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potential significant impacts if such measures are feasible (unless mitigation to such levels is achieved through adoption of a project alternative). The findings in this Section III and Section IIIA and in Section IV and Section IVA concern mitigation measures set forth in the FEIR. These findings discuss mitigation measures as proposed in the FEIR and as recommended for adoption by the Agency Commission. The full explanation of the potentially significant environmental impacts is set forth in section III of the Draft EIR and in some cases is further explained in the C&R. In most cases, mitigation measures will be implemented by the Project Applicant or another developer or facility operator who enters into a disposition and development agreement or other agreement with the Agency. In these cases, implementation of mitigation measures by the Project Applicant or other developer or facility operator have been or will, in future agreements, be made conditions of project approval. In the case of

other mitigation measures, an agency of the City or another non-City agency will have responsibility for implementation of mitigation measures.

In any instance in which the mitigation measure will be implemented by an entity other than the Project Applicant, the entity that will be responsible for implementation is explained in the paragraphs below. Generally, City agencies will implement mitigation measures as part of their existing permitting or program responsibilities, such as the San Francisco Department of Building Inspection ("DBI") or San Francisco Department of Public Works ("SFDPW") through their permit responsibilities, the San Francisco Public Utilities Commission ("SFPUC") through its operation of the City sanitary sewer system, or the San Francisco Municipal Transportation Agency ("SFMTA") as part of its operation and maintenance of traffic systems. Some measures require the SFMTA to implement new transit service and the feasibility of the implementation of these mitigation measures is documented in *Memorandum to Sonali Bose, Gail Stein, Julie Kirschbaum, Timothy Papandreou from Wells Lawson, Office of Economic and Workforce Development RE: SFMTA Cost/Revenue Analysis for Candlestick Point / Hunters Point Phase 2, May 18, 2010*. The Agency Commission has partial responsibility for implementation of mitigation measures MM-HZ-1b, MM HZ-5a, MM HZ-9, MM HZ-10b and MM HZ-12. The Agency Commission adopts these mitigation measures and agrees to assist in the implementation of these mitigation measures.

The mitigation measures proposed for adoption in this section are the same as the mitigation measures identified in the Final EIR for the Project as proposed, with the exception of MM TR-17. Mitigation measure MM TR-17 has been modified as shown and explained in Section III.A.3, below. For MM TR-17, the full text as proposed for adoption is set forth below in Section III.A.3. The full text of all of the mitigation measures as proposed for adoption is contained in **Attachment B**, the Mitigation Monitoring and Reporting Program.

As explained previously, **Attachment B** contains the Mitigation Monitoring and Reporting Program required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. It provides a table setting forth each mitigation measure listed in the FEIR that is required to reduce or avoid a significant adverse impact. **Attachment B** also specifies the entity responsible for implementation of each measure, and establishes monitoring actions and a monitoring schedule.

The Agency Commission adopts all of the mitigation measures proposed for the Project. The Agency Commission finds that all of the mitigation measures are appropriate and feasible, and that changes or alterations have been incorporated into the Project that mitigate or avoid the significant environmental effects as identified in the FEIR. Based on the analysis contained in the FEIR, other considerations in the record, and the standards of significance, the Agency Commission finds that implementation of all of the proposed mitigation measures discussed in this Section III and Section IIIA will reduce potentially significant impacts to a *less-than-significant* level.

A. Transportation and Circulation²

1. Impact TR-16: Traffic Impacts on Harney Way. (DEIR III.D-97-98; C&R 202, 601-602, 841, 1014-1016, 1193, 1404, 2405) The Project would increase traffic volumes on Harney Way.

MM TR-16, Widen Harney Way as shown in Figure 5 in the Transportation Study.

The Project would widen and improve the existing Harney Way when traffic demand warrants. Implementation of MM TR-16 would ensure that Harney Way would be widened and improved to its final configuration when traffic demand warrants additional capacity. Therefore, potential Project impacts would be reduced to less than significant as demonstrated in Table III.D-10, Table III.D-11, and Table III.D-12 in the Draft EIR. The Agency Commission recognizes that MM TR-16 is partially within the jurisdiction of SFMTA and SFDPW. The Agency Commission urges SFMTA and SFDPW to assist in implementing this mitigation measure, and finds that SFMTA and SFDPW can and should participate in implementing this mitigation measure.

2. Impact TR-17: Transit Capacity Impacts. (DEIR III.D-98-100; C&R 291, 596, 738, 1466-1467, 2383, 2388, 2406) Implementation of the Project would increase demand for transit capacity, and would contribute to cumulative transit demand.

MM TR-17, Implement the Project's Transit Operating Plan as set forth in the Transportation Plan.

The Project would include substantial improvements to transit service in the Hunters Point Shipyard, Candlestick Point, and Bayview neighborhoods, in addition to improvements currently proposed as part of SFMTA's Transit Effectiveness Program. Implementation of MM TR-17 would ensure that the Project's Transit Operating Plan would be implemented and Project-generated transit trips would be accommodated within the existing and proposed transit capacity.

MM TR-17 as set forth in the Final EIR enumerates specific service improvements for SFMTA to make in the Project area to satisfy transit demand. These service improvements are intended to augment existing transit service provided by SFMTA. Over time, SFMTA may adjust transit service in the City in response to changing needs or actions taken by other transit service providers in the area. As a result of such adjustments, SFMTA may determine that the same transit service goals identified for the Project area can be achieved in alternative ways. To provide SFMTA the ability to adjust the specific transit service solutions implemented for the Project area while achieving the same goals for transit service improvement as

² For Transportation and Circulation, cumulative impacts are included in this subsection.

identified in the Final EIR, MM TR-17 is modified as shown, with additions **underlined in bold italicized type** and deletions denoted by ~~strike-through~~:
MM TR-17

Implement the Project's Transit Operating Plan.

The Project Applicant shall work with SFMTA to develop and implement the Project's Transit Operating Plan. Upon completion of the Project build out, Elements elements of the Project Transit Operating Plan shall include:

- *Extension of the 24-Divisadero, the 44-O'Shaughnessy, and the 48-Quintara-24th Street into Hunters Point Shipyard.*
- *Increased frequency on the 24-Divisadero to 6 minutes in the AM and PM peak periods.*
- *Extension of the 29-Sunset from its current terminus near the Alice Griffith housing development, near Gilman Avenue and Giants Drive, into the proposed Candlestick Point retail area. The 29-Sunset would operate a short line between Candlestick Point and the Balboa Park BART station. This would increase frequencies on the 29-Sunset by reducing headways between buses from 10 minutes to 5 minutes during the AM and PM peak periods between Candlestick Point and the Balboa BART station. Every other bus would continue to serve the Sunset District (to the proposed terminus at Lincoln Drive and Pershing Drive in the Presidio) at 10-minute headways.*
- *Convert T-Third service between Bayview and Chinatown via the Central Subway from one-car to two-car trains or comparable service improvement.*
- *Extension of the 28L-19th Avenue Limited from its TEP-proposed terminus on Geneva Avenue, just east of Mission Street, into the Hunters Point Shipyard transit center. The 28L-19th Avenue Limited would travel along Geneva Avenue across US-101 via the proposed Geneva Avenue extension and new interchange with US-101, to Harney Way. East of Bayshore Boulevard, the 28L-19th Avenue Limited would operate as BRT, traveling in exclusive bus lanes into the Candlestick Point area. The BRT route would travel through the Candlestick Point retail corridor, and cross over Yosemite Slough into the Hunters Point Shipyard transit center.*
- *The 28L-19th Avenue Limited would operate a short line to the Balboa Park BART station. This would increase frequencies on the 28L-19th Avenue Limited by reducing headways between buses from 10 minutes to 5 minutes for the segment between Hunters Point Shipyard and the Balboa Park BART station. Every other bus would continue to the Sunset District (to the proposed terminus at North Point Street and Van Ness Avenue) at 10-minute headways. If the TEP-proposed extension of the 28L has not been implemented by the SFMTA by the time implementation of this measure is called for in the Transportation Study (Appendix D), the Project*

Applicant shall fund the extension of that line between its existing terminus and Bayshore Boulevard.

- *New CPX-Candlestick Express to downtown serving the Candlestick Point site, traveling along Harney Way (with potential stops at Executive Park), before traveling on US-101 toward downtown, terminating at the Transbay Terminal.*
- *New HPX-Hunters Point Shipyard Express to downtown serving the Hunters Point Shipyard site, traveling from the Hunters Point Shipyard Transit Center, along Innes Avenue, with stops at the India Basin and Hunters View areas, before continuing along Evans Avenue to Third Street, eventually entering I-280 northbound at 25th/Indiana. The HPX would continue nonstop to the Transbay Terminal in Downtown San Francisco.*

The SFMTA may modify or refine components listed above as needed to address changes in the operating environment and service demands, using SFMTA's service planning methodology and public review process, provided that the modifications result in:

- **Similar or higher transit mode share to what was projected in the DEIR. As shown in Table III.D-5 in the DEIR, the proposed Project is anticipated to generate approximately 20 percent of its external person-trips via transit during the weekday PM peak hour. If modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that the changes would still provide for a weekday PM peak hour transit mode share for external trips (i.e., outside of the Candlestick Point-Hunters Point Shipyard Phase II Development Area) of approximately 20 percent or greater.**
- **Adequate capacity to serve projected transit ridership. Table III.D-17 in the DEIR presents the transit ridership and capacity utilization percentages for three study area cordons. The cordons are described on page III.D-66 of the DEIR and illustrated in Figure 19 in the Project's Transportation Study (included in Appendix D of the DEIR). As shown in Table II.D-17 in the DEIR, most of the study area cordons are projected to operate well within SFMTA's 85 percent capacity utilization standard. If modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that the changes would not cause capacity to deteriorate such that the study area cordons as defined in Table III.D-17 in the DEIR would operate above SFMTA's capacity utilization standard.**
- **Similar or less severe traffic impacts than identified in Impacts TR-3 through TR-16 in the DEIR. Specifically, if modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that vehicular traffic congestion (i.e., intersection level of service) would be similar to or better than conditions identified in the DEIR at study intersections along major**

transit corridors in the study area including Palou Avenue, Gilman Avenue, Harney Way, and Innes Avenue/Hunters Point Boulevard/Evans Avenue. Before implementing any major service changes to the expected components of the Transit Operating Plan, the SFMTA shall submit a memorandum to the San Francisco Planning Department's Environmental Review Officer, describing the proposed changes and technical analysis demonstrating compliance with the criteria above.

Nothing in this measure requires the SFMTA to provide any service in advance of the schedule for Transit Improvement Phasing set forth as Table 5 in the Transit Operating Plan or in excess of the criteria set forth above.

Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources. With the implementation of MM TR-17, as proposed for modification, Project-generated transit trips would be accommodated within the existing and proposed transit capacity, and, therefore, Project impacts on transit capacity would be less than significant and the Project's contribution to cumulative impacts on transit capacity would be reduced to less than significant. The Agency Commission adopts MM TR-17 as modified. The Agency Commission recognizes that MM TR-17 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure.

3. Impact TR-18: Transit Impacts at Study Area Cordons. (DEIR III.D-100–102; C&R 291) The Project would increase demand for transit capacity and contribute to cumulative demand for transit capacity at the study area cordons.

MM TR-17, Implement the Project's Transit Operating Plan.

With full implementation of the Project's proposed transit improvements, the Project demand and the Project's contribution to cumulative transit demand would not exceed the proposed transit system's capacity at the study area cordons. Implementation of MM TR-17 would ensure that the Project's Transit Operating Plan would be implemented and the Project's impacts and the Project's contribution to cumulative impacts on transit capacity at the study area cordons would be less than significant.

B. Aesthetics

1. Impact AE-2: Degradation of Visual Character/Quality Impacts During Construction. (DEIR III.E–51–52; C&R 2402-2403) Construction activities associated with the Project could result in temporary degradation of the visual character or quality of the site.

MM AE-2, Mitigation for Visual Character/Quality Impacts During Construction.

MM AE-2, which would be incorporated into the Project's construction documents, would ensure that this impact is reduced to less than significant by requiring construction sites to be screened from public view at street level, appropriate staging of construction equipment, measures to keep the surrounding streets clean and free from construction debris, and measures to maintain the cleanliness of construction equipment. Compliance with this mitigation measure would ensure that construction equipment would be confined to the Project site and ensure routine cleaning of construction equipment so mud and dirt are not spread onto adjacent streets.

2. Impact AE-7: Effects of Light and Glare. (DEIR III.E-69-76; C&R 48, 756-757, 789, 1224, 1703, 2408, 2412). Implementation of the Project could create a new source of substantial light or glare that would adversely affect day or night views in the area or that would substantially impact other people or properties. Impact AE-7 includes Impacts AE-7a and AE-7b.

MM AE-7a.1, Lighting Direction/Fixtures and Screening Walls to Minimize Glare and Light Spill.**MM AE-7a.2, Low-level/Unobtrusive Light Fixtures.****MM AE-7a.3, Lighting Plan.****MM AE-7a.4, Non-reflective Exterior Surfaces to Minimize Glare Impacts.****MM AE-7b.1, Testing of Field Lighting System. (Stadium Option)****MM AE-7b.2, Stadium Lighting Orientation and Cut-Off Shields. (Stadium Option)**

Implementation of MM AE-7a.1 through MM AE-7a.4 would reduce impacts from light and glare to less than significant by requiring shielding of lighting fixtures, minimizing spill light from Project lighting, screening vehicle headlights to the maximum extent feasible, and eliminating or minimizing increased glare by the use of nonreflective glass and nonreflective textured surfaces in the proposed development. MM AE-7b.1 and MM AE-7b.2 would ensure that the impact of stadium lighting would be less than significant by requiring that the stadium operator: (1) test the installed field lighting system to ensure that lighting meets the operating requirements in the stadium and minimizes obtrusive spill lighting from the facility and (2) ensure that the stadium lighting orientation and use of cut-off shields minimize increased lighting on adjacent properties.

C. Wind

1. Impact W-1: Wind Hazard Criterion. (DEIR III.G-6-10; C&R 7, 46, 1704, 2304, 2412) Implementation of the Project would include tall structures that could result in ground-level-equivalent wind speed exceeding 26 mph for a single hour of the year in pedestrian corridors and public spaces. Impact W-1 includes Impacts W-1a and W-1b.

MM W-1a, Building Design Wind Analysis.

Implementation of MM W-1a would reduce the potential wind impact to less than significant by requiring review by a qualified wind consultant for buildings above 100-feet in height and, where necessary, design changes to reduce any impact below the established threshold. Required design changes would reduce potential hazardous wind effects at pedestrian level by forcing wind downwash to tops of podium areas and/or into the street and away from pedestrian areas and thus ensure pedestrian safety.

D. Air Quality

1. Impact AQ-1: Criteria Pollutants From Construction Activities. (DEIR III.H-23-24; C&R 159-160, 2403) Construction activities associated with the Project would result in short-term increases in the emission of criteria air pollutants and precursors that could exceed Bay Area Air Quality Management District (BAAQMD) CEQA significance criteria.

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans.

Implementation of MM HZ-15 requires the Applicant to ensure that construction contractors comply with the dust control strategies included in an approved dust control plan and, as applicable, an Asbestos Dust Mitigation Plan. These plans would reduce the impacts caused by construction dust to less than significant.

2. Impact AQ-2: Diesel Particulate Matter (DPM) from Construction Activities. (DEIR III.H-24-27; C&R 160-163, 764-765, 768-770, 2218, 2311-2316, 2403) Construction activities associated with the Project could result in impacts to off-site populations from Project-generated emissions of DPM. Impact AQ-2 includes Impact AQ-2a, AQ-2b, and AQ-2c.

MM AQ-2.1, Implement Emission Control Device Installation on Construction.

MM AQ-2.2, Implement Emission Control Device Installation on Construction Equipment used for Alice Griffith Parcels.

Implementation of MM AQ-2.1 and MM AQ-2.2 would require emission control devices to reduce the carcinogenic and noncarcinogenic health risks posed by DPM

emissions during construction activities to below established thresholds, and thus would reduce this impact to less than significant.

3. Impact AQ-3: Toxic Air Contaminants (TACs) from Construction Activities. (DEIR III.H-27-30; C&R 159-163, 165-168, 764-768, 2307-2308, 2316-2317, 2403) Construction activities associated with the Project could result in impacts to off-site and Alice Griffith populations from emissions of TACs bound to soil-PM₁₀. Impact AQ-3 includes Impacts AQ-3a and Impact AQ-3b.

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans.

Implementation of MM HZ-15 requires the Applicant to ensure that construction contractors comply with the dust control strategies included in an approved dust control plan and, as applicable, an Asbestos Dust Mitigation Plan. These plans would reduce the impacts caused by construction dust to less than significant.

4. Impact AQ-6: TACs From Project Operations. (DEIR III.H-33-34; C&R 159, 161-168, 2307-2308, 2320, 2412-2414) Implementation of HPS Phase II could expose nearby receptors to an increase in local concentrations of TACs due to the operation of Research and Development (R&D) uses.

MM AQ-6.1, Analysis for Facilities on Less Than One Acre.

MM AQ-6.2, Analysis for Facilities on One Acre or Larger.

MM AQ-6.1 and MM AQ-6.2 would ensure that emissions from Project R&D uses would not exceed the BAAQMD residential cancer risk and the chronic non-cancer hazard index thresholds at the nearest residential locations. Thus, these mitigation measures would reduce the potential impact to less than significant.

E. Noise and Vibration

1. Impact NO-1: Exposure of Persons to Excessive Noise Levels From Construction Activities. (DEIR III.I-24-33; C&R 759, 2403) Construction associated with the Project would generate increased noise levels for both off-site and on-site sensitive receptors; however, the Project's construction noise impacts would occur primarily in noise-sensitive areas adjacent or near to active construction sites (which would vary in location and duration over the entire period the proposed Project would be under construction), would not occur during recognized sleep hours, and would be consistent with the requirements for construction noise that exist in Sections 2907 & 2908 of the *Municipal Code*. Impact NO-1 includes Impacts NO-1a and Impact NO-1b.

MM NO-1a.1, Construction Document Mitigation to Reduce Noise Levels During Construction.

MM NO-1a.2, Noise-reducing Pile Driving Techniques and Muffling Devices.

MM NO-1a.1 and MM NO-1a.2 require implementation of construction best management practices to reduce construction noise and the use of noise-reducing pile-driving techniques. Additionally, construction activities must comply with the San Francisco Noise Ordinance. These requirements would reduce construction noise impacts to less than significant.

F. Cultural Resources and Paleontological Resources

1. Impact CP-2: Change in Significance of Archaeological Resources From Construction Activities. (DEIR) III.J-36-41; C&R 26-27, 426, 1031, 1463, 1657-1658, 1825-1826, 2332, 2403) Construction activities associated with the Project could result in a substantial adverse change in the significance of archaeological resources, including prehistoric Native American resources, Chinese fishing camps, and maritime related resources. Impact CP-2 includes Impacts CP-2a and 2b.

MM CP-2a, Mitigation to Minimize Impacts to Archaeological Resources at Candlestick Point.

MM CP-2a would reduce the potential Project impacts to significant archaeological resources to less than significant by ensuring that an archaeological testing program is performed and that any discovered archaeological resources are appropriately handled and documented.

2. Impact CP-3: Change in the Significance of Paleontological Resources From Construction Activities. DEIR III.J-41-44; C&R 25-28, 2403) Construction activities associated with the Project could result in a substantial adverse change in the significance of a paleontological resource. Impact CP-3 includes Impacts CP-3a, CP-3b, CP-3c and CP-3d.

MM CP-3a, Paleontological Resources Monitoring and Mitigation Program.

MM CP-3a would reduce the potentially significant effects of construction-related activities to paleontological resources throughout the Project site to less than significant by mitigating for the permanent loss of the adversely affected resources through implementation of a Paleontological Resources Monitoring and Mitigation Program.

G. Hazards and Hazardous Materials

1. Impact HZ-1: Exposure to Known Contaminants During Construction Activities. (DEIR III.K-53-57; C&R 115-116, 124- 134, 140-144, 995, 2221-2223, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil and/or groundwater with known contaminants from historic uses. Impact HZ-1 includes Impacts HZ-1a and HZ-1b.

MM HZ-1a, Article 22A Site Mitigation Plans. (Applies only to Candlestick Point.)

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies only to HPS Phase II)

Implementation of MM HZ-1a would reduce effects related to exposure of known contaminants at Candlestick Point by requiring compliance with SF Health Code Article 22A, or an equivalent process, which requires implementation of site mitigation prior to construction. For construction activities at HPS Phase II, MM HZ-1b would require SFDPH to verify that activities that would disturb soil or groundwater would be done in compliance with all applicable restrictions imposed for the site under the federal Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") process. Implementation of these measures would ensure that potential adverse effects on human health and the environment from exposure to known subsurface hazards from construction activities would be reduced to less than significant. The Agency Commission recognizes that MM HZ-1b is partially within the jurisdiction of the Agency. The Agency Commission adopts MM HZ-1b and agrees to participate in implementing this mitigation measure.

2. Impact HZ-2: Exposure to Previously Unidentified Contaminants During Construction. (DEIR III.K-58-60; C&R 115-116, 124- 134, 140-144, 995, 2221-2223, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil and/or groundwater with previously unidentified subsurface contaminants from historic uses. Impact HZ-2 includes Impacts HZ-2a and HZ-2b.

MM HZ-2a.1, Unknown Contaminant Contingency Plan. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-2a.2, Site-Specific Health and Safety Plans. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

Implementation of MM HZ-2a.1 requires the development of an unknown contaminant contingency plan in accord with specific SF Health Code requirements to assure appropriate procedures are followed in the event unexpected contamination

is encountered during construction activities, including procedures for ensuring compliance with applicable laws and regulations. MM HZ-2a.2 requires the preparation and implementation of a site-specific health and safety plan in compliance with federal and state OSHA regulations and other applicable laws prior to implementing construction activities. Implementation of these measures would ensure that potential adverse effects on human health and the environment from unidentified subsurface hazards encountered during construction would be reduced to less than significant.

3. Impact HZ-3: Off-Site Transport and Disposal of Contaminated Soil and Groundwater During Construction. (DEIR III.K-60-62; C&R 766, 966, 1021, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of off-site transport and disposal of contaminated soil and groundwater. Impact HZ-3 includes Impacts HZ-3a and HZ-3b.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies to HPS Phase II.)

MM HY-1a.3, Groundwater Dewatering Plan.

For all Project construction and remediation activities that require transport of contaminated soil or groundwater, compliance with federal, state, and local regulations and implementation of MM HZ-1b (requiring compliance with restrictions imposed in the clean up decision and property transfer documents) and MM HY-1a.3 (requiring compliance with SFRWQCB/NPDES standards in the dewatering plan) would ensure that potential adverse effects on human health and the environment from dewatered groundwater would be reduced to less than significant.

4. Impact HZ-4: Installation of Underground Utilities. (DEIR III.K-63-64; C&R 115-116, 124- 134, 140-144, 995, 2221-2223, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of improvements to existing and installation of new underground utilities. Impact HZ-4 includes Impacts HZ-4a and HZ-4b.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HZ-2a.2, Site-Specific Health and Safety Plans.

Implementation of MM HZ-1a, MM HY-1b, and MM HZ-2a.1, MM HZ-2a.2 and compliance with the plans, documents, and regulations referenced and required by these mitigation measures would ensure the safe handling of potentially contaminated materials encountered during improvement or installation of underground utilities and effects on human health and the environment would be reduced to less than significant.

5. Impact HZ-5: Installation of Foundation Support Piles. (DEIR III.K-64-66; C&R 115-116, 2403) Construction activities associated with the Project create vertical conduits for hazardous materials that could contaminate groundwater as a result of installation of foundation support piles. Impact HZ-5 includes Impacts HZ-5a and 5b.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents.

MM HZ-5a, Foundation Support Piles Installation Plan.

Implementation of MM HZ-1a, MM HZ-1b, and MM HZ-5a, which require compliance with Articles 22A and 31 and confirmation from SFPDH that the method that will be used for installing boreholes for each pile will prevent disturbance of potentially contaminated fill materials, would reduce potential groundwater quality impacts from pile driving to less than significant. The Agency Commission recognizes that MM HZ-5a is partially within the jurisdiction of the Agency. The Agency Commission adopts MM HZ-5a and agrees to participate in implementing this mitigation measure.

6. Impact HZ-6: Soil Handling, Stockpiling, and Transport Within the Project Site Boundaries During Construction. (DEIR III.K-66-70; C&R 964-967, 1021, 2227-2228, 2237, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the handling, stockpiling, and transport of soil that may contain contaminants. Impact HZ-6 includes Impacts HZ-6a and HZ-6b.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combined Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.1 and MM HY-1a.2 would require preparation and implementation of a site specific Storm Water Pollution Prevention Plan ("SWPPP") in accordance with the detailed requirements of these mitigation measures, which will ensure implementation of the specific measures and Best Management Practices ("BMPs") that are applicable to construction activities in the event of a spill or exposure of hazardous materials and would control potential discharge of chemicals, if chemicals were present in the runoff. Actions for responding to this impact to be required by a site mitigation plan and unknown contaminant contingency plan are included in MM HZ-1a and MM HZ-2a.1. Thus, for all construction associated with the Project requiring handling, stockpiling, or transport of soil, compliance with existing federal, state, and local regulations and controls and implementation of mitigation measures MM HZ-1a, MM HZ-1b, MM HY-1a.1, and MM HY-1a.2 would ensure that potential adverse effects on human health and the environment would be reduced to less than significant.

7. Impact HZ-7: Contaminated Surface Runoff From Construction Sites. (DEIR III.K-70-71; C&R 29, 908, 1214-1217, 1641-1643, 1650-1652, 2261, 2342-2343, 2403) Construction activities associated with the Project could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials that could be present in stormwater runoff. Impact HZ-7 includes Impacts HZ-7a and HZ-7b.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decisions Documents and Property Transfer Documents.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.1 and MM HY-1a.2 would require preparation and implementation of a site specific Storm Water Pollution Prevention Plan (SWPPP) in accordance with the detailed requirements of these mitigation measures, which will ensure implementation of the specific measures and Best Management Practices (BMPs) that are applicable to construction activities in the event of a spill or exposure of hazardous materials and would control potential discharge of chemicals, if chemicals were present in the runoff. MM HZ-1a, MM HZ-1b and MM HZ-2a.1 require compliance with restrictions and plans designed to protect human health and the environment from contamination. Implementation of MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HY-1a.1, and MM HY-1a.2 would ensure that potential adverse

effects on human health and the environment would be reduced to less than significant.

8. Impact HZ-8: Exposure to Hazardous Materials Releases That Have Not Been Fully Remediated. (DEIR III.K-71-77; C&R 129, 2418) Project occupants or visitors in or near portions of HPS Phase II where remediation has not been fully completed could be exposed to unacceptable levels of hazardous materials.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decisions Documents and Property Transfer Documents.

MM HZ-12, Compliance with Administrative Order on Consent at Early Transferred Parcels. (applies only at HPS Phase II.)

To the extent this impact could be potentially significant despite the Navy's implementation of protective measures, it would be reduced to less than significant through implementation of MM HZ-1b, which requires compliance with restrictions in cleanup and transfer documents. Potential impacts to occupants or visitors from remediation activities that may be conducted by or on behalf of the Agency or the Project Applicant are addressed by MM HZ-12, which requires compliance with all requirements incorporated into remedial design documents, work plans, health and safety plans, dust control plans, and any other document or plan required under the Administrative Order on Consent. Thus, these mitigation measures would ensure that the potential impact would be reduced to less than significant.

9. Impact HZ-9: Exposure to Hazardous Materials in Conjunction with Limited Remediation Activities During Construction of the Yosemite Slough Bridge. (DEIR III.K-77-79; C&R 1029, 1217-1218, 2403) Construction at HPS Phase II could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of Yosemite Slough bridge construction.

MM HZ-9, Navy-approved work plans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-9 would require that remediation activities conducted in conjunction with the construction of the Yosemite Slough bridge be performed only after approval of a removal action workplan for excavation of radiologically contaminated materials. Thus, the potential for exposure to hazardous materials during remediation activities conducted in conjunction with the construction of the Yosemite Slough bridge would be reduced to less than significant. The Agency Commission recognizes that MM HZ-9 is partially within the jurisdiction of the Agency. The Agency Commission adopts MM HZ-9 and agrees to participate in implementing this mitigation measure.

10. Impact HZ-10: Exposure to Hazardous Materials During Construction of Shoreline Improvements. (DEIR III.K-79-85, C&R 908, 1388, 1642, 2403)

Construction activities associated with the Project in shoreline areas could expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of sediment or soil that may contain chemical or radiological contaminants. Impact HZ-10 includes Impacts HZ-10a and HZ-10b.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related impacts.

MM BI-5b.4, Eelgrass Water Quality BMPs.

MM BI-12b.1, Essential Fish Habitat Avoidance and Minimization Measures.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HZ-10b, Regulatory Agency Approved Workplans and Permits for Shoreline Improvements

MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1, MM HY-1a.1, MM HY-1a.2, MM HZ-1a, MM HZ-2a.1, and MM HZ-10b would require that for locations where sediments containing hazardous materials are identified, plans must be developed and implemented to manage the sediment, all appropriate permits must be obtained, and best management practices (BMPs) must be implemented. The mitigation measures and compliance with applicable regulations and required permits would ensure that potential impacts related to exposure to hazardous materials releases from contaminated sediments that could be disturbed during proposed shoreline improvements would be reduced to less than significant. The Agency Commission recognizes that MM HZ-10b is partially within the jurisdiction of the Agency. The Agency Commission adopts MM HZ-10b and agrees to participate in implementing this mitigation measure.

11. Impact HZ-11: Exposure to Hazardous Materials While Constructing Infrastructure on Navy-owned property. (DEIR III.K-85-86; C&R 71, 106, 143, 908, 2338, 2403) Construction activities associated with the Project on Navy-owned property, including improvements to existing utilities and installation of new underground utilities, could expose occupants, construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, or groundwater that may contain contaminants from historic uses, including radiological contaminants.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decisions Documents and Property Transfer Documents.

MM HZ-9, Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-1b requires the Project Applicant to submit documentation to the SFDPH that the work will be undertaken in compliance with all restrictions imposed pursuant to the Institutional Controls (ICs) and transfer documents. The general requirement of MM HZ-9 would also apply to underground utility construction activities by requiring that such activities be conducted only after approval of a workplan by the Navy to assure compliance with all restrictions imposed on the property through the CERCLA process. This mitigation measure would also require such underground utility construction activities be conducted in accordance with applicable health and safety plans, DCPs, or any other documents or plans required under applicable law or laws. As a result, the potential for exposure to hazardous materials during underground utility construction at HPS Phase II would be reduced to less than significant.

12. Impact HZ-12: Remediation Activities Conducted in Conjunction with Development Activities at HPS Phase II Early Transfer Parcels. (DEIR III.K-86-88; C&R 129, 136, 138-139, 142-144, 429, 995, 1467-1468, 2338, 2403) Remediation activities conducted on behalf of the City or Project Applicant at the HPS Phase II parcels transferred prior to completion of remediation in an "early transfer" could expose remediation and construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, and/or groundwater that may contain contaminants from historic uses.

MM HZ-12, Compliance with Administrative Order on Consent at Early Transferred Parcels. (Applies only at HPS Phase II.)

To ensure compliance with the controls included in the Administrative Order on Consent ("AOC"), MM HZ-12 would require SFDPH to ensure that before development occurs, the Agency or the Project Applicant and their contractors have incorporated all applicable requirements imposed through the CERCLA process into

remedial design documents, work plans, health and safety plans, DCPs and any other document or plan required under the AOC or other applicable law, as a condition of development, as illustrated by the requirements set forth in DEIR Table III.K-2, and to conduct work in accordance with the Risk Management Plans ("RMPs"). As a result, the potential impact of exposure to hazardous materials during remediation activities conducted on behalf of the Agency or the Project Applicant in conjunction with development of HPS Phase II would be reduced to less than significant. The Agency Commission recognizes that MM HZ-12 is partially within the jurisdiction of the Agency. The Agency Commission adopts MM HZ-12 and agrees to participate in implementing this mitigation measure.

13. Impact HZ-14: Exposure of Ecological Receptors to Hazardous Materials From Construction Activities. (DEIR III.K-90-96; C&R 2403)

Construction activities associated with the Project could expose ecological receptors to unacceptable levels of hazardous materials as a result of the disturbance of soil, sediment, and/or groundwater with contaminants from historic uses.

MM HZ-1a, Article 22A Site Mitigation Plans. (Applies only to Candlestick Point.)

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies only to HPS Phase II)

MM HZ-2a.1, Unknown Contaminant Contingency Plan. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-9, Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-10b, Regulatory Agency Approved Workplans and Permits for Shoreline Improvements

MM HZ-12, Compliance with Administrative Order on Consent at Early Transferred Parcels. (applies only at HPS Phase II.)

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.3, Groundwater Dewatering Plan.

MM BI-4a.1, Wetlands and jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.**MM BI-4a.2, Wetlands and jurisdictional/Regulated Waters Impact Minimization for Construction-Related impacts.****MM BI-12b.1, Essential Fish Habitat Avoidance and Minimization Measures.**

Compliance with the requirements, permits, and other procedures included in these mitigation measures would ensure that soil handling, stockpiling, and movement within HPS Phase II would not present a significant risk to the ecological environment. Therefore, with implementation of MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM BI-4a.1, MM BI-4a.2, and MM BI-12b.1, potential construction ecosystem impacts related to handling, stockpiling, and transport of contaminated soil (including shoreline sediments) and groundwater would be reduced to less than significant.

14. Impact HZ-15: Exposure to Naturally Occurring Asbestos From Construction Activities. (DEIR III.K-97-101; C&R 124-127, 142-143, 765-768, 1389, 2403) Construction and grading activities associated with the Project could disturb soil or rock that could be a source of naturally occurring asbestos in a manner that would present a human health hazard.

MM HZ-15, Asbestos Dust Mitigation Plans (ADMP) and Dust Control Plans (DCP).

MM HZ-15 would require the preparation of an ADMP approved by BAAQMD and a DCP approved by SFDPH before commencing grading activities and any other activity that could disturb potential sources of naturally-occurring asbestos (including Bay Fill areas with the potential to contain previously-disturbed serpentinite fragments). Implementation of this mitigation measure would reduce impacts related to naturally occurring asbestos exposure during construction activities to less than significant.

15. Impact HZ-17: Worker Safety — Exposure to Hazardous Materials During Construction. (DEIR III.K-103-104; C&R 115-116, 124- 134, 140-144, 995, 2221-2223, 2403) Construction activities associated with the Project could expose construction workers to unacceptable levels of hazardous materials in soil, sediment, or groundwater in a manner which would present a human health risk. Impact HZ-17 includes Impacts HZ-17a and HZ-17b.

MM HZ-2a.2, Site-Specific Health and Safety Plans. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-2a.2 would require compliance with applicable federal and Cal/OSHA requirements and other applicable laws. Implementation of this mitigation measure would reduce impacts to less than significant.

16. Impact HZ-18: Construction Activities with Potential to Generate Hazardous Air Emissions Within One-Quarter Mile of a School. (DEIR III.K-105-108; C&R 965, 1643, 2403) Construction activities associated with the Project could result in a human health risk involving the disturbance of naturally occurring asbestos, demolition of buildings that could contain hazardous substances in building materials, or possible disturbance of contaminated soils or groundwater within one-quarter mile of an existing school. Impact HZ-18 includes Impacts HZ-18a and HZ-18b.

MM HZ-1a, Article 22A Site Mitigation Plans. (Applies only to Candlestick Point.)

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies only to HPS Phase II)

MM HZ-2a.1, Unknown Contaminant Contingency Plan. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-2a.2, Site-Specific Health and Safety Plans. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans.

This impact at Candlestick Point would be reduced through implementation of Article 22A, where applicable, or MM HZ-1a and MM HZ-2a.1. Implementation of MM HZ-1b would reduce impacts for HPS Phase II development. Implementation of mitigation measures MM HZ-2a.1, MM HZ-2a.2, and MM HZ-15 would control dust emissions at the Project site boundary, which would ensure airborne asbestos emissions do not present a health risk off site. Thus, this impact would be reduced to less than significant through implementation of MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, and MM HZ-15.

17. Impact HZ-19: Potential Project-Wide Impacts During Construction (DEIR III.K-108-109; C&R 908, 2403) Simultaneous construction activities at the Project site could pose a human health risk from the release of contaminants from historic uses or fill.

MM HZ-1a, Article 22A Site Mitigation Plans. (Applies only to Candlestick Point.)

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies only to HPS Phase II)

MM HZ-9, Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans

MM HZ-1a, MM HZ-1b, MM HZ-9, and MM HZ-15 would ensure that before development occurs within the Project site and vicinity that appropriate procedures are in place to manage any residual contaminants, including implementation of soil management plans, ADMPs and DCPs. These procedures would address both soil movement and reuse within the Project site and off-site reuse and disposal. With the implementation of these mitigation measures, impacts from soil movements within and outside of the entire Project site would be reduced to less than significant.

18. Impact HZ-21: Routine Maintenance of Properties. (DEIR III.K-110-111; C&R 82-83, 87, 107, 123, 133, 796-797, 857-858, 873, 1642, 2140, 2418) Implementation of the Project could result in adverse impacts to residents, visitors, or the environment from periodic maintenance requiring excavation of site soils to maintain or replace utilities, repair foundations, or make other subsurface repairs. Impact HZ-21 includes Impacts HZ-21a and HZ-21b.

MM HZ-1a, Article 22A Site Mitigation Plans. (Applies only to Candlestick Point.)

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. (Applies only to HPS Phase II)

MM HZ-2a.1, Unknown Contaminant Contingency Plan. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-2a.2, Site-Specific Health and Safety Plans. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.)

MM HZ-9, Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-12, Compliance with Administrative Order on Consent at Early Transferred Parcels. (applies only at HPS Phase II.)

MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-9, and MM HZ-12 would require compliance with existing regulations and restrictions set forth in ICs, transfer documents, and the AOC and require the preparation and implementation of a soil management contingency plan and HASP. Thus, these mitigation measures

would ensure that impacts during occupancy from these routine maintenance activities would be reduced to less than significant.

19. Impact HZ-24: Facilities With Hazardous Air Emissions Within One-Quarter Mile of a School. (DEIR III.K-115-116; C&R 1643, 241, 2412-2415)

Areas designated for research and development uses within HPS Phase II could pose a human health risk as a result of hazardous air emissions within one-quarter mile of a school.

MM AQ-6.1, Analysis for Facilities on Less Than One Acre.

MM AQ-6.2, Analysis for Facilities on One Acre or Larger.

MM AQ-6.1 and MM AQ-6.2 identify limitations on the location and extent of air emissions of research and development facilities to ensure BAAQMD significance thresholds are not exceeded. Thus, this impact would be less than significant.

H. Geology and Soils

1. Impact GE-1: Soil Erosion During Construction. (DEIR III.L-31-33; C&R 1392, 2403) Construction activities associated with the Project could result in the loss of topsoil caused by soil erosion. Impact GE-1 includes Impacts GE-1a and GE-1b.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

Requirements to control surface soil erosion during and after construction associated with the Project would be implemented through the requirements of MM HY-1a.1. Thus, the potential for adverse effects from soil erosion would be avoided or reduced to less than significant.

2. Impact GE-2: Settlement from Dewatering Activities During Construction. (DEIR III.L-33-35; C&R 2403) Construction activities associated with the Project could result in damage to structures caused by settlement from lowering of groundwater levels. Impact GE-2 includes Impacts GE-2a and GE-2b.

MM GE-2a, Mitigation to Minimize Dewatering Impacts During Construction.

With implementation of the dewatering techniques, groundwater level monitoring, and subsurface controls as specified in the San Francisco Building Code ("SFBC") and required by MM GE-2a, groundwater levels in the area would not be lowered such that that unacceptable settlement at adjacent or nearby properties would occur. Consequently, settlement hazards related to dewatering would be less than significant.

3. Impact GE-3: Destabilization of Bedrock From Rock Removal Activities. (DEIR III.L-35-37; C&R 2403) Rock removal activities at the Alice Griffith Public Housing site and the Jamestown area could result in damage to structures from vibration and/or settlement caused by the fracturing of bedrock for excavation.

MM GE-3, Mitigation to Minimize Rock Fragmentation Impacts During Construction.

With implementation of the techniques and ground surface and building damage monitoring, as specified in the SFBC and required by MM GE-3, vibration from controlled rock fragmentation in the area would not cause unacceptable settlement or damage at adjacent or nearby properties would occur. Consequently, settlement hazards related to controlled rock fragmentation would be less than significant.

4. Impact GE-4: Seismically Induced Groundshaking. (DEIR III.L-37-40; C&R 80-81, 87, 2418) Implementation of the Project could expose people and structures to substantial adverse effects caused by seismically induced groundshaking. Impact GE-4 includes Impacts GE-4a and GE-4b.

MM GE-4a.1, Site-Specific Geotechnical Investigation with Seismic Analyses.

MM GE-4a.2, Seismic Design Compliance Documentation.

MM GE-4a.3, Site-specific Seismic Analyses to Ensure Safety of Bridge Design.

MM GE-4a.1, MM GE-4a.2, and MM GE-4a.3 would require design-level geotechnical investigations that would include site-specific seismic analyses to evaluate the peak ground accelerations for design of Project structures and the Yosemite Slough bridge, as required by the SFBC and Caltrans. Implementation of these mitigation measures would ensure that potential impacts from groundshaking would be less than significant. The Agency Commission recognizes that MM GE-4a is partially within the jurisdiction of DBI. The Agency Commission urges DBI to assist in implementing this mitigation measure, and finds that DBI can and should participate in implementing this mitigation measure.

5. Impact GE-5: Seismically Induced Ground Failure. (DEIR III.L-40-46; C&R 80-81, 87, 2418) Implementation of the Project could expose people or structures to substantial adverse effects caused by seismically induced ground failure such as liquefaction, lateral spreading, and settlement. Impact GE-5 includes Impacts GE-5a and GE-5b.

MM GE-4a.1, Site-Specific Geotechnical Investigation with Seismic Analyses.

MM GE-4a.2, Seismic Design Compliance Documentation.

MM GE-4a.3, Site-specific Seismic Analyses to Ensure Safety of Bridge Design.

MM GE-5a, Site-Specific Geotechnical Investigation with Analyses of Liquefaction, Lateral Spreading and/or Settlement.

MM GE-4a.1, MM GE-4a.2, MM GE-4a.3, and MM GE-5a would require design-level geotechnical investigations and must include site-specific seismic analyses to evaluate the peak ground accelerations for design of Project structures, as required by the SFBC. The structural design review required by these mitigation measures would ensure that all necessary methods and techniques would be incorporated in the design for Project foundations and structures to reduce potential impacts from ground failure or liquefaction less than significant. The Agency Commission recognizes that MM GE-5a is partially within the jurisdiction of DBI. The Agency Commission urges DBI to assist in implementing this mitigation measure, and finds that DBI can and should participate in implementing this mitigation measure.

6. Impact GE-6a: Seismically Induced Landslides. (DEIR III.L-46-49; C&R 80- 81, 2418) Implementation of the Project at Candlestick Point, including the Alice Griffith Housing, could expose people or structures to substantial adverse effects caused by seismically induced landslides. Impact GE-6a includes Impacts GE-6.

MM GE-6a, Site-Specific Geotechnical Investigation with Landslide Risk Analyses.

MM GE-4a.2, Seismic Design Compliance Documentation.

Implementation of MM GE-6a and MM GE-4a.2 would ensure compliance with the SFBC and any special requirements of the HUD for compliance documentation. Thus, these mitigation measures would reduce potential impacts from landslides to less than significant. The Agency Commission recognizes that MM GE-6a is partially within the jurisdiction of DBI. The Agency Commission urges DBI to assist in implementing this mitigation measure, and finds that DBI can and should participate in implementing this mitigation measure.

7. Impact GE-7: Shoreline Instability. (DEIR III.L-49-51; C&R 2418) Implementation of the Project could expose people or structures to substantial adverse effects caused by shoreline instability. Impact GE-7 includes Impacts GE-7a and GE-7b.

MM HY-12a.1, Finished Grade Elevations Above Base Flood Elevation.

MM HY-12a.1 would reduce this impact to less than significant through requirements that account for future sea level rise and include an adaptive management strategy that would provide further protection for future sea level rise.

8. Impact GE-8: Landslides. (DEIR III.L-51-52; C&R 2418)
Implementation of the Project could expose people or structures to substantial adverse effects caused by landslides. Impact GE-8 includes Impacts GE-8a and GE-8b.

MM GE-6a, Site-Specific Geotechnical Investigation with Landslide Risk Analyses.

Site-specific, design-level geotechnical investigations would be required to be submitted to Department of Building Inspection (DBI) in connection with permit applications for individual Project elements, as specified in MM GE-6a. The site-specific analyses must assess potential landslide conditions and prescribe the requirements for foundations on slopes in accordance with the SFBC. With implementation of this mitigation measure, the Project's impact with regard to landslides would be reduced to less than significant.

9. Impact GE-9: Soil Hazards — Settlement. (DEIR III.L-52-56; C&R 80, 86-89, 105, 124, 1766, 2418) Implementation of the Project could expose people or structures to substantial adverse effects caused by damage from settlement. Impact GE-9 includes Impacts GE-9a and GE-9b.

MM GE-5a, Site-Specific Geotechnical Investigation with Analysis of Liquefaction Lateral Spreading and/or Settlement.

MM GE-4a.2, Seismic Design Compliance Documentation.

MM GE-4a.3, Site-specific Seismic Analyses to Ensure Safety of Bridge Design.

Implementation of MM GE-5a, MM GE-4a.2, and MM GE-4a.3 would ensure compliance with the provisions of the SFBC and site-specific geotechnical and design recommendations. Thus, these mitigation measures would reduce the impact to less than significant.

10. Impact GE-10: Soil Hazard — Expansive Soils. (DEIR III.L-56-59; C&R 2418) Implementation of the Project could expose people or structures to substantial adverse effects caused by expansive soils.

MM GE.10a, Site-Specific Geotechnical Investigation with Expansive Soils Analyses.

MM GE-4a.1, Site-Specific Geotechnical Investigation with Seismic Analyses.

MM GE-4a.2, Seismic Design Compliance Documentation.

MM GE-4a.3, Site-specific Seismic Analyses to Ensure Safety of Bridge Design.

MM GE-10a, MM GE-4a.1, MM GE-4a.2, and MM GE-4a.3 would require compliance with applicable codes and site-specific geotechnical and design recommendations. Thus these mitigation measures would avoid or reduce the impact to Project structures from expansive soils to less than significant. The Agency Commission recognizes that MM GE-10a is partially within the jurisdiction of DBI. The Agency Commission urges DBI to assist in implementing this mitigation measure, and finds that DBI can and should participate in implementing this mitigation measure.

11. Impact GE-11: Soil Hazard — Corrosive Soils. (DEIR III.L-59-62; C&R 2418) Implementation of the Project could expose people or structures to substantial adverse effects caused by corrosive soils.

MM GE-11a, Site-Specific Geotechnical Investigation with Corrosive Soils Analyses.

MM GE-4a.2, Seismic Design Compliance Documentation.

MM GE-4a.3, Site-specific Seismic Analyses to Ensure Safety of Bridge Design.

MM GE-11a, MM GE-4a.2, and MM GE-4a.3 would ensure that all applicable code requirements and site-specific geotechnical and design recommendations would be implemented. Thus these mitigation measures would avoid or reduce the impact to Project structures from corrosive soils to less than significant. The Agency Commission recognizes that MM GE-11a is partially within the jurisdiction of DBI. The Agency Commission urges DBI to assist in implementing this mitigation measure, and finds that DBI can and should participate in implementing this mitigation measure.

I. Hydrology and Water Quality

1. Impact HY-1: Compliance with Water Quality Standards and Waste Discharge Requirements During Construction. (DEIR III.M-55-76; C&R 907, 1641, 1799; 2403) Construction activities associated with the Project could cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements. Impact HY-1 includes Impacts HY-1a, HY-1b, and HY-1c.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combined Storm Sewer System.

MM HY-1a.2, Stormwater Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.3, Groundwater Dewatering Plan.

MM HZ-12, Compliance with Administrative Order of Consent at Early Transferred Parcels.

MM HZ-15, Asbestos Dust Mitigation and Control Plans.

MM HZ-10b, Regulatory Agency – Approved Work Plans and Permits for Shoreline Improvements.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts.

MM BI-5b.4, Eelgrass Water Quality BMPs.

MM BI-12b.1, Essential Fish Habitat Avoidance and Minimization Measures.

MM BI-12b.2, Deconstruction/Construction Debris Recovery.

MM HZ-1a, Article 22 Site Mitigation Plan.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HZ-9, Navy Approved Work Plans for Construction and Remediation Activities on Navy Owner Property.

With respect to erosion and sediment control, implementation of MM HY-1a.1, MM HY-1a.2, MM HZ-1a, MM HZ-2a.1, MM HZ-9, MM HZ-12, and MM HZ-15 would reduce the potential for contaminants, sediments, or pollutants in stormwater runoff to enter the combined or separate sewer system. MM HY-1a.3 would reduce the impacts of discharging dewatered groundwater into the separate sewer system.

With respect to potential water quality impacts caused by the shoreline improvements at Candlestick Point, implementation of MM HY-1a.2, MM HY-1a.2, MM HZ-1a, MM HZ-2a.1, and MM HZ-10b would reduce the potential for contaminants, sediments, or pollutants in stormwater runoff to enter the Lower Bay. MM HY-1a.1 and MM HY-1a.2, each of which requires the preparation and implementation of a SWPPP, would assure implementation of specified BMPs that would address shoreline improvement activities.

MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1, and MM BI-12b.2 provide specific mechanisms to protect biological resources and reduce potential effects on water quality during in-water construction activities.

All of these mitigation measures would ensure that water quality standards would not be exceeded and that the Project would not cause or contribute to a violation of the applicable Waste Discharge Requirements ("WDRs"). Thus, this impact would be reduced to less than significant. The Agency Commission recognizes that MM HY-1a.1 is partially within the jurisdiction of SFPUC. The Agency Commission urges SFPUC to assist in implementing this mitigation measure, and finds that SFPUC can and should participate in implementing this mitigation measure.

2. Impact HY-4: Flooding Effects of Construction Activities. (DEIR III.M-77; C&R 1392, 1793, 2403) Construction activities associated with the Project could substantially alter the existing drainage pattern of the site.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combined Storm Sewer System.

MM HY-1a.2, Stormwater Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.3, Groundwater Dewatering Plan.

With implementation of MM HY-1a.1 and MM HY-1a.2, and MM HY-1a.3, construction of the Project would not substantially alter the existing drainage pattern of the site or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. Thus, this impact would be reduced to less than significant.

3. Impact HY-5: Storm Sewer System Capacity During Construction. (DEIR III.M-77-78; C&R 2403) Construction activities associated with the Project could create or contribute runoff water that could exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff.

MM HY-1a.2, Stormwater Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.2 would include measures to collect, retain, and discharge runoff in ways that would not exceed the capacity of existing downstream drainage facilities. Thus, this impact would be reduced to less than significant.

4. Impact HY-6: Compliance with Water Quality Standards and Waste Discharge Requirements During Project Implementation. (DEIR III.M-78-93; C&R 907, 1214-1217, 1799, 2418) Implementation of the Project could contribute to violations of water quality standards or waste discharge requirements. Impact HY-6 includes Impacts HY-6a and HY-6b.

MM HY-6a.1, Regulatory Stormwater Requirements.

MM HY-6a.2, Recycled Water Irrigation Requirements.

MM HY-6b.1, Limitations on Stormwater Infiltration.

MM HY-6b.2, Industrial General Permit

MM HY-6b.3, Clean Marinas California Program.

MM BI-18b.1, Maintenance Dredging and Turbidity Minimization Measure for the Operation of the Marina.

MM BI-18b.2, BMPs to Reduce Impacts of Dredging to Water Quality.

MM BI-19b.1, Work Windows to Reduce Maintenance Dredging Impacts to Fish During Operation of the Marina.

MM BI-19b.2, BMPs to Reduce Impacts of Dredging to Water Quality.

Compliance with applicable regulatory requirements and implementation of the mitigation measures referenced above would ensure that water quality standards would not be exceeded and the Project would not cause or contribute to a violation of the applicable WDRs. Thus, this impact would be reduced to less than significant.

5. Impact HY-7: Other Water Quality Effects During Project Implementation. (DEIR III.M-93-94; C&R 908, 2418) Implementation of the Project could otherwise degrade water quality.

MM HY-6a.1, Regulatory Stormwater Requirements.

MM HY-6a.2, Recycled Water Irrigation Requirements.

MM HY-6b.1, Limitations on Stormwater Infiltration.

Implementation of MM HY-6a.1 would ensure compliance with the Municipal Stormwater General Permit and would include BMPs designed to treat stormwater runoff. MM HY-6b.1 would prohibit infiltration BMPs at HPS Phase II and further reduce the potential for degradation of groundwater quality. Implementation of MM HY-6a.2 would ensure compliance with the Recycled Water General Permit. Compliance with these mitigation measures would reduce the potential for nitrogen and salt migration to groundwater. Thus, the potential for the Project to degrade groundwater quality would be reduced to less than significant.

6. Impact HY-9: Erosion or Siltation Effects During Project

Implementation. (DEIR III.M-95; C&R 2418) Implementation of the Project could alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, and could result in substantial erosion or siltation on-site or off-site.

MM HY-6a.1, Regulatory Stormwater Requirements.

MM HY-6a.1 would require preparation and implementation of a Stormwater Drainage Master Plan ("SDMP") and a Stormwater Control Plan ("SCP") that meet the specifications of this mitigation measure to control post-construction erosion. Compliance with these requirements would reduce this impact to less than significant.

7. Impact HY-10: Flooding From Surface Runoff. DEIR III.M-95-97; C&R 1392, 2418) Implementation of the Project could alter the existing drainage pattern of the site or substantially increase the rate or amount of surface runoff, and could result in flooding on-site or off-site.

MM HY-6a.1, Regulatory Stormwater Requirements.

MM HY-6a.1 would require preparation and implementation of a Stormwater Drainage Master Plan (SDMP) and a Stormwater Control Plan (SCP) that meet the specifications of this mitigation measure to control post-construction runoff. Compliance with this measure will ensure that this impact would be reduced to less than significant.

8. Impact HY-11: Storm Sewer System Capacity. (DEIR III.M-98; C&R 888, 906, 1214-1217, 1650-1652, 2418) Implementation of the Project could create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff.

MM HY-6a.1, Regulatory Stormwater Requirements.

MM HY-6a.1 would require compliance with stormwater drainage capacity design criteria and would ensure that impacts related to exceeding the capacity of the storm sewer system would be reduced to less than significant.

9. Impact HY-12: Housing within a 100-Year Flood Hazard Area.

(DEIR III.M-98-103; C&R 10, 90-107, 906, 2418) Implementation of the Project could place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

MM HY-12a.1, Finished Grade Elevations Above Base Flood Elevation.

MM HY-12a.2, Shoreline Improvements for Future Sea-Level Rise.

Implementation of MM HY-12a.1 and MM HY-12a.2 would require that all housing be elevated out of the floodplain by grading and fill, that the City's Interim Floodplain Maps (or the FEMA maps, if adopted prior to Project implementation) be updated to reflect finished grade elevations, and that open space setbacks be put in place to allow protection against future sea level rise. These mitigation measures would ensure impacts pertaining to the placement of housing within a mapped flood hazard area would be reduced to less than significant.

10. Impact HY-13b: Structures within a 100-year Flood Hazard Area.

(DEIR III.M-103-105; C&R 10, 90-107, 906, 2418) Implementation of the Project at HPS Phase II could place structures within a 100-year flood hazard area or impede or redirect flood flows. Impact HY-13b includes impact HY-13.

MM HY-12a.2, Shoreline Improvements for Future Sea-Level Rise.

MM HY-12a.2 would require shoreline and public access improvements to be designed to respond to increases in elevation. Thus, this impact would be reduced to less than significant.

11. Impact HY-14: Other Flood Risk. (DEIR III.M-105-106; C&R 90-107, 329, 360, 393-394, 599, 748, 840-841, 858-859, 881-882, 887-888, 1027, 1393, 1649, 1793, 2187-2189, 2418) Implementation of the Project could expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

MM HY-14, Shoreline Improvements to Reduce Flood Risk.

MM HY-14 would require implementation of improvements recommended in the shoreline evaluation and improvement report prepared for the EIR. In accordance with these recommendations, areas along the shoreline would be developed as open space, which would allow for implementation of additional flood control improvements, if necessary. The shoreline improvements would also reinforce the structural integrity of the existing shoreline, reducing the risk of sudden structural failure of deteriorated shoreline features. Thus, this impact would be reduced to less than significant.

J. Biological Resources

1. Impact BI-4: Regional Conservation Plans. (DEIR III.N-56-63; C&R 2418-2419). Construction of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the *Clean Water Act* through direct removal, filling, hydrological interruption, or other means. Impact BI-4 includes Impacts BI-4a, BI-4b, and BI-4c.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts.

MM BI-4c, Mitigation for Shading Impacts to Jurisdictional/Regulated Waters. (Applies to Yosemite Slough bridge only)

Mitigation measures MM BI-4a.1 and MM BI-4a.2 would be implemented to reduce the effects of construction-related activities to wetlands by mitigating for the temporary and permanent loss of the wetlands and jurisdictional waters through avoidance of impacts, requiring compensatory mitigation (i.e., creation and/or restoration), obtaining permits from the USACE, SFRWQCB, BCDC, and other agencies as applicable that are designed to protect wetlands and jurisdictional waters, and implementing construction BMPs to reduce and/or prevent impacts to on waters of the United States, including wetlands and navigable waters. In addition, implementation of mitigation measure MM BI-4c would mitigate the impacts of shadow fill to mud flats and aquatic habitats as a result of construction of Yosemite Slough bridge. Consequently, implementation of mitigation measures MM BI-4a.1, MM BI-4a.2, and MM BI-4c would fully mitigate for the temporary and permanent loss of wetlands and jurisdictional waters, and adverse effects would be less than significant.

2. Impact BI-5b: Sensitive Vegetation Communities: Eelgrass Beds. (DEIR III.N-69-71; C&R 10, 793-794, 2403) Construction at HPS Phase II would not have a substantial adverse effect on eelgrass beds, a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS.

MM BI-5b.1, Avoidance of Impacts to Eelgrass.

MM BI-5b.2, Eelgrass Survey.

MM BI-5b.3, Compensatory Eelgrass Mitigation.

MM BI-5b.4, Eelgrass Water Quality BMPs.

Implementation of mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce the effects of shoreline treatments on eelgrass by avoiding impacts through initial design if feasible; determining the locations of eelgrass beds through surveys; using survey data to refine shoreline treatments to further avoid or minimize impacts to eelgrass; and compensating for unavoidable impacts through the creation or restoration of eelgrass beds at a 3:1 ratio, thus replacing impacted habitat and increasing its abundance regionally. Consequently, implementation of these mitigation measures would reduce potential adverse effects to less-than-significant levels.

3. Impact BI-6: Birds. (DEIR III.N-72-76; C&R 28-29, 33, 35-36-37, 44-45, 47-54, 734, 757, 781, 794-795, 882, 933-936, 1071-1072, 1219, 1220-1223, 1644, 1733, 1735, 2008, 2403) Construction of the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any bird species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. Impact BI-6 includes Impacts BI-6a and BI-6b.

MM BI-6a.1, Impact Avoidance and Pre-Construction Surveys for Nesting Special-Status and Legally Protected Avian Species.

MM BI-6a.2, Burrowing Owl Protocol Surveys and Mitigation.

MM BI-6b, American Peregrine Falcon Nest Protection Measures.

Implementation of mitigation measures MM BI-6a.1 and MM BI-6a.2 would reduce the effects of Project construction and implementation on nesting special-status and legally protected avian species by surveying for, identifying, and avoiding occupied nests and delaying construction if necessary to prevent nest abandonment, and/or providing a buffer zone around occupied nests to ensure that disturbance from construction activities do not result in the loss of individuals or destruction of nests or eggs. In addition, mitigation measure MM BI-6a.2 would require focused surveys for burrowing owls and specifies active and passive impact avoidance measures to avoid impacting this species and replace lost habitat. Specifically, if these species are identified nesting within the site, mitigation measures would implement construction buffers to protect occupied burrows, eggs, and young, as dictated by site-specific conditions in consultation with CDFG. Implementation of these mitigation measures would reduce potential adverse effects to less-than-significant levels by avoiding the loss of special-status or legally protected nesting species.

Mitigation measure MM BI-6b would ensure effects of Project construction to nesting peregrine falcons are reduced to a less-than-significant level by identifying active nests during pre-construction surveys and delaying construction (if necessary) to limit disturbance.

4. Impact BI-7b: Foraging Habitat for Raptors. (DEIR III.N-77-78; C&R 934-935, 1221, 1768, 2418-2419) Implementation of the Project at HPS Phase II would not have a substantial adverse effect on the quantity and quality of suitable foraging habitat for raptors.

MM BI-7b, Enhancement of Raptor Foraging Habitat.

The Project's ecological enhancements (as detailed in the Draft Parks, Open Space, and Habitat Concept Plan), the requirements specified in mitigation measure MM BI-7b, and new and improved parkland, would provide both raptor foraging opportunities and enhanced raptor and raptor prey habitat. Consequently, adverse effects to raptor foraging habitat would be less than significant. Further, these Project improvements would result in a net increase in the quality of suitable raptor foraging habitat, as well as providing ancillary habitat improvement benefits to their prey species (small mammals, birds, and insects) that could result in a higher prey base for raptors within HPS Phase II. Overall, with mitigation, the effect of the Project on raptors is expected to be beneficial.

5. Impact BI-9b: Marine Mammals and Fish. (DEIR III.N-81-83; C&R 37, 399, 1073, 2403) Pile driving associated with construction of the marina and the Yosemite Slough bridge would not have a substantial adverse effect at HPS Phase II, either directly or through habitat modifications, on marine mammals or fish identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.

MM BI-9b, Pile Driving Design and Minimization Measures.

Mitigation measure MM BI-9b would reduce the effects of pile driving-related activities by recommending the type of piles to use to minimize sound impacts, provide for an alternative method of installation to minimize sound impacts, requiring installation during an agency-approved construction window when fish are least likely to be present and thus avoid the bulk of potential impacts, and require a construction monitor to ensure all measures, including sound monitoring are complied with. This measure would not be required for the Yosemite Slough bridge if piles were driven in dry conditions behind coffer dams, as is proposed, because no aquatic pressure waves would be generated. Implementation of this mitigation measure would reduce potential adverse effects to less-than-significant levels.

6. Impact BI-11: Special-status Fish. (DEIR III.N-85-87; C&R 795-796, 1073, 1796-1797, 2403) Construction of the Project would not have a substantial adverse effect on designated critical habitat for green sturgeon and Central California Coast steelhead, and would not result in impacts to individuals of these species as well as Chinook salmon and longfin smelt through disturbance and loss of aquatic and mudflat habitat as a result of construction of shoreline revetments. Impact BI-11 includes Impacts BI-11a, BI-11b, and BI-11c.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related impacts.

Implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2 would reduce the effects of construction-related activities to aquatic habitat by mitigating for the temporary and permanent loss of jurisdictional waters from the Project as a whole by requiring compensatory mitigation (i.e., creation and/or restoration), obtaining permits from the USACE, SFRWQCB, BCDC, and other agencies as applicable that are designed to protect wetlands and jurisdictional waters, and implementing construction BMPs to reduce and/or prevent impacts to waters of the United States, including aquatic habitats. Implementation of these mitigation measures would minimize any adverse effects on aquatic habitat of special-status fish, including designated critical habitat for the green sturgeon and Central California Coast steelhead, during construction and fully compensate for any residual impacts to these species' habitats resulting from the Project as a whole, thus reducing impacts to special-status fish to less-than-significant levels.

7. **Impact BI-12: Essential Fish Habitat.** (DEIR III.N-88-93; C&R 795-797, 2133, 2403) Construction of the Project would not have a substantial adverse effect on designated essential fish habitat (EFH) or result in a substantial change in total available EFH through placement of riprap and other fill or through temporary water-quality impacts during construction. EFH is a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS. Impact BI-12 includes Impacts BI-12a, BI-12b, and BI-12c.

MM BI-12a.1, Seasonal Restrictions on In-Water Work.

MM BI-12a.2, Worker Training.

MM BI-12b.1, Essential Fish Habitat Avoidance and Minimization Measures.

MM BI-12b.2, Deconstruction/Construction Debris Recovery.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts.

MM HZ-1a, Article 22A Site Mitigation Plans.

MM HZ-1b, Compliance with Requirements Imposed by Cleanup Decisions Documents and Property Transfer Documents.

MM HZ-2a.1, Unknown Contaminant Contingency Plan.

MM HZ-9, Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property.)

MM HZ-10b, Regulatory Agency Approved Workplans and Permits for Shoreline Improvements

MM HZ-12, Compliance with Administrative Order on Consent at Early Transferred Parcels. (Applies only at HPS Phase II.)

MM HZ-15, Asbestos Dust Mitigation Plans and Dust Control Plans.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HY-1a.3, Groundwater Dewatering Plan.

Mitigation measure MM BI-12a.1 would reduce the effects of construction-related activities to EFH by establishing a construction window that would minimize impacts to fish by avoiding migration and breeding periods, and mitigation measure MM BI-12a.2 would ensure that personnel involved in construction and deconstruction activities are trained on measures to avoid and minimize adverse effects to special-status aquatic species and their habitats. Implementation of these mitigation measures, along with mitigation measures MM BI-4a.1 and MM BI-4a.2, would reduce potential adverse effects on EFH at the Project site to less-than-significant levels.

Compliance with the requirements, permits, and other procedures included in these mitigation measures would ensure that soil handling, stockpiling, and movement within HPS Phase II would not present a significant risk to the ecological environment. Therefore, with implementation of MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM BI-4a.1, MM BI-4a.2, and MM BI-12b.1, potential construction ecosystem impacts related to handling, stockpiling, and transport of contaminated soil (including shoreline sediments) and groundwater would be reduced to less than significant.

Any loss of EFH that would result from the Yosemite Slough bridge would be mitigated via the compensatory mitigation for impacts to jurisdictional waters (mitigation measure MM BI-4a.1). Measures to avoid and minimize impacts to

aquatic habitats, described in mitigation measure MM BI-4a.2, would further reduce impacts to EFH. To reduce these potential impacts to less-than-significant levels, mitigation measures MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, and MM BI-12b.2 would be implemented. Mitigation measure MM BI-12a.1 would reduce the effects of construction-related activities to EFH by establishing a construction window that would minimize impacts to fish by avoiding migration and breeding periods. Measure MM BI-12a.2 would ensure that personnel involved in deconstruction activities are trained on measures to avoid and minimize adverse effects to special-status aquatic species and their habitats. Measure MM BI-12b.1 would avoid areas with submerged vegetation thereby protecting habitat and manage construction equipment with Best Management Practices to prevent contamination. Mitigation measure MM BI-12b.2 would mandate the creation and implementation of a Seafloor Debris Removal Plan. This Plan must contain specified provisions to ensure effective recovery of lost Project debris and minimize potential environmental impairment posed by the debris, or debris recovery activity to designated EFH or other sensitive Bay habitats and biota (i.e., critical habitat and herring spawning habitats). Implementation of these mitigation measures would reduce potential adverse effects on EFH in Yosemite Slough to less-than-significant levels.

8. Impact BI-13b: Wildlife Movement. (DEIR III.N-94-95; C&R 38, 1072-1073, 2403) Construction at HPS Phase II and construction of the Yosemite Slough bridge would not interfere substantially with the movement of native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, but it could impede the use of native wildlife nursery sites.

MM BI-5b.1, Avoidance of Impacts to Eelgrass.

MM BI-5b.2, Eelgrass Survey.

MM BI-5b.3, Compensatory Eelgrass Mitigation.

MM BI-5b.4, Eelgrass Water Quality BMPs.

Implementation of mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce the effects of HPS Phase II construction on eelgrass by avoiding impacts through initial design if feasible; determining the locations of eelgrass beds through surveys; using survey data to refine shoreline treatments to further avoid or minimize impacts to eelgrass; and compensating for unavoidable impacts through the creation or restoration of eelgrass beds at a 3:1 ratio. Consequently, implementation of these measures would reduce impacts to eelgrass beds, and thus to nursery sites, to less-than-significant levels. This would ensure that construction of HPS Phase II would not interfere substantially with the use of native wildlife nursery sites. Implementation of these mitigation measures would reduce this impact to a less-than-significant level.

9. Impact BI-14: Local Plans and Policies. (DEIR III.N-95-99; C&R 38; 783; 1792, 2418-2419) Construction of the Project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impact BI-14 includes Impacts BI-14a and BI-14b.

MM BI-14a, Preservation and Replacement of Significant Trees, and Preservation and Planting of Street Trees.

MM BI-7b, Enhancement of Raptor Foraging Habitat.

Mitigation measure MM BI-14a would encourage the preservation of street trees and trees that are large enough to meet the size specification of significant trees in the *Public Works Code*, and would require the replacement of large trees that are removed. Further, it would require the planting of street trees consistent with the intent of the *Planning Code* Section 143. In addition, mitigation measure MM BI-7b includes the planting of approximately 10,000 net new trees. The planting of an estimated 10,000 net new trees would increase the number of trees in the Study Area considerably, increase canopy cover, and promote a healthy and sustainable urban forest. With implementation of mitigation measures MM BI-14a and MM BI-7b, the Project would not result in a conflict with City policies designed to protect urban streetscape through the planting of street trees. Impacts would be less than significant.

Further, the Draft Parks, Open Space, and Habitat Concept Plan (as required by mitigation measure MM BI-7b) includes the planting of approximately 10,000 net new trees, avoids removal of native trees where feasible, and establishes new parkland and open space that would include a predominance of native species (see Impact BI-2 and Impact BI-7b). The planting of an estimated 10,000 net new trees at the Project site and in the community would increase the number of trees in the Study Area considerably, increase canopy cover, and promote a healthy and sustainable urban forest. Consequently, development of the Project would not conflict with any local policies or ordinances protecting biological resources, and overall impacts would be beneficial.

10. Impact BI-15b: Contaminated Soils or Sediments during Construction. (DEIR III.N-100; C&R 907-908, 1029, 1214, 1390, 2403) Construction within the shoreline or Bay at HPS Phase II would not result in the disturbance of contaminated soil or the re-suspension of contaminated sediments.

MM HY-1a.1, Storm Water Pollution Prevention Plan: Combine Storm Sewer System.

MM HY-1a.2, Storm Water Pollution Prevention Plan: Separate Storm Sewer System.

MM HZ-10b, Regulatory Agency Approved Workplans and Permits for Shoreline Improvements

Implementation of measures to control stormwater runoff during construction would control discharge of potential chemicals adhered to soil in the runoff. Mitigation measures MM HY-1a.1 and MM HY-1a.2 would require preparation of a SWPPP to identify the specific measures and BMPs that are applicable to HPS Phase II construction activities in the event of a spill of construction materials or exposure of hazardous materials. This would reduce the likelihood of contaminants being conveyed to near-shore and offshore environments, which would reduce the risk to the aquatic environment and species that rely on that habitat (e.g., birds and mammals). Implementation of mitigation measures MM HZ-10b, MM HY-1a.1, and MM HY-1a.2 would reduce the exposure of fish or wildlife to contaminated fill or Bay/shoreline sediments during construction activities, and adverse effects would be less than significant.

11. Impact BI-18b: Sensitive Aquatic Species, Mollusks, and Designated EFH. (DEIR III.N-104-106; C&R 796-797, 906-908, 1390-1391, 1799, 2418-2419) Implementation of the marina in HPS Phase II would require routine maintenance dredging of the marina, which could remove habitat or generate substantial increases in turbidity within the marina, but would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFG or USFWS, or have a substantial adverse effect on designated EFH, a sensitive natural community identified in local or regional plans, policies, and regulations or by the NMFS.

MM BI-18b.1, Maintenance Dredging and Turbidity Minimization Measures for the Operation of the Marina.

MM BI-18b.2, Implement BMPs to Reduce Impacts of Dredging To Water Quality.

Implementation of mitigation measure MM BI-18b.1 would reduce the effects of marina maintenance dredging to less-than-significant levels by requiring compensatory mitigation for impacts to oysters and EFH that would be designed to avoid, minimize, and if avoidance is not feasible, restore oyster habitat and EFH. Mitigation measure MM BI-18b.2 would mandate the application of BMPs to control the distribution of sediments disturbed by the dredging activities. Consequently, implementation of both measures would reduce adverse effects of sedimentation associated with dredging to less-than-significant levels.

12. Impact BI-19b: Contaminated Sediments during Operation. (DEIR III.N-106-108; C&R 907-908, 1029, 1214, 1390, 2418-2419) Implementation of the marina in HPS Phase II would not have a substantial adverse effect, either directly or through habitat modifications, on sensitive aquatic species, identified as candidate,

sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS, or have a substantial adverse effect on designated EFH, a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS, or have a substantial effect on predators that prey on contaminated species or feed on contaminated substrates as a result of routine maintenance dredging or could generate routine increases in turbidity within the marina that would result in the re-suspension of contaminated sediments.

MM BI-19b.1, Work Windows to Reduce Maintenance Dredging Impacts to Fish during Operation of the Marina.

MM BI-19b.2, Implement BMPs to Reduce Impacts of Dredging To Water Quality.

Implementation of mitigation measures MM BI-19b.1 and MM BI-19b.2 would reduce contamination associated with dredging to less-than-significant levels by (1) reducing the effects of increased contamination resulting from routine maintenance dredging by requiring that dredging occur during established work windows when sensitive fish species are less likely to be present, and (2) mandating application of BMPs to control the distribution of sediments disturbed by the dredging activities. Consequently, implementation of these mitigation measures would reduce potential adverse effects to less-than-significant levels.

13. Impact BI-20: Wildlife Movement. (DEIR III.N-108-111; C&R 936, 1072, 2418-2419) Implementation of the Project would not interfere substantially with the movement of resident or migratory bird species by increasing collision hazards and the amount of artificial lighting. Impact BI-20 includes Impacts BI-20a and BI-20b.

MM BI-20a.1, Lighting Measures to Reduce Impacts to Birds.

MM BI-20a.2, Building Design Measures to Minimize Bird Strike Risk.

MM BI-20a.1 and MM BI-20a.2 would reduce the effects of operational activities related to tall structures and increased lighting to birds to less-than-significant levels by incorporating these solutions. Specifically, these measures would reduce the incidence of bird strikes by requiring operational methods to reduce the effects of artificial lighting; making the structure (especially the glass surfaces) more visible from the outside with the use of external window coverings; and creating non-reflective or interference zones on or inside the glass. These measures are promoted in eastern and midwestern cities such as Toronto, Chicago, and New York City where avian collisions with buildings have been much better documented than on the West Coast, and implementation of these mitigation measures would reduce potential adverse effects to less-than-significant levels.

14. Impact BI-21: Local Plans and Policies. (DEIR III.N-111-112; C&R 38; 783; 1792, 2418-2419) Implementation of the Project would not conflict with any

local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Impact BI-21 includes Impacts BI-21a and BI-21b.

MM BI-14a, Preservation and Replacement of Significant Trees, and Preservation and Planting of Street Trees.

Operation of the Project would be consistent with the biological resources protection policies of the *City of San Francisco General Plan*. In addition, the City has adopted an Urban Forestry Ordinance and Section 143 of the *Planning Code* to protect trees as a significant resource to the community, and as discussed in Impact BI-14a, the Project's construction-related effects would comply with the Urban Forestry Ordinance to the extent applicable and, with mitigation measure MM BI-14a, would ensure that the Project is constructed in a manner consistent with policies of the Urban Forestry Ordinance and *Planning Code* Section 143. Consequently, the operation of the Project would not conflict with any local policies or ordinances protecting biological resources, and the impact would be less than significant.

15. Impact BI-22: Special-Status and/or Legally Protected Species. (DEIR III.N-112-114, C&R 31-54, 734, 795-796, 1073, 1219-1221, 1223, 1796-1797, 2418-2419) Implementation of the Project would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, by the CDFG, USFWS, or NMFS.

MM BI-5b.1, Avoidance of Impacts to Eelgrass.

MM BI-5b.2, Eelgrass Survey.

MM BI-5b.3, Compensatory Eelgrass Mitigation.

MM BI-5b.4, Eelgrass Water Quality BMPs.

MM BI-7b, Enhancement of Raptor Foraging Habitat.

MM BI-6a.1, Impact Avoidance and Pre-Construction Surveys for Nesting Special-Status and Legally Protected Avian Species.

MM BI-6a.2, Burrowing Owl Protocol Surveys and Mitigation.

MM BI-6b, American Peregrine Falcon Nest Protection Measures.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts.

MM BI-9b, Pile Driving Design and Minimization Measures.

Implementation of ecological Project design features described in the Draft Parks, Open Space, and Habitat Concept Plan (required by mitigation measure MM BI-7b) would result in multiple measures to avoid, limit, and mitigate for impacts to special-status and legally protected species. Mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce the effects on eelgrass, and the sensitive or special-status fish species that could occupy these areas by surveying for and avoiding this habitat. For areas that cannot be avoided, the Project Applicant would implement a comprehensive eelgrass mitigation plan that would replace at a minimum ratio of 3:1 (i.e., 3 new acres of eelgrass to 1 removed acre) the impacted areas of eelgrass and monitor them for success over sequential years, thus replacing impacted habitat and increasing its abundance regionally. Residual adverse effects would be less than significant with this mitigation.

Mitigation measures MM BI-6a.1, MM BI-6a.2, and MM BI-6b would require surveys for special-status and nesting avian species and implement impact-avoidance measures such as construction buffers to ensure that the loss or take of these species would not occur. Potential impacts to burrowing owls would be mitigated through the conservation of lands as detailed in the *California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation Guidelines*, and Project-related open space preservation. Residual adverse effects would be less than significant with this mitigation.

Impacts to foraging raptors would be beneficial due to the removal of invasive plants and improvement of existing parkland through the restoration and management of native-dominated grassland. The Project would provide high-quality foraging habitat, and a net increase in the quality of raptor foraging habitat would result. Mitigation measure MM BI-9b would reduce the effects of pile driving-related activities to fish and marine mammals by recommending the type of piles to use to minimize sound impacts; providing for an alternative method of installation to minimize sound impacts; requiring installation during an agency-approved construction window when fish are least likely to be present to avoid the bulk of potential impacts; and requiring a construction monitor to ensure compliance with all measures, including sound monitoring. Residual adverse effects would be less than significant with this mitigation.

Compensatory mitigation for Project impacts to aquatic habitat would be provided as described by mitigation measure MM BI-4a.1, and mitigation measure MM BI-4a.2 would be implemented to minimize impacts to wetlands, aquatic habitats, and water quality during construction. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels. Further, a net increase of approximately 8 acres of new aquatic habitat as a result of removal of fill and structures would more than offset the loss of open water habitat.

Implementation of mitigation measure MM BI-18b.1 would reduce the effects of marina operational activities to less-than-significant by (1) determining the distribution of oyster populations within the new marina area, and (2) preparing a modeling study of potential sediment plume generation and assessing the potential for that plume to reach oysters, and using that model to guide site-specific mitigation for sedimentation impacts to oysters that would be designed to avoid, minimize, and if avoidance is not feasible, restore oyster habitat. Implementation of mitigation measure MM BI-18b.2 would mandate the application of BMPs to control the distribution of sediments disturbed by the dredging activities to reduce water quality impacts to the species. Residual adverse effects would be less than significant with implementation of this mitigation measure.

16. Impact BI-23: Sensitive Habitats. (DEIR III.N-14-15, C&R 793-794, 2418-2419) Implementation of the Project would not have a substantial adverse effect on sensitive natural communities identified in local or regional plans, policies, or regulations by the CDFG, USFWS, or NMFS.

MM BI-12a.1, Seasonal Restrictions on In-Water Work.

MM BI-12a.2, Worker Training.

MM BI-12b.1, Essential Fish Habitat Avoidance and Minimization Measures.

MM BI-12b.2, Deconstruction/Construction Debris Recovery.

MM BI-18b.1, Maintenance Dredging and Turbidity Minimization Measures for the Operation of the Marina.

MM BI-18b.2, Implement BMPs to Reduce Impacts of Dredging To Water Quality.

MM BI-5b.1, Avoidance of Impacts to Eelgrass.

MM BI-5b.2, Eelgrass Survey.

MM BI-5b.3, Compensatory Eelgrass Mitigation.

MM BI-5b.4, Eelgrass Water Quality BMPs.

MM BI-19b.1, Work Windows to Reduce Maintenance Dredging Impacts to Fish during Operation of the Marina.

MM BI-19b.2, Implement BMPs to Reduce Impacts of Dredging To Water Quality.

Mitigation measures MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, and MM BI-12b.2 would be implemented. Implementation of mitigation measure MM BI-18b.1 would reduce the effects of marina operational activities to EFH by (1) determining the distribution of oyster populations within the new marina area, and (2) preparing a modeling study of potential sediment plume generation and assessing the potential for that plume to reach oysters, and using that model to guide site-specific mitigation for sedimentation impacts to EFH that would be designed to avoid, minimize, and if avoidance is not feasible, restore oyster habitat. Implementation of mitigation measure MM BI-18b.2 would mandate the application of BMPs to control the distribution of sediments disturbed by the dredging activities to reduce water quality impacts to EFH.

Mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce potential Project effects on eelgrass by requiring surveys for and avoidance of this habitat. For areas that cannot be avoided, the Project Applicant would implement a comprehensive eelgrass mitigation plan that would replace at a minimum ratio of 3:1 (i.e., 3 new acres of eelgrass to 1 removed acre) the impacted areas of eelgrass and monitor them for success over a 5-year period, thus, replacing impacted habitat and increasing its abundance regionally. Residual impacts would be less than significant with implementation of this mitigation measure. Mitigation measures MM BI-19b.1 and MM BI-19b.2 would reduce dredging and contamination impacts to EFH to less-than-significant levels by (1) reducing the effects of increased contamination resulting from routine maintenance dredging by requiring that dredging occur during established work windows when sensitive fish species are less likely to be present, and (2) mandating application of BMPs to control the distribution of sediments disturbed by the dredging activities.

17. Impact BI-24: Wetlands and Jurisdictional Waters. (DEIR III.N-115-116; C&R 10, 32, 34, 37-52, 732, 736, 778, 782-783, 788, 792-793, 796, 907, 933, 1021, 1214, 1218, 1392, 1644, 1654, 1704-1705, 1768, 1792-1793, 2418-2419) Implementation of the Project would not have a substantial adverse effect on federally protected wetlands and other waters as defined by Section 404 of the *Clean Water Act* (including, but not limited to, marsh, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

MM BI-4a.1, Wetlands and Jurisdictional/Regulated Waters Mitigation for Temporary and/or Permanent Impacts.

MM BI-4a.2, Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related impacts.

Mitigation measures MM BI-4a.1 and MM BI-4a.2 would reduce the effects of construction-related activities to wetlands and other waters by mitigating for the temporary and permanent loss of the wetlands and jurisdictional waters through avoidance of impacts, requiring compensatory mitigation (i.e., creation, preservation, and/or restoration), obtaining permits from the USACE, SFRWQCB, and BCDC that

are designed to protect wetlands and jurisdictional waters, and implementing construction Best Management Practices to reduce and/or prevent impacts to waters of the United States, including wetlands and navigable waters. With implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2, potential adverse effects of the Project to federally protected wetlands and other waters as defined by Section 404 of the *Clean Water Act* would be reduced to a less-than-significant level.

18. Impact BI-25: Wildlife Movement. (DEIR III.N-116-117; C&R 38, 1072-1073, 2418-2419) Implementation of the Project would not interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site.

MM BI-5b.1, Avoidance of Impacts to Eelgrass.

MM BI-5b.2, Eelgrass Survey.

MM BI-5b.3, Compensatory Eelgrass Mitigation.

MM BI-5b.4, Eelgrass Water Quality BMPs.

MM BI-20a.1, Lighting Measures to Reduce Impacts to Birds.

MM BI-20a.2, Building Design Measures to Minimize Bird Strike Risk.

Construction of breakwaters and other shoreline treatments in HPS Phase II would occur near eelgrass beds, which could directly or indirectly impact them such that productivity and survival of these habitats would be substantially reduced. Eelgrass communities are considered important aquatic nursery sites as they serve as a haven for numerous aquatic species. Elimination of these important nursery areas would be considered a significant impact due to the ecological importance of these habitats to aquatic species. Mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce the effects on eelgrass by requiring surveys for and avoidance of this habitat. Mitigation measures MM BI-20a.1 and MM BI-20a.2 would reduce the effects of operational activities related to tall structures and increased lighting to birds to less-than-significant levels by incorporating design features that would help minimize bird strikes, including using operational methods to reduce the effects of new lighting towers and design measures to make the exteriors of buildings more readily visible to birds.

19. Impact BI-26: Local Plans and Policies. (DEIR III.N-117-118; C&R 38; 783; 1792, 2418-2419) Implementation of the Project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

MM BI-14a, Preservation and Replacement of Significant Trees, and Preservation and Planting of Street Trees.

MM BI-7b, Enhancement of Raptor Foraging Habitat.

Mitigation measure MM BI-14a would encourage the preservation of street trees and trees that are large enough to meet the size specification of significant trees in the *Public Works Code*, and would require the replacement of large trees that are removed. Further, it would require the planting of street trees consistent with the intent of the *Planning Code* Section 143. In addition, mitigation measure MM BI-7b includes the planting of approximately 10,000 net new trees at the Project site and in the community. The planting of an estimated 10,000 net new trees would increase the number of trees in the Study Area considerably, increase canopy cover, and promote a healthy and sustainable urban forest. With implementation of mitigation measures MM BI-14a and MM BI-7b, the Project would not result in a conflict with City policies designed to protect urban streetscape through the planting of street trees, and impacts would be less than significant.

The Draft Parks, Open Space, and Habitat Concept Plan (required by mitigation measure MM BI-7b) includes the planting of an estimated 10,000 net new trees at the Project site and in the community, avoids removal of native trees where possible, and establishes new parkland and open space that would include a predominance of native species. Consequently, the Project would not conflict with any local policies or ordinances protecting biological resources, and overall impacts of the Project are expected to be beneficial.

K. Public Services

1. Impact PS-1: Police Protection During Construction (DEIR III-O-8; C&R 1658, 2403) Construction activities associated with the Project could result in a need for new or physically altered facilities in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.

MM PS-1, Site Security Measures During Construction.

Implementation of the security measures required by MM PS-1, this impact would be reduced to less than significant.

2. Impact PS-2: Police Protection During Operation. (DEIR III.O-9-12; C&R 1732, 2006, 2020, 2191, 2419) Implementation of the Project could result in a need for new or physically altered facilities in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.

The Project could include construction of a facility for the police in areas designated for community-serving uses. Construction activities associated with the proposed public facilities were considered in the analysis of the overall Project. A discussion

of project-related construction impacts, including those associated with the construction of public facilities, is provided in the applicable sections of this EIR, including Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality). Construction of the entire development program, including the public facilities, would result in significant and unavoidable impacts related to construction noise and demolition of an historic resource (**See Findings Section IV**); all other construction-related impacts would be less than significant (in some cases, with implementation of identified mitigation).

3. Impact PS-3: Fire Protection and Emergency Medical Services During Construction. (DEIR III.O-18; C&R 2403) Construction activities associated with the Project could result in a need for new or physically altered facilities in order to maintain acceptable response times for fire protection and emergency medical services.

MM TR-1, Construction Traffic Management Plan.

During construction of the Project, emergency access to the Project site would be maintained through compliance with the Construction Transportation Management Plan ("CTMP") prepared for the Project, as required by MM TR-1. Compliance with the CTMP would ensure that access to the Project site is not obstructed during construction activities. Thus, this impact would be reduced to less than significant.

4. Impact PS-4: Fire Protection and Emergency Medical Services During Operation. (DEIR III.O-18-22, C&R 968, 1643, 1732, 2006-2007, 2020, 2137, 2419) Implementation of the Project could result in a need for new or physically altered facilities in order to maintain acceptable response times for fire protection and emergency medical services.

A new SFFD station could be accommodated on the Project site, on land designated for community-serving uses. Community serving uses were anticipated as part of the Project and the impacts of their construction are evaluated in this EIR. A discussion of Project-related construction impacts, including those associated with the construction of public facilities, is provided in the applicable sections of this EIR, including Section III.D, Section III.H, Section III.I, Section III.J, Section III.K, and Section III.M. Construction of the entire development program, including the public facilities, would result in significant and unavoidable impacts related to construction noise and demolition of an historic resource (**See Findings Section IV**); all other construction-related impacts would be less than significant (in some cases, with implementation of identified mitigation). Refer to Section III.D, Section III.H, Section III.I, Section III.J, Section III.K, and Section III.M for the specific significance conclusions for construction-related effects.

L. Recreation

1. Impact RE-2: Deterioration or Degradation of Existing Parks and Recreational Facilities. (DEIR III.P-15-31; C&R 607, 743, 1473-1474, 1648-1649, 1704, 1735, 2419-2420) Implementation of the Project could increase the use of existing parks and recreational facilities that could cause the substantial physical deterioration of the facilities to occur or to be accelerated, and result in the need for, new or physically altered park or recreational facilities.

MM RE-2, Phasing of parkland with respect to residential and/or employment-generating uses.

Implementation of MM RE-2 would ensure that adequate parkland is provided as residential and employment-generating uses are constructed and occupied. Thus, impacts related to parkland development with respect to development phasing would be reduced to less than significant.

2. Impact RE-1: Construction of Parks, Recreational Uses and Open Space. (DEIR III.P-12-14, C&R 1751, 2403) Construction of the parks, recreational uses, and open space proposed by the Project could result in substantial adverse physical environmental impacts.

Construction activities associated with the proposed parks and recreational facilities were analyzed as part of the overall Project. A discussion of project-related construction impacts, including those associated with the construction of parks and recreational facilities, is provided in the applicable sections of this EIR, including Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality). Construction of the entire development program, of which the parks and recreational facilities are a part, would result in significant and unavoidable impacts related to construction noise and demolition of an historic resource (**See Findings IV**); all other construction-related impacts would be less than significant (in some cases, with implementation of identified mitigation). Refer to Section III.D, Section III.H, Section III.I, Section III.J, Section III.K, and Section III.M for the specific significance conclusions for construction-related effects.

M. Utilities

1. Impact UT-2: Construction of New or Expansion of Existing Water Treatment of Conveyance Facilities. (DEIR III-Q-17-18; C&R 951, 1643, 2403) Implementation of the Project could require or result in the construction of new or expanded water treatment facilities.

MM UT-2, Auxiliary Water Supply System.

The Project would require the expansion of an auxiliary water conveyance system to provide adequate water supply for firefighting to the Project site. MM UT-2 would ensure the provision of adequate water for on-site fire-fighting purposes, and the Project would not require water supplies in excess of existing entitlements or result in the need for new or expanded entitlements for water to fight fires. Thus, this impact would be reduced to less than significant.

2. Impact UT-3: Wastewater Conveyance and Treatment (DEIR III.Q-29-34; C&R 2420-2421) Implementation of the Project at Candlestick Point could require expansion of existing off-site wastewater conveyance facilities. Impact UT-3 includes Impacts UT-3a and UT-3b.

MM UT-3a, Wet-Weather Wastewater Handling.

MM UT-3a would ensure that there would be no net increase in wet-weather flows in the Combined Sewer System ("CSO") as a result of the Project that could result in a temporary increase in CSO volume. During wet weather, the temporary retention or detention of wastewater on site during wet weather or completion of the separate stormwater and wastewater systems for the Project would ensure that there would be no increase in the likelihood of a CSO event as a result of the Project. Thus, the impact on the Combined Sewer System would be reduced to less than significant.

3. Impact UT-5: Construction Solid Waste and Permitted Land Fill Capacity. (DEIR III.Q-43-47; C&R 812, 966, 1021, 2403) Construction activities associated with the Project, including demolition of existing facilities, could generate construction-related solid waste that could exceed the capacity of landfills serving the City and County of San Francisco. Impact UT-5 includes Impacts UT-5a and UT-5b.

MM UT-5a, Construction Waste Diversion Plan.

MM UT-5a requires the Applicant to submit a Waste-Diversion Plan demonstrating strategies to divert at least 75 percent of total construction wastes. Thus, the impact of the construction waste generated by the Project on the capacity of the Altamont Landfill would be reduced to less than significant.

4. Impact UT-7: Operation Solid Waste and Permitted Landfill Capacity. (DEIR III.Q-49-53; C&R 2421-2422) Implementation of the Project could generate solid waste that could exceed the capacity of landfills serving the City and County of San Francisco. Impact UT-7 includes Impacts UT-7a and UT-7b.

MM UT-7a, Site Waste Management Plan.

MM UT-7a would provide specific strategies to ensure that the Project reduces solid waste disposed of in landfills in a manner consistent with the City's overarching goal

of achieving zero waste by 2020. Thus, this impact would be reduced to less than significant.

5. Impact UT-9: Compliance with Solid Waste Regulations. (DEIR III.Q-56-58; C&R 2421-2422) Implementation of the Project would comply with federal, state, and local statutes and regulations related to solid waste.

MM UT-5a, Construction Waste Diversion Plan.

MM UT-7a.1, Site Waste Management Plan.

MM UT-7a.1 and MM UT-5a would ensure compliance with applicable regulations pertaining to solid waste. Development of the Project would not conflict with regulatory policies pertaining to solid waste. Thus, this impact would be reduced to less than significant.

N. Energy

1. Impact ME-2: Electricity Use. (DEIR III.R-17-21; C&R 2017, 2138, 2182, 2184, 2423) Buildings constructed by the Project could use large amounts of electricity in a wasteful manner.

MM GC-2, Exceed Title 24 Standards.

MM GC-3, ENERGY STAR Appliances.

MM GC-4, LED Lighting.

MM GC-2 would require the Project to exceed the 2008 Title 24 energy efficiency standards for homes and businesses by at least 15 percent. MM GC-3 would require installation of ENERGY STAR appliances for builder-supplied appliances, and MM GC-4 would require installation of energy efficient lighting. Implementation of these measures would reduce electricity consumption impacts to less than significant.

2. Impact ME-3: Natural Gas Use. (DEIR III.R-22-26; C&R 2184, 2423) Buildings constructed by the Project could use large amounts of natural gas in a wasteful manner.

MM GC-2, Exceed Title 24 Standards.

MM GC-3, ENERGY STAR Appliances.

MM GC-2 would require the Project to exceed the 2008 Title 24 energy efficiency standards for homes and businesses by at least 15 percent. MM GC-3 would require installation of ENERGY STAR appliances for builder-supplied appliances. Implementation of these measures would reduce natural gas consumption impacts to less than significant.

3. Impact ME-4: Vehicle-Trip Energy Use in Large Amounts or a Wasteful Manner. (DEIR III.R-24-26; C&R 2423) Vehicle trips associated with the Project could use large amounts of energy in a wasteful manner.

MM TR-1, Construction Traffic Management Program.

MM TR-2, TDM Plan.

MM TR-1 and MM TR-2 would require implementation of traffic reduction measures that would minimize vehicles miles traveled. Thus, this impact would be reduced to less than significant.

O. Greenhouse Gas Emissions

1. Impact GC-1: Conflict With GHG Emission Goals. (DEIR III.S-36-38; C&R 96, 605-606, 945, 1471, 2184-2185, 2187, 2423) The Project could result in a substantial contribution to global climate change by increasing GHG emissions in a manner that conflicts with the state goal of reducing GHG emissions in California to 1990 levels by 2020 (e.g., a substantial contribution to global climate change) or conflicts with San Francisco's Climate Action Plan by impeding implementation of the local GHG reduction goals established by the San Francisco 2008 Greenhouse Gas Reduction Ordinance.

MM GC-1, Tree Planting.

MM GC-2, Exceed Title 24 Standards.

MM GC-3, ENERGY STAR Appliances.

MM GC-4, LED Lighting.

Implementation of MM GC-1 through MM GC-4 would ensure that adequate GHG emission reductions are achieved as residential and employment-generating uses are constructed and occupied. Thus, impacts related to climate change and GHG emissions for the operational phase of the development would be less than significant.

III.A. FINDINGS FOR POTENTIALLY SIGNIFICANT CUMULATIVE IMPACTS THAT CAN BE AVOIDED OR REDUCED TO A LESS-THAN-SIGNIFICANT LEVEL

A. Aesthetics

1. Contribution to Cumulative Degradation of Visual Character/Quality Impacts During Construction (DEIR III.E-78-79; C&R 48, 756-757, 789, 1224, 1703, 2408, 2412). Construction activities associated with cumulative development in the Project are could result in temporary degradation of the visual character or quality of the site or result in increases sources of light and glare. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM AE-2 and AE-7a.1. Consequently, the Project would not make a considerable contribution to the cumulative impact.

2. Contribution to Cumulative Effects of Light and Glare (DEIR III.E-81-82; C&R 48, 756-757, 789, 1224, 1703, 2408, 2412). Development of cumulative projects in the identified Plan areas would result in increased sources of light and glare from building and street lighting, parking lot lighting, vehicle headlights, and increased building surfaces. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM AE-7a.1, AE-7a.2, AE-7a.3, and AE-7a.4. Consequently, the Project would not make a considerable contribution to the cumulative impact.

B. Wind

1. Contribution of Cumulative Wind Hazard (DEIR III.G-10-11; C&R 7, 46, 1704, 2304, 2412) Wind effects from cumulative development, depending on building heights and massing, could result in a significant adverse wind effect. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measure MM WI-1a. Consequently, the Project would not make a considerable contribution to the cumulative impact.

C. Air Quality

1. Contribution to Increases of Criteria Pollutants from Construction Activities (DEIR III.H-23-24; C&R 159-160, 2403) Construction activities associated with the Project could contribute to cumulative impacts from increases in emission of criteria air pollutants and precursors that exceed BAAQMD CEQA significance criteria if development of cumulative projects were to occur simultaneously with construction of the Project. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measure MM HZ-15. Consequently, the Project would not make a considerable contribution to the cumulative impact.

2. Contribution to Cumulative Diesel Particulate Matter from Construction Activities (DEIR III.H-24-27; C&R 160-163, 764-765, 768-770, 2218, 2311-2316, 2403) Construction activities associated with the Project could contribute to impacts to off-site populations from emissions of DPM if development of cumulative projects were to occur simultaneously with construction of the Project. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM AQ-2.1 and AQ-2.2. Consequently, the Project would not make a considerable contribution to the cumulative impact.

3. Contribution to Cumulative Toxic Air Contaminants from Construction Activities (DEIR III.H-27-30; C&R 159-163, 165-168, 764-768, 2307-2308, 2316-2317, 2403) Construction activities associated with the Project could contribute to cumulative impacts to off-site and Alice Griffith populations from emissions of TACs bound to soil-PM₁₀ if development of cumulative projects were to occur simultaneously with construction of the Project. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measure MM HZ-15. Consequently, the Project would not make a considerable contribution to the cumulative impact.

D. Cultural Resources and Paleontological Resources

1. Contribution to Cumulative Change in Significance of Archaeological Resources and Paleontological Resources, as well as Human Remains from Construction Activities (DEIR III.J-45-46; C&R 25-28, 2403) Cumulative development in the Project area could result in a significant impact to archaeological and paleontological resources, as well as human remains. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM CP-2a and CP-3a. Consequently, the Project would not make a considerable contribution to the cumulative impact.

E. Hydrology and Water Quality

1. Contribution to Cumulative Alteration of Drainage Pattern within the Islais Creek and Yosemite Basins (DEIR III.M-107; C&R 1392, 1793, 2403, 2418) Cumulative development in the watershed could alter the drainage pattern of the various development sites within the Islais Creek and Yosemite Basins, resulting in localized changes, and in some cases, adverse effects such as flooding. Past construction activities have significantly altered the drainage patterns of the watersheds and the impact from these past activities is considered significant and adverse. However, the Project's contribution to this cumulative impact would not be considerable, because overall, the Project would not substantially change the existing drainage patterns at the Project site, and mitigation measures MM HY-1a.1, MM HY-1a.2, and MM HY-1a.3 would be implemented. Consequently, the Project would not make a considerable contribution to the cumulative impact.

2. Contribution to Cumulative Degradation of SF Bay Water Quality (DEIR III.M-108; C&R 907, 1214-1217, 1641, 1799; 2403, 2418) Cumulative development in the watershed could contribute to violations of water quality standards or waste discharge requirements. The Lower Bay, the receiving waterbody, has noted impairments for chlordane, dichloro-diphenyl-trichloroethane (DDT), dieldrin, dioxin compounds, exotic species, furan compounds, mercury, and polychlorinated biphenyls (PCBs) from past discharges. Additional development could exacerbate existing pollutant concentrations. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM HY-6a.1, MM HY-6a.2, MM HY-6b.1, MM HY-6b.2, MM HY-6b.3, MM BI-18b.1, MM BI-18b.2, MM BI-19b.1, and MM BI-19b.2. Consequently, the Project would not make a considerable contribution to the cumulative impact.

3. Cumulative Contribution of Runoff Water to Storm Sewer System (DEIR III.M-107-108; C&R 888, 906, 1214-1217, 1650-1652, 2403, 2418) Implementation of cumulative development in the watershed could create or contribute runoff water that would exceed the capacity of existing or planned storm sewer systems or provide substantial additional sources of polluted runoff. The Project's contribution to this cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM HY-6a.1. Consequently, the Project would not make a considerable contribution to the cumulative impact.

F. Biological Resources

1. Cumulative Contribution to Removal or Modification of Areas with Special-Status Species and Sensitive Natural Communities (DEIR III.N-119-120; C&R 31-54, 734, 795-796, 1073, 1219-1221, 1223, 1796-1797, 2403, 2418-2419 2403) Cumulative projects within the Bay could involve removal and/or modification of areas that have the potential to contain special-status species and sensitive natural communities. As development in the region continues, habitat for and individuals of sensitive wildlife species native to the Region, including those species listed under federal and state ESAs and those individuals identified by state and federal resources agencies as species of concern, fully protected, or sensitive, would be lost through conversion of habitat to urbanized environment. With continued conversion of natural habitat to human use, the availability and accessibility of remaining natural habitats in this ecosystem would dwindle and those remaining natural areas may not be able to support additional plant or animal populations above their current carrying capacities. Thus, the conversion of plant and wildlife habitat on a Regional level would result in a significant regional cumulative impact on special-status species and their habitats.

The Project may be required to participate in mitigation plans approved by state and federal resource agencies (i.e., for green sturgeon, Central California Coast steelhead and possibly Chinook salmon and longfin smelt), which would replace lost habitat and preserve contiguous areas of habitat for these species. The Project would also

implement ecological design features and mitigation measures specifically designed to avoid, reduce, or mitigate impacts to special-status/sensitive species and their habitat and reduce the Project's contribution to the cumulative loss of these species and their habitats. These mitigation measures include MM BI-5b.1 through BI-5b.4, MM BI-6a.1, BI-6a.2, BI-6b, BI-7b, BI-12a.1, BI-12a.2, BI-12b.1, BI-12b.2, BI-14a.

In addition, the Project would mitigate impacts to 43 acres of non-native grassland that provides raptor foraging habitat on HPS Phase II by restoring an equivalent amount of higher-quality native-dominated grassland specifically managed for grassland-associated species. These areas would represent high-quality foraging habitat and would result in a net increase in the quality of raptor foraging habitat. Consequently, with implementation of the proposed mitigation and ecological Project components the Project would mitigate any contributions to significant cumulative impact to candidate, sensitive, or special-status species, riparian habitat, or other sensitive natural communities. The Project would thus not make a cumulatively considerable contribution to a regionally significant cumulative impact.

2. Cumulative Contribution to Impacts on wetlands and Jurisdictional Waters (DEIR III.N-121-122; C&R 10, 32, 34, 37-52, 732, 736, 778, 782-783, 788, 792-793, 796, 907, 933, 1021, 1214, 1218, 1392, 1644, 1654, 1704-1705, 1768, 1792-1793, 2418-2419). Development of cumulative projects could result in significant impacts to wetlands and jurisdictional waters. Wetlands and jurisdictional waters restoration projects within the Bay area are extensive, with approximately 40,000 acres of wetlands are either in progress or planned. Although these restoration projects are attempting to reduce the cumulative loss of these habitats within the Region, the large historical loss of these areas has resulted in a cumulatively significant loss of wetlands and jurisdictional waters within the Region. Minimizing impacts to jurisdictional wetlands and other waters; compensating for impacts to these habitats; securing a SAA from the CDFG (if applicable) and 404 and 401 permits under the CWA; and compliance with the federal and state "no net loss of wetlands" policy would protect the hydrology and ecology of the wetlands and jurisdictional waters within the Project site and the Bay and its adjacent wetlands. Impacts from the Project to these habitats would thus be fully compensated. Therefore, because no long-term net loss of wetland resources would be attributable to the Project, development of the Project would not make a cumulatively considerable contribution to the regionally significant cumulative impact.

3. Cumulative Contribution to Impact on Wildlife Movement Corridors and Nursery Sites from Conversion of Open Areas (DEIR III.N-122-124; C&R 936, 1072-1073, 2418-2419, 2403) The conversion of open areas, both terrestrial and aquatic, on a Regional level as a result of cumulative development would result in a regionally significant cumulative impact on wildlife movement corridors and nursery sites. The Project site does not contain any regional wildlife corridors or pathways. The Project's contribution to the cumulative impact to migratory birds would be avoided or substantially reduced by the implementation of mitigation measures

MM BI-20a.1 and MM BI-20a.2. Consequently, implementation of the Project would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors and the Project would not make a considerable contribution to this cumulative impact.

4. Cumulative Contribution to Impacts on Eelgrass Beds (DEIR III.N-123-124; C&R 10, 31-54, 734, 793-794, 795-796, 1073, 1219-1221, 1223, 1796-1797, 2403, 2418-2419) Construction of the Project and the cumulative projects on the shoreline or in-water in the vicinity of eelgrass beds could remove them or indirectly impact them such that productivity and survival of these habitats would be reduced. Mitigation measures MM BI-5b.1 through MM BI-5b.4 would reduce potential Project effects on eelgrass by requiring surveys for and avoidance of this habitat. For areas that cannot be avoided, this habitat would be replaced at a minimum ratio of 3:1 (i.e., 3 new acres of eelgrass to 1 removed acre), replacing impacted habitat. Consequently, implementation of the Project would not impede the use of native wildlife nursery sites and the Project would not make a considerable contribution to this cumulative impact.

G. Public Services

1. Cumulative Contribution to Demand for Fire Protection (DEIR III.O-22-23; C&R C&R 968, 1643, 1732, 2006-2007, 2020, 2137, 2419) Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses and associated increased demand for fire protection. New or physically altered fire or emergency medical facilities could be required in order to maintain acceptable levels of service from cumulative development, and expansion of the water conveyance system could also be required. Because it is unknown the extent to which such facilities and systems would require expansion and whether such improvements would accommodate projected growth, this is a potentially significant impact. Since adequate response times would be ensured for the Project through provision of a new fire facility, the construction of which is evaluated and mitigated for in this EIR, the Project would not make a cumulatively considerable contribution to any potentially significant cumulative impact on fire and emergency medical services. The Project's cumulative impact would be less than significant.

H. Utilities

1. Cumulative Contribution to Water Demand (DEIR III.Q-18-19; C&R 950-951, 1643, 1735, 2012, 2182, 2403). Development of cumulative projects would result in increased demands for water. After 2030, during multiple dry-year periods, the total retail water supply in San Francisco would be slightly less than estimated total demand, including the cumulative demand associated with the Project, major development proposals, and background growth. During multiple dry-year periods, the SFPUC would need to implement the provisions of the WSAP and RWSAP,

which could include voluntary rationing or the curtailment of retail deliveries. With the implementation of the WSAP and RWSAP during multiple dry-year periods, existing and projected future water supplies could accommodate cumulative future retail water demand. Implementation of the Phased WSIP would ensure sufficient water supply and water treatment capacity for the Project and estimated current and future retail demand. Provision of an AWSS on site and connection to the existing off-site AWSS by implementation of mitigation measure MM UT-2 would ensure adequate water for firefighting purposes. As no additional water supply or water treatment capacity is needed to serve the Project and projected future development beyond the supply identified under the Phased WSIP, the Project would not make a considerable contribution to a cumulative impact on water supply. The Project's cumulative impact on water supply would be less than significant.

2. Cumulative Contribution to Demand on Sewer Storm System (DEIR III.Q-35-36; C&R 2420-2421) Cumulative projects in the Bayside Drainage Area would contribute both additional wastewater and additional stormwater to the Bayside System, which could exceed its capacity. Peak-flow capacities of the Bayside System are adequate to convey the wastewater generated by the Project. Wet-weather flow volumes would be reduced compared to existing conditions because the stormwater that currently flows from the Project site into the combined system would be offset by the proposed separated stormwater and wastewater system on site. Because there would be adequate dry-weather conveyance capacity to transport wastewater from the Project and because the total wet-weather volume in the Bayside system with the Project would be less than under current conditions, it would have no impact and, regardless of future contributions to CSOs from other projects, the Project's contribution would not be cumulatively considerable. Mitigation measure MM UT-3a would ensure that there would be no increase in CSO flows as a result of the Project by providing temporary detention or retention of wastewater on site during wet weather or completion of the separate stormwater and wastewater systems for the Project. The Project's cumulative impact would be less than significant.

3. Cumulative Contribution to Solid Waste Generation (DEIR III.Q-56-58; C&R 812, 966, 1021, 2403, 2421-2422) Cumulative development in the City would generate varying amounts of solid waste that would decrease the remaining capacity of servicing landfills. As some landfills are nearing capacity or would close during the planning period for the General Plan, this is a potentially significant cumulative problem. The Project would implement strategies for reduction of construction waste and would achieve a construction waste diversion rate of at least 75 percent. Implementation of mitigation measure MM UT-7a would provide for preparation of a waste diversion plan that would address waste-diversion strategies for areas not otherwise covered by existing City policies. With compliance with the Green Building Ordinance and implementation of on-site recycling, the Project would not make a cumulatively considerable contribution to any potential cumulative impact with regard to landfill capacity. The Project's cumulative impact would be less than significant.

I. Greenhouse Gas Emissions

1. **Cumulative Contribution to Greenhouse Gas Emissions** (DEIR III.S-36-39; C&R 96, 605-606, 945, 1471, 2184-2185, 2187, 2423) Development of cumulative projects would result in greenhouse gas emissions during construction and operation that would contribute to global climate change. Given the requirements of ARB's scoping plan and early action measures that would apply to construction contractors, these emissions are less than significant for the cumulative impact to climate change because the Project would not conflict with state goals or the goals articulated in the Greenhouse Gas Reduction Ordinance and the San Francisco Climate Action Plan. The Project's contribution to the operational cumulative impact would be avoided or substantially reduced by the implementation of mitigation measures MM GC-1 through MM GC-4. Given the Project design as a dense, infill mixed-use project, with a transit-oriented design, the mitigation measures identified previously, the Project's large reductions in GHG emissions as compared to the ARB Scoping Plan No Action Taken scenario, and the continuing implementation of GHG reduction actions by the City and County of San Francisco, the Project would not conflict with the state's goals of reducing GHG emissions to 1990 levels by 2020, or the City's GHG reduction goals established in the Greenhouse Gas Reduction Ordinance, and would not result in a significant cumulative impact. Consequently, the Project would not make a considerable contribution to this cumulative impact.

IV SIGNIFICANT IMPACTS THAT CANNOT BE AVOIDED OR REDUCED TO A LESS THAN SIGNIFICANT LEVEL

Based on substantial evidence in the whole record of these proceedings, the Agency Commission finds that, where feasible, changes or alterations have been required, or incorporated into, the Project to reduce the significant environmental impacts listed below as identified in the FEIR. The Agency Commission finds that the mitigation measures in the FEIR and described below are appropriate, and that changes have been required in, or incorporated into, the Project that, to use the language of Public Resources Code section 21002 and CEQA Guidelines section 15091, may substantially lessen, but do not avoid (i.e., reduce to less than significant levels), the potentially significant or significant environmental effects associated with implementation of the Project as described in Chapter III. The Agency Commission adopts all of the mitigation measures proposed in the FEIR that are relevant to the Project and set forth in the MMRP, attached hereto as Attachment B. The Agency Commission further finds, however, for the impacts listed below, that no mitigation is currently available to render the effects less than significant. The effects therefore remain significant and unavoidable. Based on the analysis contained within the FEIR, other considerations in the record, and the standards of significance, the Agency Commission finds that because some aspects of the Project would cause potentially significant impacts for which feasible mitigation measures are not available to reduce the impact to a less-than-significant level, the impacts are *significant and unavoidable*.

The Agency Commission determines that the following significant impacts on the environment, as reflected in the FEIR, are unavoidable, but under Public Resources Code Section 21081(a)(3) and (b), and CEQA Guidelines 15091(a)(3), 15092(b)(2)(B), and 15093, the Agency Commission determines that the impacts are acceptable due to the overriding considerations described in Section VI below. This finding is supported by substantial evidence in the record of this proceeding.

A. Transportation and Circulation³

1. Impact TR-1: Effect of Project Construction on Vehicle Traffic and Roadway Construction on Transportation System. (DEIR III.D-68-70; C&R 1001-1002, 1027, 2133, 2402) The Project would impact the transportation system through construction vehicle traffic and roadway construction and contribute to cumulative construction impacts in the vicinity of the Project. Implementation of MM TR-1, which requires development and implementation of a Project construction traffic management program, would minimize impacts associated with construction traffic but disruption and increased delays and construction-related traffic impacts on local and regional roadways could still occur even with implementation of traffic control plans. These impacts are considered *significant and unavoidable*.

MM TR-1, Candlestick Point-Hunters Point Shipyard Phase II Construction Traffic Management Program.

2. Impact TR-2: Effect of Project on Traffic Volumes (DEIR III.D-70-71; C&R 64-65, 1733-1734, 1882-1883, 2137, 2402, 2405) The Project would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system. MM TR-2 requires development and implementation of a Travel Demand Management Plan for the Project, so that alternative modes of transportation would be encouraged, the use of single-occupant vehicles would be discouraged, and the impact of additional vehicles generated by the Project would be lessened. However, the Project would still result in significant and unavoidable impacts on traffic and transit operations, and would still make considerable contributions to cumulative impacts related to substantial increases in traffic. These impacts are considered *significant and unavoidable*.

MM TR-2, Transportation Demand Management Plan.

3. Impact TR-3: Effect of Project Traffic at Certain Area Intersections. (DEIR III.D-72-82; C&R 63, 65, 360, 596-597, 599-601, 799, 1404, 2405) The Project would have significant impacts on nine intersections in the Project vicinity, and would contribute to cumulative traffic conditions at these intersections: Third Street at Oakdale, Revere, Carroll, Jamestown, Jerrold and Williams/Van Dyke; and

³ Significant cumulative impacts for traffic and transportation are included in this subsection. See Section IVA for discussion of significant and unavoidable contributions to cumulative impacts in other resource areas.

Bayshore Boulevard at Paul, Cortland and US 101 Northbound Off-ramp/Cesar Chavez. No feasible mitigation measures have been identified to reduce Project impacts on these intersections. Therefore, these impacts are considered *significant and unavoidable*.

4. Impact TR-4: Effect of Project Traffic at Tunnel/Blanken. (DEIR III.D-82-83) The Project would result in significant Project AM peak hour traffic impacts and contribute to cumulative PM peak hour traffic impacts at the intersection of Tunnel/Blanken. MM TR-4, which requires restriping the northbound and southbound approaches of the intersection of Tunnel/Blanken to provide dedicated left-turn lanes adjacent to shared through/right-turn lanes would improve conditions at this intersection, but not to acceptable LOS D or better conditions during the AM and PM peak hours. The Agency Commission recognizes that MM TR-4 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. Even with implementation of this mitigation measure, Project-related impacts at this intersection are *significant and unavoidable*.

MM TR-4, Restripe the northbound and southbound approaches of the intersection of Tunnel/Blanken to provide dedicated left-turn lanes adjacent to shared through/right-turn lanes.

5. Impact TR-5: Project Contribution to Traffic at Degraded Intersections. (DEIR III.D-83-84; C&R 152, 203, 596, 628, 2405) The Project would contribute significant traffic to intersections in the Project vicinity that would operate at LOS E or LOS F under 2030 No Project conditions. The Project contributions to cumulative traffic conditions would be significant in twenty intersections in the Project vicinity, and at sixteen of these intersections no feasible mitigation measures were identified. These sixteen intersections are: Third Street at 25th Street, Cesar Chavez Street, Cargo Way, Evans Avenue, Palou Avenue and Paul Avenue; Bayshore Boulevard at Visitacion Avenue, Alemany Boulevard/Industrial Street, Blanken, Bacon Street and Sunnydale Avenue; San Bruno Avenue at Paul Avenue, Silver Avenue and Mansell Avenue/US 101 Southbound Off-ramp; Cesar Chavez Street at Pennsylvania/I 280; and Evans Avenue at Napoleon Avenue/Toland Street. (The other four intersections are discussed below, at Impacts TR-6, TR-7 and TR-8.) Because no feasible mitigation measures were identified to alleviate the Project's significant contribution to cumulative conditions at these intersections, this impact is *significant and unavoidable*.

6. Impact TR-6: Project Traffic at Freeway Ramps. (DEIR III.D-84; C&R 1014-1016, 1701, 2405-2406) The Project would contribute significant traffic at the intersections of Geneva/US 101 Southbound Ramps and Harney/US 101 Northbound Ramps, which would operate at LOS F under 2030 No Project conditions. MM TR-6 requires that the Project Applicant pay its fair share contribution to the Harney Interchange Project, which is currently being studied by the City of Brisbane and Caltrans. The Agency Commission recognizes that MM TR-6 is partially within the jurisdiction of SFMTA, the San Francisco County Transportation Authority ("SFCTA") and SFDPPW. The Agency

Commission urges SFMTA, SFCTA and SFDPW to assist in implementing this mitigation measure, and finds that SFMTA, SFCTA and SFDPW can and should participate in implementing this mitigation measure. But, because the environmental review of the Harney Interchange Project is not yet complete and the interchange would be approved by Caltrans, the implementation of MM TR-6 is uncertain and is partially outside of the City/Agency jurisdiction. Therefore, Project-related contributions to cumulative traffic impacts at these two intersections are *significant and unavoidable*.

MM TR- 6, Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.

7. Impact TR-7. Project Traffic at Amador/Cargo/Illinois. (DEIR III.D-84-85) The Project would contribute significant traffic to the intersections of Amador/Cargo/Illinois, which would operate at LOS E under 2030 No Project. MM TR-7 requires a feasibility study of reconfiguring the southbound approach on Illinois Street to provide a dedicated southbound left turn lane and a dedicated right-turn lane. The Agency Commission recognizes that MM TR-7 is partially within the jurisdiction of SFMTA and the Port. The Agency Commission urges SFMTA and the Port to assist in implementing this mitigation measure, and finds that SFMTA and the Port can and should participate in implementing this mitigation measure. If feasible, the Project Applicant would contribute its fair share to the intersection improvements. Implementation of this mitigation would improve operations at this intersection to acceptable LOS C conditions during the AM and PM peak hours. However, since a feasibility study would be required, implementation of MM TR-7 is uncertain. Therefore, Project-related impacts at this intersection are *significant and unavoidable*.

MM TR-7, Feasibility study of reconfiguring the southbound approach on Illinois Street to provide a dedicated southbound left turn lane and a dedicated right-turn lane.

8. Impact TR-8: Project Traffic at Bayshore/Geneva. (DEIR III.D-85; C&R 2405) The Project would contribute significant traffic to the intersection of Bayshore/Geneva, which would operate at LOS F under 2030 No Project. MM TR-8 requires that the Project Applicant pay its fair share contribution to the Geneva Avenue Extension Project, which is currently being studied by the City of Brisbane. The Agency Commission recognizes that MM TR-8 is partially within the jurisdiction of SFMTA, SFCTA and SFDPW. The Agency Commission urges SFMTA, SFCTA and SFDPW to assist in implementing this mitigation measure, and finds that SFMTA, SFCTA and SFDPW can and should participate in implementing this mitigation measure. However, since implementation of MM TR-8 would be partially under the jurisdiction of the City of Brisbane, its implementation is uncertain. Therefore, the Project-related impacts at this intersection are *significant and unavoidable*.

MM TR-8, Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.

9. Impact TR-10: Project Traffic Effects. (DEIR III.D-86-87; C&R 1702, 1798, 2407) The Project would result in increased traffic volumes on area roadways,

and most substantially on key north/south and east/west streets, which would also experience cumulative traffic growth. As a result, the existing residential streets could be used as “cut-throughs,” shortcuts, or bypasses by non-neighborhood traffic. Substantial amounts of cut-through traffic can result in impacts such as noise, safety impacts to pedestrians, impaired driveway access, interference with emergency vehicle access, increased dust, exhaust, and litter, and similar annoyances that adversely affect neighborhood character. MM TR-2, which calls for the development and implementation of a Travel Demand Management Plan for the Project, and MM TR-17, which requires implementation of the Project's Transit Operating Plan, would likely reduce spillover impacts. Nonetheless, cut-through traffic may still occur during periods of congestion, and the impacts associated with spillover traffic are considered *significant and unavoidable*.

MM TR-2, Transportation Demand Management Plan.

MM TR-17, Implement the Project's Transit Operating Plan.

10. Impact TR-11: Project Traffic at Freeway Segments. (DEIR III.D-87-91; C&R 800, 1016, 2405-2406) The Project would contribute cumulatively considerable amounts of traffic to four freeway segments expected to operate at LOS E or LOS F under 2030 No Project conditions, specifically, US 101 northbound from Sierra Point to Alana/Geneva/Harney; US 101 southbound from the I 80 Merge to Cesar Chavez; US 101 southbound from Third/Bayshore to Alana/Geneva/Harney; and US 101 southbound from Alana/Geneva/Harney to Sierra Point. No feasible mitigations were identified to reduce this Project-related contribution to 2030 cumulative freeway congestion impacts to a less-than-significant level. Therefore, the Project's contributions to cumulative congestion impacts at these freeway segments are considered *significant and unavoidable*.

11. Impact TR-12: Project Traffic Impact at Freeway Ramps. (DEIR III.D-91; C&R 1014-1016, 1701, 2405-2406) The Project would cause four ramp junctions to deteriorate from acceptable LOS D or better to LOS E or F conditions or from LOS E to LOS F conditions, specifically, the US 101 northbound on-ramp from Alemany Boulevard; US 101 northbound on-ramp from Harney Way; US 101 northbound on-ramp from Bayshore Boulevard/Cesar Chavez Street; US 101 southbound on-ramp from Harney Way/Geneva Avenue. No feasible mitigation measures were identified to reduce these impacts to less-than-significant. Project impacts at these locations are considered *significant and unavoidable*.

12. Impact TR-13: Project Traffic Contribution to Cumulative Impacts at Freeway Ramps. (DEIR III.D-91-95; C&R 1014-1016, 1701, 2405-2406) The Project would contribute to significant cumulative traffic impacts at 12 freeway ramp locations. The Project would contribute cumulatively significant traffic increases at ramp junctions projected to operate at LOS E or LOS F under 2030 No Project conditions, specifically: US 101 northbound on-ramp from Sierra Point Parkway; US 101 northbound on-ramp from Harney Way; US 101 northbound on-ramp from

Alemanya Boulevard; US 101 northbound on-ramp from Bayshore Boulevard/Cesar Chavez Street; US 101 southbound off-ramp to Bayshore Boulevard/Cesar Chavez Street; US 101 southbound on-ramp from Third Street/Bayshore Boulevard; US 101 southbound on-ramp from Harney Way/Geneva Avenue; US 101 southbound on-ramp from Sierra Point Parkway; I 280 northbound off-ramp to Cesar Chavez Street; I 280 northbound on-ramp from Indiana Street/25th Street; I 280 southbound off-ramp to Pennsylvania Avenue/25th Street; and I 280 southbound on-ramp from Pennsylvania Avenue/25th Street. No feasible mitigation measures have been identified for these ramp junction locations. Therefore, the Project's contribution to cumulative impacts at the ramp locations is considered *significant and unavoidable*.

13. Impact TR-14: Project Traffic Impact to Diverge Queue Storage at Harney/US 101 Northbound Off-ramp. (DEIR III.D-95 to DEIR III.D-96; C&R 1014-1016, 1701, 2405-2406) The Project would result in significant impacts related to freeway diverge queue storage at the Harney/US 101 Northbound Off-ramp. The Project would result in increases in traffic volumes that would cause the US 101 northbound off-ramp to Harney Way to experience queues that may extend back to the upstream freeway mainline segment which could result in unsafe conditions on the freeway mainline, resulting in significant traffic impacts at this location. MM TR-6 provides for the Project Applicant to pay a fair share toward the construction of the Harney Way Interchange Project, which could mitigate for the Project's contributions to this impact. Because the environmental review of the interchange project is not yet complete and the interchange project would be undertaken and approved by Caltrans, the implementation of MM TR-6 is uncertain and is outside the City/Agency jurisdiction. Therefore, Project-related impacts related to freeway diverge queue storage are *significant and unavoidable*.

MM TR- 6, Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.

14. Impact TR-15: Project Traffic Contribution to Diverge Queue Storage Impacts. (DEIR III.D-97; C&R 1014-1016, 1701, 2405-2406) The Project could contribute to significant cumulative traffic impacts related to freeway diverge queue storage at some off-ramp locations: US 101 northbound off-ramp to Harney Way and Bayshore/Cesar Chavez; US 101 southbound Off-ramp to Harney Way/Geneva Avenue and Sierra Point/Lagoon; and I-280 northbound off-ramp at Cesar Chavez. MM TR-6 provides for the Project Applicant to pay a fair share toward the construction of the Harney Way Interchange Project, which could mitigate for the Project's contributions to this impact. Because the environmental review of the interchange project is not yet complete and the interchange project would be undertaken and approved by Caltrans, the implementation of MM TR-6 is uncertain and is outside the City/Agency jurisdiction. Therefore, Project-related impacts related to freeway diverge queue storage are *significant and unavoidable*.

MM TR- 6, Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.

15. Impact TR-21: Project Traffic Impacts to 9-San Bruno Transit Line. (DEIR III.D-104-106; C&R 148, 291, 2406) The Project would increase congestion and contribute to cumulative conditions at intersections along San Bruno Avenue, which would increase travel times and impact operations of the 9-San Bruno. Project-related transit delays due to traffic congestion and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the 9-San Bruno, which would add up to 8 minutes of delay per bus during peak hours. MM TR-21.1 requires the maintenance of the headways of the 9-San Bruno by requiring the Project Applicant, in cooperation with SFMTA and prior to issuance of a grading permit for Development Phase I, to conduct a study to evaluate the effectiveness and feasibility of various roadway improvement which could reduce Project impacts on transit operations along the San Bruno Avenue corridor. If these measures are not feasible or effective, MM TR-21.2 requires the purchase of additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 9-San Bruno. The Agency Commission recognizes that MM TR-21.1 and MM TR-21.2 are partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing these mitigation measures, and finds that SFMTA can and should participate in implementing these mitigation measures. Because the feasibility and effectiveness of the improvements contemplated in MM TR-21.1 and MM TR-21.2 are uncertain Project impacts on the 9-San Bruno are considered *significant and unavoidable*.

MM TR-21.1, Maintain the proposed headways of the 9-San Bruno.

MM TR-21.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 9-San Bruno.

16. Impact TR-22: Project Traffic Impacts to 23-Monterey, 24-Divisadero, 44-O'Shaughnessy Transit Lines. (DEIR III.D-106-109; C&R 148-149, 590, 859-860, 894, 932, 2139, 2406) The Project would contribute traffic to cumulative conditions at intersections along Palou Avenue, which would increase travel times and impact operations of the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy. Project-related transit delays due to traffic congestion and passenger boarding delays associated with increased ridership would result in significant impacts on the operation of the 23-Monterey, 24-Divisadero, and 44-O'Shaughnessy along Palou Avenue, which would add up to 7 minutes of delay per bus during peak hours. MM TR-22.1 requires the maintenance of the headways of the 23-Monterey, 24-Divisadero and the 44-O'Shaughnessy, by requiring the Project Applicant, in cooperation with SFMTA and prior to issuance of a grading permit for Development Phase I, to conduct a study to evaluate the effectiveness and feasibility of various improvements, which could reduce Project impacts on transit operations along the Palou Avenue corridor. If MM TR-22.1 is not feasible or effective, MM TR-22.2 requires the purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy. The Agency Commission

recognizes that MM TR-22.1 and MM TR-22.2 are partially within the jurisdiction of SFMTA and SFDPW. The Agency Commission urges SFMTA and SFDPW to assist in implementing these mitigation measures, and finds that SFMTA and SFDPW can and should participate in implementing these mitigation measures. Because the feasibility and effectiveness of the improvements contemplated in MM TR-22.1 and MM TR-22.2 are uncertain to sufficiently reduce the impacts on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy to a less-than-significant level, the Project impacts on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy are considered *significant and unavoidable*.

MM TR-22.1, Maintain the proposed headways of the 23-Monterey, 24-Divisadero and the 44-O'Shaughnessy.

MM TR-22.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy.

17. Impact TR-23: Project Traffic Impacts to 29-Sunset Transit Line. (DEIR III.D-109-111; C&R 148-149, 152, 590, 598, 627, 948, 2406) The Project would increase congestion at intersections along Gilman Avenue and Paul Avenue, which would increase travel times and would impact operations of the 29-Sunset. Project-related transit delays due to traffic congestion and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the 29-Sunset, particularly at Third Street and Bayshore Boulevard. Overall, the Project-related congestion would add up to 17 minutes of delay per bus during peak hours. MM TR-23.1 requires maintenance of headways of the 29-Sunset, by requiring the Project Applicant, in cooperation with SFMTA and prior to issuance of a grading permit for Development Phase I, to conduct a study to evaluate the effectiveness and feasibility of various improvements, which could reduce Project impacts on transit operations along the along the Gilman Avenue and Paul Avenue corridor. If MM TR-23.1 is not feasible or effective, MM TR-23.2 requires the purchase of additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 29-Sunset. The Agency Commission recognizes that MM TR-23.1 and MM TR-23.2 are partially within the jurisdiction of SFMTA and SFDPW. The Agency Commission urges SFMTA and SFDPW to assist in implementing these mitigation measures, and finds that SFMTA and SFDPW can and should participate in implementing these mitigation measures. Because the feasibility and effectiveness of the improvements contemplated in MM TR-23.1 and MM TR-23.2 might not be sufficient to reduce the impacts on the 29-Sunset to a less-than-significant level, the Project impacts on the 29-Sunset are considered *significant and unavoidable*.

MM TR-23.1, Maintain the proposed headways of the 29-Sunset.

MM TR-23.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 29-Sunset.

18. Impact TR-24: Project Traffic Impacts to 48-Quintara-24th Street Transit Line. (DEIR III.D-111-112; C&R 152, 590, 948, 932, 1703, 1734, 2406) The Project would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street. Project-related transit delays due to traffic congestion and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the 48-Quintara-24th Street along Evans Avenue, particularly at intersections of Third Street, Napoleon/Toland Streets and at Cesar Chavez Street. Overall, the Project-related congestion would add up to 3 minutes of delay per bus during peak hours. MM TR-24.1 requires maintenance of headways of the 48-Quintara-24th Street, by requiring the Project Applicant, in cooperation with SFMTA and prior to issuance of a grading permit for Development Phase I, to conduct a study to evaluate the effectiveness and feasibility of a series of improvements which could reduce Project impacts on transit operations along the Evans Avenue corridor. If MM TR-24.1 is not feasible or effective, MM TR-24.2 requires the purchase of additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 48-Quintara-24th Street line. The Agency Commission recognizes that MM TR-24.1 and MM TR-24.2 are partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing these mitigation measures, and finds that SFMTA can and should participate in implementing these mitigation measures. Because the feasibility and effectiveness of the improvements contemplated in MM TR-24.1 and MM TR-24.2 might not be sufficient to reduce the impacts on the 48-Quintara-24th Street to a less-than-significant level, the Project impacts on the 48-Quintara-24th Street are considered *significant and unavoidable*.

MM TR-24.1, Maintain the proposed headways of the 48-Quintara-24th Street.

MM TR-24.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 48-Quintara-24th Street.

19. Impact TR-25: Project Traffic Impacts to 54-Felton Transit Line. (DEIR III.D-113; C&R 590, 2406) The Project would increase congestion at several intersections in the area, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the 54-Felton. The Project would create traffic congestion resulting in significant impacts to the operations of the 54-Felton, adding up to 6 minutes of delay per bus, particularly during the PM peak hour. MM TR-25.1 requires the purchase additional transit vehicles to mitigate the Project impacts and Project contribution to cumulative impacts to headways on 54-Felton. The Agency Commission recognizes that MM TR-25.1 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. While the provision of additional transit vehicles for the 54-Felton would reduce impacts associated with increased travel times, the transit vehicles would still be subject to delays resulting from increased congestion, and therefore Project impacts on the 54-Felton are considered *significant and unavoidable*.

MM TR-25.1, Purchase additional transit vehicles to mitigate the Project impacts and Project contribution to cumulative impacts to headways on 54-Felton.

20. Impact TR-26: Project Traffic Impacts to T-Third Transit Line. (DEIR III.D-113 to DEIR III.D-114; C&R 63, 65-66, 156, 289-291, 590, 627, 931-932, 948, 1700, 2406) The Project would increase congestion at intersections along Third Street, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the T-Third. Project-related transit delays due to traffic congestion on Third Street and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the T-Third, particularly in the segment between Thomas Avenue and Kirkwood Avenue, resulting in overall delays of up to 3 minutes per bus during peak hours. MM TR-26.1 requires maintenance of headways of the T-Third, by requiring the Project Applicant, in cooperation with SFMTA and prior to issuance of a grading permit for Development Phase I, to conduct a study to evaluate the effectiveness and feasibility of various improvements, which could reduce Project impacts on transit operations along Third Street. If MM TR-26.1 is not feasible or effective, MM TR-26.2 requires the purchase of additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the T-Third. The Agency Commission recognizes that MM TR-26.1 and MM TR-26.2 are partially within the jurisdiction of SFMTA and SFDPW. The Agency Commission urges SFMTA and SFDPW to assist in implementing these mitigation measures, and finds that SFMTA and SFDPW can and should participate in implementing these mitigation measures. Because the feasibility and effectiveness of the improvements contemplated in MM TR-26.1 and MM TR-26.2 might not be sufficient to reduce the impacts on the T-Third to a less-than-significant level, the Project impacts on the T-Third are considered *significant and unavoidable*.

MM TR-26.1, Maintain the proposed headways of the T-Third.

MM TR-26.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the T-Third.

21. Impact TR-27: Project Traffic Impacts to 28L-19th Avenue/Geneva Limited Transit Line. (DEIR III.D-115; C&R 590, 627, 948, 1398-1399, 1405, 2406) The Project could increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard, increasing travel times and impacting operations of the 28L-19th Avenue/Geneva Limited. Increased congestion associated with Project vehicle trips would impact the operations of the 28L-19th Avenue/Geneva Limited, resulting in delays of 4 minutes per bus during peak hours. MM TR-27.1 requires San Francisco County Transportation Authority (SFCTA) and SFMTA to coordinate with the City of Brisbane to ensure transit preferential treatment is accounted for in the design of the Geneva Avenue Extension. If MM TR-27.1 is not feasible or effective, MM TR-27.2 requires the purchase of additional transit vehicles as

necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 28L-19th Avenue/Geneva Limited. The Agency Commission recognizes that MM TR-27.1 and MM TR-27.2 are partially within the jurisdiction of SFMTA and SFCTA. The Agency Commission urges SFMTA and SFCTA to assist in implementing these mitigation measures, and finds that SFMTA and SFCTA can and should participate in implementing these mitigation measures. But, because implementation of MM TR-27.1 would be partially under the jurisdiction of the City of Brisbane, its implementation is uncertain. Implementation of MM TR- 27.2, on the other hand, would allow maintenance of headways as proposed for the 28L-19th Avenue/Geneva Limited. However, given the congestion along Geneva Avenue, implementation of MM TR-27.2 alone, without MM TR-27.1, might not be sufficient to reduce the impact to less-than-significant levels. Therefore, the Project impacts on the 28L-19th Avenue/Geneva Limited are considered *significant and unavoidable*.

MM TR-27.1, Ensure transit preferential treatment is accounted for in the design of the Geneva Avenue Extension.

MM TR-27.2, Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 28L-19th Avenue/Geneva Limited.

22. Impact TR-28: Project Traffic Impacts to 9X, 9AX, 9BX-Bayshore Expresses and 14X-Mission Express Transit Lines. (DEIR III.D-116; C&R 148, 2406) The Project would increase congestion on US 101 mainline and ramps, which would increase travel times and impact operations of the 9X, 9AX, 9BX-Bayshore Expresses, and 14X-Mission Express. The Project would also contribute to cumulative impacts on these transit routes on US 101. No feasible mitigation measures have been identified to reduce these impacts, and therefore they are considered *significant and unavoidable*.

23. Impact TR-30: Project Traffic Impacts to SamTrans Bus Lines. (DEIR III.D-116-117; C&R 204, 2406) The Project would increase congestion and contribute to cumulative congestion on US 101 and on Bayshore Boulevard, which would increase travel times and adversely affect operations of SamTrans bus lines on these facilities. No feasible mitigation has been identified to reduce these impacts, and therefore they are considered *significant and unavoidable*.

24. Impact TR-32: Project Traffic Impacts to Bicycle Routes. (DEIR III.D-118; C&R 2406) Implementation of the Project's proposed transit preferential treatments and significant increases in traffic volumes on Palou Avenue could result in impacts on bicycle travel on Bicycle Routes #70 and #170 between Griffith Street and Third Street. The combination of the proposed transit preferential treatment and the substantial increase in traffic volumes and congestion would result in potentially significant impacts on bicycle travel on Bicycle Route #70 and Bicycle Route #170 on Palou Avenue. MM TR-32 requires the Project Applicant to fund a study, to be undertaken by SFMTA, to determine the feasibility of relocating these bicycle routes. The Agency Commission recognizes that MM TR-32 is partially within the jurisdiction of

SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. Because the feasibility of the relocation of Bicycle Routes #70 and #170 on Palou Avenue is uncertain, the Project impact on bicycle circulation on Palou Avenue is considered *significant and unavoidable*.

MM TR-32, Determine the feasibility of relocating Bicycle Routes #70 and #170.

25. Impact TR-38: Stadium 49ers Game Site Access and Traffic Impacts. (DEIR III.D-127 to DEIR III.D-133, 2406) Implementation of the proposed 49ers stadium would result in significant impacts on study area roadways and intersections, for as many as 12 times a year. MM TR-38 requires that a management plan for accommodating the increased vehicle, transit, pedestrian and bicycle demands during game days be prepared and implemented. This mitigation would likely reduce automobile travel to the stadium and encourage transit usage. The Agency Commission recognizes that MM TR-38 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. However, even with implementation of MM TR-38, the Project's impacts on Sunday pre-game and post-game period traffic conditions would be considered *significant and unavoidable*.

MM TR-38, Transportation Management Plan (TAMP) for the stadium 49er game events.

26. Impact TR-39: Stadium 49er Game Transit Impacts. (DEIR III.D-134-136; C&R 596, 738, 2406) Implementation of the Project with existing game day service and Project transit improvements would not be adequate to accommodate projected transit demand. It is estimated that there would be a capacity shortfall of approximately 3,640 passengers per hour during game days. MM TR-39 requires SFMTA to increase the frequency on regularly scheduled Muni routes serving the stadium area on game days, and the stadium operator to fund additional Muni shuttle service between the stadium and regional transit service, including BART (Balboa Park and/or Glen Park Station) and Caltrain (Bayshore Station). Implementation of this mitigation measure would reduce the Project's impacts to transit service on Sundays during a football game to less-than-significant levels. The Agency Commission recognizes that MM TR-39 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. However, because of the traffic impacts during post-game conditions, the impact on transit operations would remain *significant and unavoidable*.

MM TR-39, SFMTA to increase the frequency on regularly scheduled Muni routes serving the stadium area on game days and stadium operator to fund additional Muni shuttle service to transit facilities.

27. Impact TR-46: Stadium Secondary Event Site Access and Traffic Impacts. (DEIR III.D-141-144) Weekday evening secondary events at the stadium

would result in increased congestion at intersections, freeway mainline, and freeway ramps already operating at unacceptable LOS under Project conditions without a secondary event, and result in significant impacts at nine additional intersections and one additional freeway off-ramp. MM TR-46 requires the stadium operator to develop, as part of a Stadium Transportation Management Plan (TMP), a strategy for coordinating with representatives of SFMTA and the SF Police Department for deploying traffic control officers in the Project vicinity during secondary events, similar to what would be in place for game days. Implementation of this mitigation measure would likely improve vehicle entrance and exit flows to the stadium site during secondary events. The Agency Commission recognizes that MM TR-46 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. However, even with the implementation of MM TR-46, on days when secondary events are held at the stadium, the Project's impacts to the study roadway network are considered *significant and unavoidable*.

MM TR-46, Transportation Management Plan (TMP) for the stadium secondary events.

28. Impact TR-47: Stadium Secondary Event Transit Impacts. (DEIR III.D-144-145) With implementation of the Project, the existing transit service and Project improvements would not be adequate to accommodate projected transit demand during secondary events with attendance of 37,500 spectators. In addition, transit lines serving the area would experience additional delays due to traffic generated by the secondary event. MM TR-47 requires SFMTA to increase frequency on regularly scheduled Muni routes serving the stadium area prior to large special events, and the stadium operator to fund additional Muni shuttle service between the stadium and regional transit service, including BART (Balboa Park and/or Glen Park stations) and Caltrain (Bayshore station). The Agency Commission recognizes that MM TR-47 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. With implementation of MM TR-47, the Project's impacts to transit service on special event days would be reduced, but not to less-than-significant levels. In addition, traffic impacts during secondary events would not be mitigated, and would impact transit operations. Therefore, the impact on transit operations is considered *significant and unavoidable*.

MM TR-47, SFMTA to increase the frequency on regularly scheduled Muni routes serving the stadium area on special event days and stadium operator to fund additional Muni shuttle service to transit facilities.

29. Impact TR-51: Project Site Access and Traffic Impacts from Arena Uses. (DEIR III.D-146-149; C&R 362, 2383, 2388, 2407-2408) With implementation of the Project, weekday evening events at the arena would exacerbate congestion at intersections, freeway mainline, and freeway ramps already operating at unacceptable LOS under Project conditions without an arena event, and result in significant traffic impacts at Harney Way and Jamestown Avenue, which

would operating acceptably under Project conditions without an arena event. Overall, since local streets and freeway facilities would experience increased congested without an arena event, traffic impacts associated with the new arena would be significant. MM TR-51 requires the arena operator to develop a Transportation Management Plan (TMP) and to coordinate with representatives of SFMTA and the SF Police Department for deploying traffic control officers in the Project vicinity to increase efficiency during events at the arena, and for developing incentives to increase transit ridership to the arena. As explained under Impact TR-52, MM TR-51 also requires that if Variants 1 or 2A are implemented in lieu of the stadium, the arena operator work with SFMTA to increase service on selected bus lines during arena events and provide shuttle service to transit. The Agency Commission recognizes that MM TR-51 is partially within the jurisdiction of SFMTA. The Agency Commission urges SFMTA to assist in implementing this mitigation measure, and finds that SFMTA can and should participate in implementing this mitigation measure. However, even with the implementation of MM TR-51, the Project's impacts to the study roadway network during a sell-out event at the arena would be considered *significant and unavoidable*.

MM TR-51, Transportation Management Plan (TMP) for Arena Events.

30. Impact TR-52: Transit Impacts from Arena Uses. (DEIR III.D-149-150; C&R 627, 2383, 2388, 2407-2408) With implementation of the Project, the existing and proposed transit service would be affected by sell-out weekday evening events at the arena. With the stadium use at HPS Phase II, transit capacity would be adequate to accommodate projected transit demand, but because of traffic congestion in the area, impacts to transit would result. This impact of traffic congestion on transit service could be avoided with implementation of MM TR-23.1, described above, but its feasibility is uncertain. With the implementation of Variants 1 or 2A at the stadium site, traffic congestion would impact transit service and in addition, events at the arena might cause transit capacity impacts, which could be mitigated by increasing service on selected bus lines and having the arena operator provide shuttle service to transit as required by MM TR-51. However, due to the uncertainty of the mitigation, the impact is considered *significant and unavoidable*.

MM TR-23.1, Maintain the proposed headways of the 29-Sunset.

MM TR-51: Transportation Management Plan (TMP) for Arena Events. (Variants 1 and 2A)

B. Shadow

1. Impact SH-1a: New Shadow on Gilman Park from Tower Variants 3C and 3d. (DEIR IV-152; C&R 2445) Tower placement at Candlestick Point under Tower Variants 3C and 3D would add shadows to Gilman Park during the hours between one hour after sunrise and one hour before sunset, with a new shadow load greater than 1.0 percent. This new shadow could have an adverse effect on the use of the park under these variants and is conservatively considered to be a *significant and unavoidable*.

C. Air Quality

1. **Impact AQ-4: Criteria Pollutants from Project Operations.** (DEIR III.H-30-31; C&R 158-168, 764-768, 1387, 2305-2306, 2384, 2412-2415) Operation of the Project would violate the Bay Area Air Quality Management District (BAAQMD)'s CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources, and contribute substantially to an existing or projected air quality violation at full build-out in the year 2029. Project emissions of ROG, NO_x and PM₁₀ would exceed the BAAQMD CEQA thresholds and the ROG, NO_x, PM₁₀ and PM_{2.5} proposed BAAQMD CEQA thresholds. No feasible mitigation measures have been identified to reduce the Project's operational criteria emissions below these thresholds. This impact is considered *significant and unavoidable*.

D. Noise and Vibration

1. **Impact NO-2: Groundborne Vibration Impacts from Construction.** (DEIR III.I-33-39; C&R 51, 763, 795, 2415-2417) Construction activities associated with the Project would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before Project construction activities on adjacent parcels are complete. MMs NO-1a.1, NO-1a.2, and NO-2a would require implementation of construction best management practices, noise-reducing pile driving techniques as feasible, and monitoring of buildings within 50 feet of pile driving activities. Implementation of these measures would reduce vibration impacts, but not to a less-than-significant level as vibration levels from pile driving activities could be as high as 103 VdB for the residential uses within the HPS North District and the CP Center and South Districts when occupied. Additionally, excavation activities at the Alice Griffith area would result in vibration levels of approximately 87 VdB, due to the use of heavy construction equipment. Therefore, this impact is considered *significant and unavoidable*. Impact NO-2 includes Impacts NO-2a, NO-2b and NO-2c.

MM NO-1a.1, Construction Document Mitigation to Reduce Noise Levels During Construction.

MM NO-1a.2, Noise-reducing Pile Driving Techniques and Muffling Devices.

MM NO-2a, Pre-construction Assessment to Minimize Pile Driving Impacts.

2. **Impact NO-3: Increase in Ambient Noise Levels from Construction.** (DEIR III.I-39-40; C&R 759, 768, 2415-2417) Construction activities associated with the Project would result in a substantial temporary or periodic increase in ambient noise levels. Construction activities occurring within the Project site and in the Project vicinity for roadway and infrastructure improvements would involve demolition, grading, and excavation activities, followed by construction and external

finishing of the proposed facilities and associated parking areas, as well as roadway and landscaping improvements. These activities would involve the use of heavy equipment. MMs NO-1a.1, NO-1a.2 and NO-2a would reduce construction related noise levels, but not to a less-than-significant level. Therefore, construction related temporary impacts in ambient noise levels are *significant and unavoidable*.

MM NO-1a.1, Construction Document Mitigation to Reduce Noise Levels During Construction.

MM NO-1a.2, Noise-reducing Pile Driving Techniques and Muffling Devices.

MM NO-2a, Pre-construction Assessment to Minimize Pile Driving Impacts.

3. Impact NO-6: Noise Impacts from Project Traffic. (DEIR III.I-41-44; C&R 44-46, 48-49, 760, 762, 1472, 1882, 2415-2417) Operation of the Project would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes. The increase in traffic resulting from implementation of the Project and ambient growth over the next 20 years would increase the ambient noise levels at noise-sensitive locations along the major vehicular access routes to the Project site, particularly along sections of Jamestown Avenue, Carroll Avenue, and Gilman Avenue. No feasible mitigation measures have been identified to reduce this impact to a less-than-significant level. Therefore, this impact is considered *significant and unavoidable*.

4. Impact NO-7: Noise Impacts from Stadium Events. (DEIR III.I-45-52; C&R 45) Noise during football games and concerts at the proposed stadium would result in temporary increases in ambient noise levels that could adversely affect surrounding residents for the duration of a game or concert. There would be significant noise impacts during football game days and concert days on the existing residential uses closest to the proposed stadium and possibly for the new residential uses closest to the proposed stadium. MM NO-7.1 requires the Stadium Operator to create a Stadium Noise Mitigation Program, to minimize game and concert-related temporary increases in ambient noise levels at nearby residences. MM NO-7.2 requires the Project Applicant to choose a qualified acoustical consultant to review plans for the new residential and follow its recommendations to provide acoustic insulation or other equivalent measures to these residences. These measures would reduce the noise impacts from games and concerts at the proposed stadium, but, because the noise insulation measures recommended under MM NO-7.1 would depend on factors outside of the control of the City or the Project Applicant, their ultimate feasibility cannot be guaranteed at this time. Therefore, noise impacts from football games and concerts at nearby residences are considered *significant and unavoidable*.

MM NO 7.1, Mitigation to Minimize Game/Concert-related Temporary Increases in Ambient Noise Levels at Nearby Residences.

MM NO 7.2, Residential Use Plan Review by Qualified Acoustical Consultant.

E. Cultural Resources and Paleontological Resources

1. Impact CP 1b: Impacts to Historic Resources from Construction Activities. (DEIR III.J-33-36; C&R 5, 11-12, 330, 355, 369-370, 419-430, 439, 617-619, 1031, 1656, 1736, 2198, 2328, 2331, 2417, 2462-2463) Construction at HPS Phase II could result in a substantial adverse change in the significance of an historical resource. Implementation of the Project could result in the demolition of Buildings 211, 224, 231, and 253, which have been identified as historic resources in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. MM CP-1b.1 requires preparation of written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District prior to demolition. In addition, MM CP-1b.2 requires interpretive displays depicting the history of the Hunters Point Shipyard to be installed at Heritage Park at Drydocks 2 and 3. Implementation of these mitigation measures would reduce the Project's impacts on historic resources. However, the demolition of historic resources would not be reduced to a less-than-significant level by these mitigation measures. Therefore, Project impacts on historical resources are considered *significant and unavoidable*.

MM CP-1b.1, Mitigation to Minimize Impacts on Historic Resources at HPS Phase II.

MM CP-1b.2, Interpretive Displays Depicting History of HPS.

IVA. SIGNIFICANT CUMULATIVE IMPACTS THAT CANNOT BE AVOIDED OR REDUCED TO A LESS-THAN-SIGNIFICANT LEVEL

A. Air Quality

1. Cumulative Contribution of Criteria Pollutants from Project Operation (DEIR III.H-30-31; C&R 158-168, 764-768, 1387, 2305-2306, 2384, 2412-2415) Operation of the Project would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out. No feasible mitigation measures have been identified that would reduce the Project's contribution to this cumulative impact, which would be *significant and unavoidable*.

2. Cumulative Contribution to TAC and PM_{2.5} Impact Under the Proposed Bay Area Air Quality Management District CEQA Guidelines (DEIR III.H-42; C&R 158-168, 764-768, 2307-2308, 2311, 2403, 2414-2415) The Project may result in a considerable contribution to a cumulative air quality impact regarding TACs and PM_{2.5} emissions under proposed BAAQMD CEQA Guidelines. The area adjacent to the Project that is zoned commercial has the potential to house small-

scale TAC or PM_{2.5} emissions sources, such as automotive repair or refinishing, dry cleaning, or artist shops. An analysis of Project sources of TACs and PM_{2.5} on sensitive receptors and known existing and projected sources of TACs and PM_{2.5} on new receptors did not identify an exceedance of the proposed BAAQMD CEQA Guidelines to receptors in the Project area or within 1,000 feet of the Project area. But, it is not known to what extent other sources may exist in the area or Bay Area Air Basin to which the Project may contribute. There is the potential for these cumulative emissions to exceed the proposed BAAQMD CEQA thresholds and for the Project to contribute to such an exceedance. If these guidelines are adopted as proposed, the Project may result in a considerable contribution to a cumulative air quality impact for TAC or PM 2.5 in the Project area. Given the inability to determine the nature of such an impact accurately at this time and to determine whether any mitigation measures would be effective to reduce the impact to a less than significant level, this impact is considered *significant and unavoidable*.

B. Noise

1. **Cumulative Contribution to Noise from Construction Activities** (DEIR III.I-53; C&R 759, 768, 2415-2417) Construction activities such as use of heavy equipment and pile driving associated with development of cumulative projects could contribute to a cumulative impact from increased noise levels for both off-site and on-site sensitive receptors. Although the EIR identifies mitigation measures that would reduce the Project's contribution to this cumulative impact, even with implementation of these mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a, the Project's contribution would remain considerable and the impact would be *significant and unavoidable*.

2. **Cumulative Contribution to Pile-Driving Activities** (DEIR III.I-53; C&R 759, 768, 2415-2417) Construction of the Project would include pile-driving activities that may overlap with other nearby construction activities during Project development and make a considerable contribution to cumulative construction-related temporary increases in ambient noise levels. Although the EIR identifies mitigation measures that would reduce the Project's contribution to this cumulative impact, even with implementation of these mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a, the Project's contribution would remain considerable and the impact would be *significant and unavoidable*.

3. **Cumulative Contribution to Traffic Noise Levels** (DEIR III.I-53; C&R 44-46, 48-49, 760, 762, 1472, 1882, 2415-2417) Project operation would make a considerable contribution to a substantial, permanent increase in cumulative traffic noise levels that would affect existing and future residential uses along all Project site access roads. No feasible mitigation measures have been identified that would reduce the Project's contribution to this cumulative impact, which would be *significant and unavoidable*.

4. Cumulative Contribution to Ambient Noise During Stadium Events (DEIR III.I-53; C&R-45) Project operation would make a considerable contribution to a substantial increase in cumulative noise during stadium events. Although the EIR identifies mitigation measures that would reduce the Project's contribution to this cumulative impact, even with implementation of these mitigation measures MM NO-7.1 and NO-7.2, the ultimate feasibility and practicality of mitigation measure MM NO-7.1 cannot be guaranteed at this time. Therefore, the Project would make a considerable contribution to cumulative noise impacts from football games and concerts and this cumulative impact would be *significant and unavoidable*.

5. Cumulative Contribution to Vibration Effects During Construction Activities (DEIR III.I-54; C&R 51, 763, 795, 2415-2417) Pile-driving activities during construction could make a considerable contribution to cumulative vibration effects if pile driving would occur and/or heavy construction equipment would operate on multiple sites and collectively result in vibration impacts in excess of 85 VdB at nearby sensitive receptors. Although the EIR identifies mitigation measures that would reduce the Project's contribution to this cumulative impact, even with implementation of these mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a, the Project's contribution would remain considerable and the cumulative impact would be *significant and unavoidable*.

C. Cultural Resources and Paleontological Resources

1. Cumulative Contribution to Impacts on Historic Resources (DEIR III.J-44-45; C&R 5, 11-12, 330, 355, 369-370, 419-430, 439, 617-619, 1031, 1656, 1736, 2198, 2328, 2331, 2417, 2462-2463) The Project would make a considerable contribution to a cumulative impact on significant historical resources, including residential, commercial, and civic properties that are listed or eligible for listing on national, state, or local registers. Although the EIR identifies mitigation measures that would reduce the Project's contribution to this cumulative impact, even with implementation of these mitigation measures MM CP-1b.1 and CP-1b.2, the Project's incremental contribution to these cumulative effects would be cumulatively considerable, and thus *significant and unavoidable*.

D. Public Services

1. Cumulative Contribution to Demand for Police Services (DEIR III.O-12-13) Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses and associated increased demand for police protection. While the Police Department considers population growth projections in its annual budgeting process to determine equipment and staffing needs for the coming year, it is possible that cumulative growth in the City could exceed the capacity of existing or planned staffing and facility improvements, and could require construction of one or more stations, resulting in a significant impact. Because the Project would require new or physically altered police facilities in order to maintain acceptable police services, the

Project would make a cumulatively considerable contribution to a potential significant cumulative impact on police services. The Project's cumulative impact would be *significant and unavoidable*.

V EVALUATION OF PROGRAM ALTERNATIVES

This Section describes the Project as well as the Project Alternatives and the reasons for approving the Project and for rejecting the Alternatives. This Article also outlines the Project's purposes and provides a context for understanding the reasons for selecting or rejecting alternatives.

CEQA mandates that EIR evaluate a reasonable range of alternatives to the Project or the Project location that generally reduce or avoid potentially significant impacts of the Project. CEQA requires that every EIR also evaluate a "No Project" alternative. Alternatives provide a basis of comparison to the Project in terms of their significant impacts and their ability to meet Project objectives. This comparative analysis is used to consider reasonable, potentially feasible options for minimizing environmental consequences of the Project.

A. Reasons for Selection of the Project

The overall goals of the Project are to carry out the policy adopted by the voters of San Francisco in approving Proposition G. The objectives identified in Proposition G are set out in detail in Section I. The main objectives of the integrated development called for by Proposition G are the following:

1. Produce tangible community benefits for the Bayview and the City.

(a) Economic Opportunity: The Project transforms an urban brownfield into an economically diverse community of housing and job opportunities. Low, moderate and above-moderate income housing will be provided throughout the Project site, as discussed in more detail below.

Construction jobs, jobs in the retail and service sectors, and research and development jobs requiring highly skilled workers will be created. Professional office space is also provided to serve banking, medical, and other such community needs. The Project is expected to create approximately 5,582 construction job opportunities across a wide range of trades through the build-out of the Project and approximately 10,700 permanent jobs.

The Project's developer will be subject to provisions of the Bayview Hunters Point Employment and Contracting Policy and other Agency policies that will require that the developer use good faith efforts to ensure that 50% of the job opportunities and contracts will be for individuals and businesses within the City of San Francisco, with first consideration given to those in District 10.

The Project will provide a range of additional programs designed to create commercial opportunities for small and local businesses, including:

- A requirement of the Developer to pay \$8,925,000 to fund workforce training and placement programs for local residents. The City's Office of Economic and Workforce Development will match these funds with compatible programs in the Bayview area. Additionally, the Developer will comply with the City's First Source Hiring Policy and will work with the City Build Sector Academies and community based organizations ("CBOs") to maximize access to professional development opportunities;
 - A community builder program designed to support the participation of local builders in the construction of both market-rate and affordable housing;
 - \$2,500,000 for construction assistance programs designed to provide technical assistance and contractor workshops in conjunction with local hiring and disadvantaged business programs;
 - \$1,000,000 contribution towards the Agency's surety bond program designed to assist local contractors in obtaining insurance and credit support;
 - A community realtor program designed to provide specific opportunities for licensed brokers in the area; and
 - A requirement that any hotel or restaurant project constructed on the Project site comply with the Agency's Card Check Policy. Other uses also must comply with the Agency's Card Check Policy, including businesses using custodial, security, stationary engineering services, and grocery stores.
- (b) Arts District: the Project will provide permanent new and renovated space for the existing Shipyard artists as well as an arts education center.
- (c) Parks and Open Space: the Project will provide a substantial increase in the amount of developed, useable, high-quality parks, recreational facilities, and open space within the Project site. The Project will create a continuous network of interconnected recreational opportunities, promoting the use of the existing parks, such as the Candlestick Point State Recreation Area ("CPSRA"), as well as new parks, sports fields, and active urban recreation uses. The Project will provide a network of pedestrian and bike pathways that will connect Project uses to the adjacent neighborhoods and ensure unrestricted public access to the parks and open space on the Project site and the San Francisco Bay shoreline. Enhanced connectivity of on-site and off-site facilities and new neighborhood parks will allow integration of new and existing facilities into the citywide park network. (DEIR III.P-15)
- (d) Habitat Restoration: The Project will result in a net increase in the quality of suitable raptor foraging habitat, and that of their prey species (small mammals, birds, and insects). At least 43 acres at HPS Phase II will be enhanced by removal of invasive plants and restoration of native-dominated grasslands. Outside of designated grassland management

areas, 10,000 new trees will be planted, thus providing roosting sites, hunting perches, and nesting sites.

2. Reunify the Project Site with the Bayview and protect the character of the Bayview for its existing residents.

(a) Integration of the Project Site with the Bayview: The Project will provide for extensive transportation improvements designed to integrate transit, bicycle and pedestrian circulation and automobile connections with the greater Bayview community, including the investment of more than \$545 million in transportation and related pedestrian and bicycle improvements including street lights and signs, sidewalks and gutters, streets and roads and off-site transportation improvements.⁴

3. Incorporate environmental sustainability concepts and practices.

(a) Mixed Use: The Project brings together opportunities to live, work and recreate in one place. A comparable project without these design features would generate 76% more vehicle trips.

(b) Energy and Water Conservation: The Project has set a target to achieve LEED Gold for neighborhood development for the entire Project. New buildings will be constructed to exceed California Building Code Title 24 2008 energy efficiency standards by 15% by using such measures as high performance glazing, efficient lighting, daylighting, shading, envelope optimization, reflective roofs, and natural ventilation in the design of vertical improvements. Additionally, ENERGY STAR appliances are proposed for all new residential units. Strategies to conserve water include the potential use of recycled water for non-potable water uses, drought tolerant plant species and efficient irrigation systems such as drip irrigation, moisture sensors, weather data-based controllers and progressive low impact development strategies to retain and treat stormwater on site and/or in adjacent areas.

(c) Sea level Rise: The Project plans for sea level rise. Project design for sea level rise meets both near term (2050) and long-range (2080) projected needs. In addition, the Project incorporates an adaptive management strategy to address sea level rise for the most conservative estimates at 2100 and beyond.

4. Encourage the 49ers – an important source of civic pride – to remain in San Francisco by providing a world-class site for a new waterfront stadium and supporting infrastructure.

(a) A New Stadium Site and Supporting Infrastructure: The Project has been designed to provide the 49ers with a site for a world-class waterfront stadium on Hunters Point Shipyard. The Project will provide for the construction of stadium related infrastructure, including parking and transportation improvements, and, upon satisfaction of certain conditions the developer will contribute \$100,000,000 to the construction of a new stadium on the Shipyard.

⁴ MACTEC Master Cost Estimate and Infrastructure Cashflows, May 7, 2010.

5. *Be fiscally prudent, with or without a new stadium.*

(a) Positive Revenues to the City: A fiscal analysis of the Project has shown net new revenues to the City from the Project significantly exceed new costs to the City. Economic benefits stemming from the Project at full build out include more than \$8 billion in net new property value.

Section 4 of Proposition G states that consistent with the objectives identified in Section 4 and subject to the public review process described in Proposition G, the City shall encourage the timely development of the Project Site with a mixed-use project that includes the following major uses, together with supporting transportation and other infrastructure improvements.

1. Over 300 acres of public park and public open space improvements, including the improvement of the existing Candlestick Point State Recreation Area, the establishment of a new State park area on the Shipyard Property, the creation of a number of recreation facilities, sports fields, and neighborhood-oriented parks, passive open space, waterfront promenades and recreation areas and the extension of the Bay Trail along the waterfront of the Project Site.

The Project with the stadium use includes 336 acres of parks and open space improvements, including proposed improvement to the existing Candlestick Point State Recreation Area. The scenarios for non-stadium uses include 327 acres of parks and open space for the Housing/R&D Variant and 327 acres of parks and open space for the R&D Variant. The Project includes open space on the PHS Phase II Property that could be accepted by the State for park under SB 792, although the decision whether to do so will be made by the State, not by the City and so far the State has not indicated an interest in acquiring Shipyard property.⁵ The Project also includes recreational facilities, sports fields and neighborhood-oriented parks as set forth in the Draft Park, Open Space and Habitat Concept Plan.⁶ The Project also provides for extension of the Bay Trail along the waterfront of the Project Site. The Project proposes to extend the Bay Trail from the western edge of CPSRA to Yosemite Slough, and along the waterfront on the Shipyard, ultimately connecting to the existing northern trail at India Basin. The Project also will provide access for personal non-motorized watercraft. While the precise location of access points will be determined through the CPSRA General Plan Amendment process, by providing such access, the Project will advance the purposes of the Bay Area Water Trail.⁷

2. Between about 8,500 and 10,000 residential housing units across the Project Site, including a mix of rental and for-sale units, both affordable and market-rate.

⁵ California Department of Parks and Recreation, January 12, 2010 comment letter on the DEIR, C&R-1624.

⁶ Draft Park, Open Space, and Habitat Concept Plan, April 27, 2010.

⁷ Existing San Francisco Bay Trail Plan Route, Figure III.B-3, Revised; C&R-346, C&R-349.

The Project includes up to 10,500 for-sale and rental residential units: approximately 7,155 market-rate units and 3,345 below market-rate units or approximately 32%. The below market-rate units include:

- Alice Griffith Replacement Units (256). The affordability of the Alice Griffith units is determined by the Federal Department of Housing and Urban Development.
- Agency Tax Credit Units (1,388). These units will serve households earning up to 60% AMI, and should other subsidy sources be obtained by the Agency the goal is to serve households earning below 50% of AMI.
- Inclusionary Units (809). These units will serve households earning between 80-120% AMI.
- Workforce Units (892). These units will serve households earning between 140-160% AMI.

The Project proposes a mix of townhomes, low and mid-rise flats, and high-rise tower homes that range in size from studios to four bedrooms. Additionally, the Project requires the Developer to contribute an additional \$28,665,000 into a Community First Housing Fund to assist qualifying residents in the purchase of housing units.

3. About 600,000 square feet of regional retail on Candlestick Point and about 100,000 square feet of neighborhood-serving retail on the Shipyard Property.

The Project includes up to 635,000 square feet of regional retail on Candlestick Point and 250,000 square feet of neighborhood retail, with half planned for the Shipyard and half planned for Candlestick Point.

4. About 2,000,000 square feet of green office, science and technology, biotechnology or digital media office, research and development and industrial uses on the Shipyard Property and about 150,000 square feet on Candlestick Point, with more of such uses on the Project site if the stadium is not built on the Shipyard Property.

The Project with the stadium scenario includes 2,500,000 square feet of research and development and related uses, including light industry, on the Shipyard. On Candlestick Point, the Project includes 150,000 square feet of office and other commercial uses.

5. If practicable, a site for an arena or other public performance venue.

The Project includes a 10,000-seat performance venue on Candlestick Point.

6. If the 49ers and the City determine it is feasible to build a new stadium for the 49ers and the 49ers elect in a timely manner to do so, a site on the Shipyard property for a new National Football League stadium for the 49ers, including green parking surfaces that

would both accommodate parking for stadium events and serve as public playing fields at other times.

The Project includes a 69,000-seat football stadium for the 49ers and parking areas that can be used as sports fields when not used for the stadium parking purpose. The Project includes an approximately 85 acre community sports field complex and multi-use field area. The multi-use fields will provide much needed community sports fields that can also accommodate stadium parking on game days. Small, medium and large multi-use soccer fields will be available for use throughout the year.

7. If a new stadium is not built, then additional green office, science and technology, research and development and industrial space, or housing – or a combination of those uses – instead of the stadium and associated parking.

The Project includes two scenarios in lieu of the stadium use, in the event the 49ers choose not to avail themselves of the opportunity to build a new stadium at the Shipyard. In lieu of the stadium use at HPS Phase II, the Project's preferred non-stadium scenario includes a mix of housing and research and development uses at the stadium site by moving 1,600 housing units from Candlestick Point to the Shipyard location and providing for 500,000 square feet of additional research and development uses. Alternatively, in the event housing is not permitted by the regulatory agencies overseeing the remediation of the Shipyard, the stadium site could be used for up to an additional 2,500,000 square feet of research and development.

The Project also includes some elements not specifically called for by Proposition G. These include a 220-room hotel on Candlestick Point, space for new public and community facilities on both the Shipyard and Candlestick Point, and a 300-slip marina on the Shipyard.

B. Alternatives Rejected and Reasons for Rejection

The Agency Commission rejects the Alternative set forth in the Final EIR and listed below because the Agency Commission finds, in addition to the reasons described in Section VII below, that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in this Section under CEQA Guidelines 15091(a)(3), that make infeasible such Alternatives. In making these determinations, the Agency Commission is aware that CEQA defines “feasibility” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors.” The Agency Commission is also aware that under CEQA case law the concept of “feasibility” encompasses (i) the question of whether a particular alternative promotes the underlying goals and objectives of the project, and (ii) the question of whether an alternative is “desirable” from a policy standpoint to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal and technological factors.

In addition, adoption of the Project will reduce many of the impacts associated with the Project through the implementation of the mitigation measures identified previously. Some

of the alternatives are less effective at reducing some of the environmental impacts associated with the Project and are not environmentally superior to the Project because they would reduce some of the Project impacts at the expense of creating other impacts.

1. No Project Alternative

Consistent with Section 15126.6(e)(1) of the CEQA Guidelines, this alternative assumes that no new development would occur at Candlestick Point and HPS Phase II would be developed with new uses consistent with the existing Hunters Point Shipyard Redevelopment Project (HPS Redevelopment Plan). Under the existing HPS Redevelopment Plan, total development at HPS would result in construction of up to 1,800 new housing units at HPS, including the 1,500 previously authorized under HPS Phase I, approximately 570,000 gross square feet (gsf) of commercial space (132,000 gsf of commercial space was approved as part of HPS Phase I), 1,087,000 gsf of R&D space, and replacement of existing artist studios. This alternative also provides for 580,000 gsf of mixed use development and 330,000 gsf of cultural and education space. The HPS Redevelopment Plan allows maritime industrial uses and does not allow a football stadium. (Draft EIR, VI-7.)

The No Project Alternative is rejected for the following reasons:

(a) Integrated Development and Revitalization: This alternative would not meet the Project and Proposition G objective of creating an integrated development of the Candlestick Point and Hunters Point Shipyard areas with strong commercial, institutional, cultural, urban design, and transportation connections between the two areas in order to revitalize this area and reconnect it with larger Bayview Hunters Point community and the City. Under this alternative, the Hunters Point Shipyard Phase II would be developed as a separate undertaking. No foreseeable large-scale redevelopment of the Candlestick Point area would be anticipated. The southeast area of the City, and in particular these two redevelopment areas, would lose the benefit of the Project's integrated improvements and programs for transportation, transit, pedestrian and bike paths, open space and recreation, urban design, mix of uses, community facilities, and community benefits. This alternative would fail to reconnect the Candlestick Point area with the larger neighborhood and the City, because this area would remain in its existing condition.

(b) Substantial New Housing Including Affordable Housing: This alternative would substantially reduce the ability to meet the Project and Proposition G objective of providing substantial new market rate and affordable housing opportunities. The No Project Alternative would result in only an additional 300 new housing units on the Hunters Point Shipyard. In contrast, the Project would provide 10,500 new housing units, of which approximately 32% or 3,345 would be offered at below market rates. The No Project Alternative would impede the City's ability to meet its ABAG defined housing need by severely limiting the new housing opportunities on a site that could accommodate significant new housing. (Draft EIR, III-C-6.) Additionally, unlike the Project, the No Project Alternative would not provide the number of housing units required to meet the housing

demand projected by the number of employees on-site at full buildout and thus would not provide a balance of jobs and housing. (Draft EIR, VI-10.)

(c) Alice Griffith Public Housing Rebuilding: This alternative would not meet the Project and Proposition G objective of rebuilding the Alice Griffith public housing, which is currently in need of replacement, physically isolated from the surrounding area, and without benefit of nearby neighborhood-serving uses. Under this alternative, Alice Griffith would not be rebuilt as part of a larger new neighborhood served by new infrastructure, including significant new transit service, retail uses, new and improved parks and open space, and community uses. Additionally, under this alternative, the condition of the Alice Griffith housing would continue to deteriorate.

(d) Job Creation: This alternative would substantially reduce the ability to meet the Project and Proposition G objective of creating a range of job and economic development opportunities for local, economically disadvantaged individuals and business enterprises, particularly for residents and businesses located in the Bayview. The No Project Alternative would generate an estimated 6,200 jobs. (Draft EIR, VI-10.) Total jobs projected under the Project and the Variants proposed for approval range from 10,730 – 16,635 jobs. (Draft EIR, III C-12; IV-15.) This alternative would result in approximately 4,000 fewer jobs than the Project and potentially up to 10,000 fewer jobs under the Variants proposed for approval.

(e) Green Technology: This alternative would not meet the Project and Proposition G objective of providing a green technology, biotechnology or digital media campus component. The No Project Alternative includes over 1.1 million square feet of industrial and maritime uses, including manufacturing, processing, fabricating and assembly. The market for these types of industry has been declining in San Francisco.⁸ For example, a recent study of the break-bulk cargo market showed that the demand for such facilities is limited to its current or projected availability. (Draft EIR, III.B-16.) The Project and two Variants proposed for approval would include sites for cutting edge research and development space ranging from 2.5-5 million square feet to serve the green technology industry market.

(f) Parks, Recreation and Open Space: This alternative would not meet the Project and Proposition G objective of providing over 300 acres of new and improved park, open space and recreation areas. The proposed significant improvements to the CPSRA and ongoing operation and maintenance funding of the CPSRA as provided for by Public Resources Code Section 5006.8 with the land exchange envisioned by the Project would not occur. Improvements to the CPSRA that would not occur under this alternative include revegetation and landscaping, shoreline restoration and stabilization, new trails, paths, and visitor facilities, widening of the park at its narrowest pinch point, creation of habitat areas, and salt-marsh restoration. (Draft EIR III.P-17; VI-22.) The portions of the CPSRA that are used for stadium parking, are undeveloped, or are inaccessible would remain in these

⁸ *Eastern Neighborhoods Area Plans, Economic Impact Report, City and County of San Francisco*, Office of the Controller, October 7, 2008; *City and County of San Francisco - An Overview of San Francisco's Recent Economic Performance, Executive Summary*, ICF Consulting, April 3, 2006.

underutilized conditions. Consequently, the Project improvements that would enhance park aesthetics, enhance the park landscape ecology, provide connections throughout the CPSRA and connections with other Project parks, and provide direct access to the Bay and the shoreline for walking, swimming, fishing, kayaking, and windsurfing would not occur. (Draft EIR VI-22.) In addition, California State Parks lacks an adequate and reliable funding stream to support the operation and maintenance of the CPSRA. Under this alternative, improvements to the CPSRA, and the provision of operation and maintenance funding for the CPSRA totaling \$50 million dollars would not be provided. (Public Resources Code Section 5006.8)

(g) Community Benefits: This alternative would not include the Project Community Benefits Plan totaling \$83.2 million for workforce training and placement programs for local residents, a community builder program designed to support the participation of local builders, new and renovated artists studios, a Community First Housing Fund to assist qualifying residents in the purchase of housing units, education support and support for community health facilities, and a community benefits fund (the "Legacy Fund") funded through the payment of 0.5% of the initial sales price of all market rate homes.

(h) Opportunity for a New Stadium: This alternative would not meet the Project and Proposition G objective of encouraging the 49ers to remain in San Francisco by providing a site for, and infrastructure to serve, a new 49ers stadium. The 49ers have been actively pursuing the opportunity to construct a new football stadium in Santa Clara; the current stadium at Candlestick Point is outdated and no longer meets their standards or requirements. Without a new stadium that meets current NFL standards, the Project would not fulfill the objective of encouraging the 49ers to remain in San Francisco.

(i) Environmental Impacts: This alternative would reduce some of the Project's potentially significant environmental impacts, including aesthetics, wind, air quality, noise, and certain transportation impacts. Also, the Project would have impacts that would not occur with this alternative, including impacts associated with construction and operation of the Yosemite Slough Bridge, the marina, the stadium, and the arena. But, as described in C&R Table ES-1d, this alternative would result in most of the significant and unavoidable impacts that were identified for the Project, with the exception of certain construction-related traffic impacts, traffic spillover impacts, transit impacts, and various impacts specifically related to the stadium and the arena. Further, under this alternative, the construction and operation of maritime uses at HPS Phase II could result in impacts that would not occur with the Project, including, but not limited to, impacts on air quality, noise, hydrology and water quality, and biological resources and these would be avoided with the Project. (Draft EIR VI-170.) Additionally, the Project's shoreline improvements and protective measures to avoid or reduce the potential for flooding and future sea level rise impacts would not be implemented for the CPSRA.

Thus, this alternative would reduce some of the Project impacts and would avoid impacts associated with the bridge, marina, stadium and arena. However, this alternative would result in many of the same potentially significant impacts requiring mitigation as the Project and many of the same significant and unavoidable impacts, including significant and

unavoidable transportation and cultural resource impacts. This alternative would have some impacts that would not occur with the Project. Consequently, this alternative would not provide substantial environmental benefits in comparison to the Project.

2. CP-HPS Phase II Development Plan; No Yosemite Slough Bridge

The CP-HPS Phase II Development Plan, No Yosemite Slough Bridge alternative would have the same development program as the Project (Draft EIR, Table II-3), except the Yosemite Slough Bridge would not be built. The main roadway connection between Candlestick Point and the Hunters Point Shipyard Phase II would be via Ingalls Street. A bus rapid transit route would be constructed along an abandoned railroad right of way to provide access between Candlestick Point and Hunters Point Shipyard Phase II. All other aspects of the Development Plan would remain the same, including the proposed stadium at the Hunters Point Shipyard and the agreement with the California State Parks to reconfigure, improve, and provide certain funding for the CPSRA.

The CP-HPS Phase II Development Plan, No Yosemite Slough Bridge Alternative is rejected for the following reasons:

- (a) Project Objectives: This alternative would not meet, or would substantially reduce the ability to meet, three key Project and Proposition G objectives: (1) to provide automobile, public transportation, and pedestrian connections between the Shipyard and Candlestick Point; (2) to create an appealing walkable urban environment served by transit; and (3) to provide the necessary transportation infrastructure, including automobile, public transit and pedestrian connections between Candlestick Point, the Hunters Point Shipyard, and the larger neighborhood to facilitate the handling of game day traffic in conjunction with the proposed new 49ers stadium.

Due to geography, topography, and the current condition of infrastructure, Candlestick Point and the Hunters Point Shipyard are comparatively isolated from the transit and roadway networks serving the City and region, and are not easily accessible by pedestrians and bicyclists. These deficiencies have been identified as top community concerns during the extensive local and citywide planning efforts for the Project and across southeastern San Francisco. (C&R-55-56.) As part of the City's transportation goals and plans, and to serve the increased travel demands from the Project, a new BRT network has been proposed. BRT service generally provides faster more reliable service than traditional local bus routes using a variety of strategies to reduce conflicts with other vehicles. (C&R-56.) For the Project, BRT service would provide an internal link between the two Project areas, would link the Project with the surrounding developments and neighborhoods, and would connect to Caltrain, BART, the T-Third light rail, and numerous Muni bus lines. A key element of the Project's overall transportation system would involve providing the most direct route of travel for the BRT, as well as bicycles and pedestrians, between Hunters Point Shipyard, Candlestick Point, and destinations to the west. (C&R-56.) Thus, the planned BRT is a critical component in the promotion of public transit use by the Project residents, visitors, and employees consistent with the City's Transit-First policy and the Project's Transportation Plan.

Another key goal of the Project's Transportation Plan is to provide effective ingress and egress for the proposed new stadium. The NFL has stated that an essential feature of any stadium access plan is the ability to clear the stadium parking lots within an hour or less. (C&R-56.) In doing so, the City is concerned that surrounding residential area streets not be unduly affected by stadium traffic. (C&R-56.)

The Draft EIR concluded that the Yosemite Slough Bridge would best achieve three primary transportation functions consistent with the Project objectives and overall City goals and policies. First, the Bridge's BRT lanes allow a more direct route (approximately $\frac{2}{3}$ mile shorter) between the Project neighborhoods and to and from BART, Caltrain, Muni light rail and local buses than an alternative route around the slough. Second, the Bridge provides pedestrians and cyclists a direct connection between Hunters Point Shipyard and Candlestick Point, avoiding a diversion through or near the industrial area around Yosemite Slough, which is not well suited for other types of traffic. Third, the bridge provides automobile access between the stadium site and US-101, via a planned reconstructed interchange at Harney Way, which is the only route that can meet NFL standards for traffic egress; other routes would create substantial risks that the NFL would not approve a stadium in the area.⁹

For each of these three transportation functions, the Draft EIR analysis and the additional analysis in the C&R determined that the Yosemite Slough Bridge would provide a superior and necessary function compared to alternatives without the bridge. (C&R-54-67.) For the BRT service, the analysis demonstrated that in terms of travel time and associated ridership, reliability, safety, operating costs, adaptability to possible future light rail, and minimizing impacts on local industrial businesses, the BRT route across the Yosemite Slough Bridge would be substantially superior to alternative routes around the Slough and would provide a quality of service associated with bus rapid transit. (C&R-57-61.) Based on these findings, SFMTA has stated that the additional travel time, cost, reduced ridership, and overall effect on route reliability associated with a route around the Slough would likely affect Muni's ability operate the service to the Hunters Point Shipyard. (C&R-61.)

To evaluate accommodating game day traffic, the analysis examined two alternative egress routes without a bridge and concluded that: (1) Alternative Route 1 would have a stadium exit capacity substantially below what would be necessary to accommodate a new NFL stadium at the Shipyard; and (2) Alternative Route 2 would closely approximate the required egress clearance capacity, but would have negative drawbacks, including elimination of BRT service from the Balboa Park BART station and the Bayshore Caltrain Station and serious conflicts with the operation of the T-third light rail service. (C&R-62-66.) These drawbacks would conflict with the City's Transit-First policy.

The bridge would enable walking and cycling between Candlestick Point and the Hunters Point Shipyard, thereby enhancing the connection between these two Project areas and reducing automobile use and the demand for parking. Without the bridge, walking and cycling distance between the center of Candlestick Point and the center of Hunter Point

⁹ Letter from Neil Glat, Senior Vice President, National Football League, to Stanley Muraoka, Environmental Review Officer, San Francisco Redevelopment Agency, January 12, 2009.

Shipyard would increase by 2/3 mile or 50 percent compared to conditions with the bridge. Without the bridge, pedestrians and cyclists would travel through an industrial area with heavy truck traffic, several intersections, and few amenities. Some of these differences may be reduced with the construction of the Bay Trail around Yosemite Slough. The trail, however, would be open only during park hours from 8:00 A.M. to sunset. The bridge lighting would provide security in the evening hours, when recreational fields at the Shipyard would be in use. (C&R-66-67.)

In addition, the Candlestick Point State Recreation Area Reconfiguration, Improvement and Transfer Agreement provides that the bridge will serve as a part of the open space network on all days when it is not open to private motor vehicle traffic. The bridge would be required to function primarily for public transit, bicycle, and pedestrian use, and would be closed to private motor vehicle traffic except on days when football games are held at the stadium on the Shipyard. Without the bridge, the unique recreational and viewing benefits provided for pedestrians and cyclists using the bridge would not occur.

(b) Environmental Impacts: This alternative would result in the same impacts as the Project, except for those impacts associated with the construction and operation of the bridge. The Project's potentially significant impacts associated with aesthetics, wind, cultural resources, air quality, noise, geology and soils, hazards and hazardous materials, hydrology and water quality, biology, public services, recreation, utilities, energy and greenhouse gas emissions would be the same under this alternative and would require the same mitigation measures except for MM HZ-9 and MM BI 4c, which specifically address the bridge construction. Biological impacts associated with the bridge would not occur. The Draft EIR determined, and the C&R document (in particular, Master Response 3, pp. 30-54 and Response to Letter 47, pp. 731-803.) provided additional supporting facts, analysis, and expert opinion based on the facts demonstrating that all of the potential biological associated with the bridge would be either less than significant or would be reduced to less than significant with implementation of the prescribed Project mitigation measures, all of which are adopted as part of the Project approval. Additionally, all of the Project's significant and unavoidable impacts related to transportation, air quality, noise, and cultural resources would occur under this alternative. (Draft EIR VI-30-59; C&R, Table ES-1d.) Game day transportation impacts would be increased under this alternative. Thus, this alternative would not provide a substantial reduction of Project impacts or a substantial environmental benefit in comparison to the Project.

3. Reduced CP-HPS Phase II Development; San Francisco 49ers Stay at Existing Candlestick Park Stadium; Limited State Parks Agreement; Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians

This alternative would be a reduced development alternative. Total housing with this alternative would be 5,210 units, about half of the units proposed with the Project. At Candlestick Point, the number of residential units would be decreased and retail and arena uses would not be developed. Replacement of the Alice Griffith public housing would occur as part of a larger 1,210 housing unit development. Minor improvements would be made to the CPSRA under the Limited State Parks Agreement. At HPS Phase II, housing would be

increased by 1,350 units for a total of 4,000 units; other development uses at HPS Phase II would be the same as the Project, except for the proposed stadium. A new approximately 40-foot wide Yosemite Slough Bridge serving only transit, bike, and pedestrian uses would extend Arelious Walker Drive from Candlestick Point to HPS Phase II. This alternative assumes that the 49ers football team would continue to use the existing Candlestick Park stadium and would not include a new 49ers stadium at HPS Phase II.

The Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, Limited State Parks Agreement, Yosemite Slough Bride Serving Only Transit, Bicycles, and Pedestrians Alternative is rejected for the following reasons:

- (a) Integrated Development: This alternative would significantly reduce the ability to meet the Project and Proposition G objective to provide an integrated development connecting Candlestick Point and the Hunters Point Shipyard site with the larger BVHP neighborhood by fostering the creation of strong commercial, institutional, cultural and urban design ties between the development on Candlestick Point and the Hunters Point Shipyard and the Bayview in particular and the City in general. Under this alternative, only the Alice Griffith replacement development would occur in the Candlestick Point area. No new mixed use, commercial, arena, community uses or other development would occur at Candlestick Point. Additionally, enhanced streetscape improvements along Harney Way and Gilman, including street trees, sidewalk plantings, furnishings, and paving treatments designed to visually tie together the waterfront with the greater Bayview neighborhood would not occur, nor would street improvements along Ingerson, and Jamestown Avenues.
- (b) Affordable Housing and Job Creation: This alternative would reduce the ability to meet the Project and Proposition G objectives to create substantial affordable housing, jobs, and commercial opportunities for existing Bayview residents and businesses. Over 50 percent of the residential units and 86 percent of the retail proposed under the Project would not be built under this alternative. The alternative also would result in a loss of 150,000 square feet of office space, a 10,000-seat performance arena, and a 220-room hotel. This reduction in development would result in 3725 fewer jobs than the Project. (Draft EIR, VI-65.)
- (c) Opportunity for a New Stadium: This alternative would not meet the Project and Proposition G objective of encouraging the 49ers to remain in San Francisco by providing a site for, and infrastructure to serve, a new 49ers stadium. The 49ers have been actively pursuing a new football stadium in Santa Clara; the current stadium at Candlestick Point is outdated and no longer meets their standards or requirements. Without a new stadium that meets current NFL standards, the Project would not fulfill the objective of encouraging the 49ers to remain in San Francisco.
- (d) Parks, Recreation, and Open Space: This alternative would not meet the Project and Proposition G objective of providing over 300 acres of new and improved park, recreation, and open space areas. The proposed significant improvements to the CPSRA and ongoing operation and maintenance funding of the CPSRA as provided for by Public Resources Code Section 5006.8 with the land exchange envisioned by the Project would be substantially

reduced under this alternative. The portions of the CPSRA that are used for stadium parking, are undeveloped, or are inaccessible would remain in these underutilized conditions. Except for the Alice Griffith redevelopment area, other neighborhood parks or open space uses would not be developed in the Candlestick Point area.

(e) Community Benefits: This alternative would not generate the same level of funding for the Project Community Benefits Plan and would reduce the extent of the benefits to the community anticipated under the Project. No community facilities would be constructed at Candlestick Point, resulting in a 50 percent reduction in community facilities from those proposed in the Project.

(f) Environmental Impacts: This alternative would result in less development and would reduce the scope and intensity of many of the Project's potentially significant impacts, including all construction related impacts, transportation, noise, aesthetics, wind, air quality, geology and soils, hydrology and water quality, hazards and hazardous materials, biology, public services, recreation, utilities, energy and greenhouse gas emissions. Nonetheless, the Project's potentially significant impacts for these topics, except for the aesthetic impact associated with the stadium lighting (AE-7b), would occur under this alternative and require mitigation measures identified for the Project to avoid or reduce these impacts to less than significant. (Table ES-2a, C&R-2243-2247.) Six of the Project's significant and unavoidable transportation impacts associated with the proposed stadium and arena would not occur and the Project's significant and unavoidable noise impact associated with the stadium would not occur. All of the Project's other significant and unavoidable impacts associated with transportation, air quality, noise, and cultural resources would occur under this alternative. (Table ES-1d, C&R-22.) If the Project's non-stadium scenarios are implemented in lieu of the stadium, the Project, like this alternative, would avoid the significant noise and lighting impacts associated with the stadium. Although this alternative would reduce the intensity and scope of impacts associated with the Project, most significant and unavoidable impacts associated with the Project would still occur under this alternative, hence, this alternative does not provide substantial environmental benefits as compared to the Project.

4. Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge

Land uses under this alternative would be similar to those proposed under the Project. Residential densities and commercial intensities for most uses would be approximately 30 percent less than those proposed under the Project. A total of 7,350 residential units would be constructed under this alternative. This alternative includes the preservation of four historic buildings, Buildings 211, 224, 231, and 252, and Drydock 4 at HPS Phase II in addition to the historic structures already preserved under the Project (Buildings 104, 204, 205, 207, 208 and Drydocks 2 and 3). The proposed Yosemite Slough Bridge, marina, and new stadium would not be built. Additionally, the State Parks agreement would not occur.

The Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge alternative is rejected for the following reasons:

- (a) Substantial New Housing Including Affordable Housing: This alternative would substantially reduce the ability to meet the Project and Proposition G objective of providing substantial new market rate and affordable housing opportunities. The total number of housing units would be reduced from 10,500 to 7,350. As the Disposition and Development Agreement provides for affordable housing units as a percentage of the total housing units, the number of affordable housing units would be reduced from 3,345 to 2,509.¹⁰
- (b) Job Creation: This alternative would substantially reduce the ability to meet the Project and Proposition G objective of creating a range of job and economic development opportunities for local, economically disadvantaged individuals and business enterprises, particularly for residents and businesses located in the Bayview. This alternative would generate an estimated 7,219 jobs. (Draft EIR, VI-98.) Total jobs projected under the Project and the Variants proposed for approval range from 10,730 – 16,635 jobs. (Draft EIR, III C-12; IV-15.) This alternative would result in approximately 3,511 fewer jobs than the Project and potentially up to 9,416 fewer jobs under the Variants proposed for approval.
- (c) Community Benefits: This alternative would reduce the level of finding for the Community Benefit Plan programs and thus would reduce the level of benefits provided to the community.
- (d) Opportunity for a New Stadium: This alternative would not meet the Project and Proposition G objective of encouraging the 49ers to remain in San Francisco by providing a site for, and infrastructure to serve, a new 49ers stadium. The 49ers have been actively pursuing the opportunity to construct a new football stadium in Santa Clara; the current stadium at Candlestick Point is outdated and no longer meets their standards or requirements. Without a new stadium that meets current NFL standards, the Project would not fulfill the objective of encouraging the 49ers to remain in San Francisco.
- (e) Transportation Objectives: This alternative would not meet, or would substantially reduce the ability to meet, two key Project and Proposition G objectives: (1) to provide automobile, public transportation, and pedestrian connections between the Shipyard and Candlestick Point; (2) to create an appealing walkable urban environment served by transit.

Due to geography, topography, and the current condition of infrastructure, Candlestick Point and the Hunters Point Shipyard are comparatively isolated from the transit and roadway networks serving the City and region, and are not easily accessible by pedestrians and bicyclists. These deficiencies have been identified as top community concerns during the

¹⁰ Disposition and Development Agreement (Candlestick and Phase 2 of the Hunters Point Shipyard), dated for reference purposes only as of June 3, 2010, by and between the Redevelopment Agency of the City and County of San Francisco (the "Agency") and CP Development Co., LP, a Delaware limited partnership (the "Developer"), Candlestick Point and Phase 2 of the Hunters Point Shipyard Below Market Rate Housing Plan at F-11.

extensive local and citywide planning efforts for the Project and across southeastern San Francisco. (C&R-55-56.) As part of the City's transportation goals and plans, and to serve the increased travel demands from the Project, a new BRT network has been proposed. BRT service generally provides faster more reliable service than traditional local bus routes using a variety of strategies to reduce conflicts with other vehicles. (C&R-56.) For the Project, BRT service would provide an internal link between the two Project areas, link the Project with the surrounding developments and neighborhoods, and connect to Caltrain, BART, the T-Third light rail, and numerous Muni bus lines. A key element of the Project's overall transportation system would involve providing the most direct route of travel for the BRT, as well as bicycles and pedestrians, between Hunters Point Shipyard, Candlestick Point, and destinations to the west. (C&R-56.) Thus, the planned BRT is a critical component in the promotion of public transit use by the Project residents, visitors, and employees consistent with the City's Transit-First policy and the Project's Transportation Plan.

The Draft EIR analysis and the additional analysis in the C&R determined that the Yosemite Slough Bridge would provide a superior and necessary function compared to alternatives without the bridge. (C&R-54-67.) For the BRT service, the analysis demonstrated that in terms of travel time and associated ridership, reliability, safety, operating costs, adaptability to possible future light rail, and minimizing impacts on local industrial businesses, the BRT route across the Yosemite Slough Bridge would be substantially superior to alternative routes around the Slough and would provide a quality of service associated with bus rapid transit. (C&R-57-61.) Based on these findings, SFMTA has stated that the additional travel time, cost, reduced ridership, and overall effect on route reliability associated with a route around the Slough would likely affect Muni's ability operate the service to the Hunters Point Shipyard. (C&R-61.)

The bridge would enable walking and cycling between Candlestick Point and the Hunters Point Shipyard, thereby enhancing the connection between these two Project areas and reducing automobile use and the demand for parking. Without the bridge, walking and cycling distance between the center of Candlestick Point and the center of Hunter Point Shipyard would increase by 2/3 mile or 50 percent compared to conditions with the bridge. Without the bridge, pedestrians and cyclists would travel through an industrial area with heavy truck traffic, several intersections, and few amenities. Some of these differences may be reduced with the construction of the Bay Trail around Yosemite Slough. The trail, however, would be open only during park hours from 8:00 A.M. to sunset. The bridge lighting would provide security in the evening hours, when recreational fields at the Shipyard would be in use. (C&R-66-67.)

In addition, the Candlestick Point State Recreation Area Reconfiguration, Improvement and Transfer Agreement provides that the bridge will serve as a part of the open space network on all days when it is not open to private motor vehicle traffic. The bridge would be required to function primarily for public transit, bicycle, and pedestrian use, and would be closed to private motor vehicle traffic except on days when football games are held at the stadium on the Shipyard. Without the bridge, the unique recreational and viewing benefits provided for pedestrians and cyclists using the bridge would not occur.

(f) Parks, Recreation, and Open Space: This alternative would not meet the Project and Proposition G objective of providing over 300 acres of new and improved park, open space and recreation areas. The proposed significant improvements to the Candlestick Point State Recreation Area (CPSRA) and ongoing operation and maintenance funding of the CPSRA as provided for by Public Resources Code Section 5006.8 with the land exchange envisioned by the Project would not occur. Improvements to the CPSRA that would not occur under this alternative include revegetation and landscaping, shoreline restoration and stabilization, new trails, paths, and visitor facilities, widening of the park at its narrowest pinch point, creation of habitat areas, and salt-marsh restoration. (Draft EIR III.P-17; VI-22.) The portions of the CPSRA that are used for stadium parking are undeveloped or inaccessible and would remain in these underutilized conditions. Consequently, the Project improvements that would enhance park aesthetics, enhance the park landscape ecology, provide connections throughout the CPSRA and connections with other Project parks, and provide direct access to the Bay and the shoreline for walking, swimming, fishing, kayaking, and windsurfing would not occur. (Draft EIR VI-22.) In addition, California State Parks lacks an adequate and reliable funding stream to support the operation and maintenance of the CPSRA. Under this alternative, improvements to the CPSRA, and the provision of operation and maintenance funding for the CPSRA totaling \$50 million dollars would not be provided. (Public Resources Code Section 5006.8.)

(g) Financial Infeasibility: At the request of the City, CBRE Consulting conducted an independent financial feasibility analysis of Alternative 4.¹¹ The CBRE Consulting analysis determined that Alternative 4 is financially infeasible primarily due to the significant costs associated with the historic reuse component of this alternative and the reduced density, land sale revenue and public financing proceeds that would occur under this reduced development scenario. CBRE compared the estimated revenue derived from land sales in the reduced development alternative with the costs of the infrastructure, open space and other public benefits associated with this alternative. As density is reduced, the developable homes and commercial uses are insufficient to finance the costs via land sales, community facilities districts and tax increment bond proceeds. Capital outlay is shifted to more costly forms of capital such as equity, which reduces returns. The analysis finds that the net difference would result in a land value insufficient to attract a private developer to develop the land or investors and/or lenders to finance the project given the complexity of the project and risk profile.

(h) Environmental Impacts: This alternative was identified by the Draft EIR as the environmentally superior alternative. In general, under this alternative the Project impacts would be reduced and impacts related to the bridge, stadium, marina, and historic structures would be avoided. Nonetheless, the alternative would result in thirty significant unavoidable impacts. (Table ES-1d, C&R pp. 2200-2206.) Additionally, except for those impacts and mitigation measures specifically related to the stadium and the bridge, this alternative would have the same potentially significant impacts requiring the same mitigation measures as the Project. Because no improvements to the CPSRA would occur,

¹¹ *Candlestick Point-Hunters Point Shipyard Phase II Reduced Development Alternative Evaluation of Financial Feasibility*, CBRE Consulting, May 20, 2010.

this alternative would not provide for shoreline improvements and protective measures to avoid or reduce the potential for flooding and future sea level rise impacts at CPSRA. While identified as the environmentally superior alternative, a detailed comparison of the impacts associated with this alternative and those associated with the Project demonstrates that the alternative would provide limited, but not substantial, environmental benefits in comparison with the Project.

4A. CP-HPS Phase II Development Plan with Historic Preservation

This subalternative to alternative 4 includes the historic preservation element of alternative 4 in conjunction with the Project's full development program. This subalternative would retain the historic structures included in the Project (Buildings 140, 204, 205, 207 and 208 and Drydocks 2 and 3) and also would retain Buildings 211, 224, 231, and 253 and Drydock 4. The retention and rehabilitation of these structures would be achieved generally in accordance with the recommendations included in the *Candlestick Point-Hunters Point Shipyard Phase II Historic Preservation Feasibility Study*, prepared by Page & Turnbull, July 1, 2009 and Revised May 18, 2010. In order to accommodate the research and development uses that would be displaced with the preservation of Buildings 211, 224, 231 and 253, maximum height limits would be increased (from a maximum of 105 feet to a maximum of 120 feet) in certain areas in HPS Phase II. Additionally, to address sea level rise in the historic district, a wave protection berm would be constructed around the district to accommodate a 36-inch sea level rise.

The ultimate feasibility of this subalternative for the non-stadium scenarios, the Housing/R&D Variant and the R&D Variant, has not been determined at this time and for this reason, the Project incorporates this subalternative into the non-stadium scenarios as explained in Section I. The following findings support the rejection of Subalternative 4A as applied to the Project with implementation of the stadium scenario.

(a) **Financial Infeasibility:** This finding applies to the Project with the proposed new stadium located at HPS Phase II and is primarily based on the facts, analysis, and expert opinion contained in the following three reports and all of the documents referenced therein: (1) *Candlestick Point-Hunters Point Shipyard Phase II Historic Preservation Feasibility Study*, prepared by Page & Turnbull, July 1, 2009 and Revised May 18, 2010; (2) *Candlestick Point-Hunters Point Shipyard Phase II Historic Preservation Landscape and Sea Level Rise Study*, prepared by Royston Hanamoto Alley & Abey ("RHAA"), May 18, 2010; and (3) *Proposed Candlestick Point-Hunters Point Shipyard Phase II Development: Financial Feasibility Analysis of Historic Retention Options*, prepared by CBRE Consulting, May 20, 2010.

At the request of the City, CBRE Consulting ("CBRE") prepared a financial feasibility analysis of the option of preserving the four structures as proposed in Subalternative 4A as well as the feasibility of preserving only some buildings or a portion of Building 253. In addition to the full preservation proposed in Subalternative 4A, (preservation of Buildings 211, 224, 231 and 253), the options evaluated for feasibility included preservation of Buildings 224 and 253 (Option 1), preservation of Buildings 224, 231 and 253 (Option 2)

and preservation of Building 224 and the 6-story tower portion of Building 253. CBRE prepared its analysis based on the Candlestick Point - Hunters Point Shipyard Phase II Historic Preservation Alternatives Feasibility Study prepared by Page & Turnbull, which was peer-reviewed for the City by Architectural Resources Group, the Agency's architectural preservation consultant, and Hawk Engineers, the City's consulting civil engineer. Further, CBRE received projections on development costs and revenues for the Project from Lennar Urban, all of which have been reviewed by C.H. Elliott and Associates, the City's financial consultant for the Project. C.H. Elliott also reviewed CBRE's feasibility analysis with a particular focus on the integration of CBRE's analysis into the horizontal land development model as described further below.

CBRE determined that the full preservation option, as set forth in Subalternative 4A, and all lesser preservation options analyzed by Page and Turnbull (Options 1, 2, and 3) were financially infeasible, whether evaluated within the context of the Parcel C and Crisp Road areas as a subdevelopment area of the Project or in the context of the entire Candlestick Point-Hunters Point Shipyard II development area. The primary reason underlying the infeasibility conclusion is the extremely high restoration costs associated with the historic retention options.

CBRE's feasibility analysis was completed in two steps. First, CBRE undertook a residual land value analysis, which compared the estimated value of the buildings upon completion with the costs of development or rehabilitation. The net difference between these values is the amount "left over" for the land, or the residual land value. If the residual is below the market-value for land, then a subsidy would be required to attract a developer to the site. Second, CBRE incorporated the residual land values specific to the potential historic buildings into a dynamic, project-wide financial model. The financial model indicates project financial feasibility by calculating an internal rate of return ("IRR"), which indicates the return on capital that is capable of being generated throughout the course of development and ownership of land. CBRE calculated the IRR for the project-wide development assuming implementation of Subalternative 4A and each of the partial preservation options. As explained in the analysis, the Project Developer anticipates achieving a minimum rate of return for the Project with the stadium, but without historic preservation of the four buildings, of around 18 percent.

In the Subalternative 4A scenario, restoration costs are extremely high (\$407.1 million), which are only partially offset by the estimated capitalized value (\$139.8 million). The difference between the two (\$267.3 million, or \$262.0 million net of demolition) represents a significant subsidy that increases the project's expected \$2.28 billion infrastructure and development budget by 11.5 percent. The resulting IRR anticipated under this scenario is estimated at 13.7 percent. The costs are an order of magnitude that does not justify retention, as no developer would be enticed to pursue and no lender would finance this project, whether at the Parcel C major phase level or the Project-wide level, with residual land values and an IRR significantly below required thresholds.

The other scenarios analyzed reflect the spectrum between complete demolition and full retention. The results of the analyses of these scenarios indicate that they are all infeasible.

Two of the three options (Options 1 and 2) yielded negative residual land values, while the third (Option 3), albeit slightly positive, did not meet the criteria of feasibility. In this case, the \$38.2 million residual land value represented less than 3.8 percent of the construction costs, an insufficient cushion to entice a developer to build or a lender to finance construction. As with the Historic Retention-Base Plan (e.g. Subalternative 4A), Options 1, 2, and 3 were evaluated in the context of the overall Candlestick Point-Hunters Point Shipyard II development financial analysis. The IRR of the three partial retention options ranged from 14.5 percent to 15.1 percent. As such, all three indicated an IRR below the minimum 18 percent range threshold, declines in net cash flow, and ratios to total development costs out of proportion to building square footage.

While the financial model analysis of the Project with the stadium as proposed in the EIR produces at present an IRR between 15 to 16 percent, taking into account expected public and philanthropic subsidies, the Project Developer and the City reasonably expect that an 18 percent or higher IRR will ultimately be achieved with the broad additional financial support and funding mechanisms that are likely to accompany the Project's retention of the San Francisco 49ers. Therefore, it is reasonable for the Developer to move forward with an NFL stadium project currently projected at a IRR below 18 percent with the expectation that ultimate rate of return will achieve the target rate.

However, it is not equally reasonable to assume that the economic feasibility of historic reuse will improve or that significant new support will be available for retaining historic structures. The ability to attract private capital partners for the Project is reasonably likely as a result of refinements to costs and enhancements over time as the Project advances. However, inclusion of the historic preservation alternative would further widen the gap between currently projected and target rate of return. Further, subsidies that might be available specifically for historic preservation would not be expected to close the financial feasibility gap because these subsidies would not be expected to be sufficient in this instance. At best, federal tax credits and other public subsidies would total about \$28 million for Subalternative 4A, the Historic Retention - Base Plan, which would not offset costs significantly enough to be feasible. Similar, but lesser credits might be available for Scenario Options 1 and 2, but would not be sufficient to make them feasible. This tax credit would not be available for Scenario Option 3 due to the partial demolition of the building.

In sum, Subalternative 4A and the lesser preservation options analyzed (e.g. partial implementation of Subalternative 4A) are financially infeasible for this Project because they would result in the Project facing a greater reduced rate of return from the target rate, resulting in a further financial drag on the feasibility of the Project, and subsidies that might be available for preservation of historic resources are not reasonably expected to close the feasibility gap so as to render the preservation of these buildings analyzed in Subalternative 4A feasible.

(b) Environmental Impacts: This alternative would avoid the significant impact to cultural resources associated with the demolition of historic resources on HPS Phase II. However, all other Project potentially significant impacts and significant unavoidable impacts would occur under this alternative. Thus, this alternative, while avoiding one significant

unavoidable impact, would still result in all other Project impacts that are significant and unavoidable.

5. Reduced CP-HPS Phase II Development; No HPS Phase II Stadium, State Parks Agreement or Yosemite Slough Bridge

This alternative would have the same land use program proposed with the Project, except that the new stadium at HPS Phase II and the Yosemite Slough Bridge would not be constructed and the 49ers would continue to use Candlestick Park. The total number of housing units would be the same as for the Project; however, because this alternative would not include the CPSRA boundary reconfiguration, the land coverage of the development at Candlestick Point would be smaller. Approximately 1,350 units would be shifted from Candlestick Point to HPS Phase II. This alternative assumes a State Parks agreement would not occur, no 49ers stadium would be built at HPS Phase II, and the proposed Yosemite Slough bridge would not be constructed.

The Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, State Parks Agreement or Yosemite Slough Bridge is rejected for the following reasons:

(a) Opportunity for a New Stadium: This alternative would not meet the Project and Proposition G objective of encouraging the 49ers to remain in San Francisco by providing a site for, and infrastructure to serve, a new 49ers stadium. The 49ers have been actively pursuing a new football stadium in Santa Clara; the current stadium at Candlestick Point is outdated and no longer meets their standards or requirements. Without a new stadium that meets current NFL standards, the Project would not fulfill the objective of encouraging the 49ers to remain in San Francisco.

(b) Parks, Recreation, and Open Space: This alternative would not meet the Project and Proposition G objective of improving the CPSRA to enhance public access to the waterfront and enjoyment of the Bay. The proposed significant improvements to the CPSRA and ongoing operation and maintenance funding of the CPSRA as provided for by Public Resources Code section 5006.8 with the land exchange envisioned by the Project would not occur under this alternative. Improvements to the CPSRA that would not occur under this alternative include revegetation and landscaping, shoreline restoration and stabilization, new trails, paths and visitor facilities, widening of the park at its narrowest pinch point, creation of habitat areas, and salt marsh restoration. (Draft EIR III.P-17) The portions of the CPSRA that are used for stadium parking, are undeveloped, or are inaccessible would remain in these underutilized conditions. In addition, the California State Parks an adequate and reliable funding stream to support the operation and maintenance of the CPSRA. Under this alternative, improvements to the CPSRA, and the provision of operation and maintenance funding for the CPSRA totaling \$50 million dollars would not be provided. (Public Resources code section 5006.8)

This alternative would not provide for the construction of the Bay Trail from the western boundary of Candlestick Point near the Harney Way/US-101 interchange, through the CPSRA, to the proposed Bay Trail extensions around Yosemite Slough, and along the

waterfront on HPS ultimately connecting to the existing northern trail along the India Basin shoreline. Additionally, under this alternative, opportunities to purchase or rent up to eleven Workforce Housing Units (as defined in the Project Housing Plan) in the Candlestick Point area would not be available to income-eligible employees of State Parks working at the CPSRA.

(c) Transportation Objectives: This alternative would not meet, or would substantially reduce the ability to meet, two key Project and Proposition G objectives: (1) to provide automobile, public transportation, and pedestrian connections between the Shipyard and Candlestick Point; (2) to create an appealing walkable urban environment served by transit.

Due to geography, topography, and the current condition of infrastructure, Candlestick Point and the Hunters Point Shipyard are comparatively isolated from the transit and roadway networks serving the City and region, and are not easily accessible by pedestrians and bicyclists. These deficiencies have been identified as top community concerns during the extensive local and citywide planning efforts for the Project and across southeastern San Francisco. (C&R-55-56.) As part of the City's transportation goals and plans, and to serve the increased travel demands from the Project, a new BRT network has been proposed. BRT service generally provides faster more reliable service than traditional local bus routes using a variety of strategies to reduce conflicts with other vehicles. (C&R-56.) For the Project, BRT service would provide an internal link between the two Project areas, would link the Project with the surrounding developments and neighborhoods, and would connect to Caltrain, BART, the T-Third light rail, and numerous Muni bus lines. A key element of the Project's overall transportation system would involve providing the most direct route of travel for the BRT, as well as bicycles and pedestrians, between Hunters Point Shipyard, Candlestick Point, and destinations to the west. (C&R-56.) Thus, the planned BRT is a critical component in the promotion of public transit use by the Project residents, visitors, and employees consistent with the City's Transit-First policy and the Project's Transportation Plan.

The Draft EIR analysis and the additional analysis in the C&R determined that the Yosemite Slough Bridge would provide a superior and necessary function compared to alternatives without the bridge. (C&R-54-67.) For the BRT service, the analysis demonstrated that in terms of travel time and associated ridership, reliability, safety, operating costs, adaptability to possible future light rail, and minimizing impacts on local industrial businesses, the BRT route across the Yosemite Slough Bridge would be substantially superior to alternative routes around the Slough and would provide a quality of service associated with bus rapid transit. (C&R-57-61.) Based on these findings, SFMTA has stated that the additional travel time, cost, reduced ridership, and overall effect on route reliability associated with a route around the Slough would likely affect Muni's ability operate the service to the Hunters Point Shipyard. (C&R-61.)

The bridge would enable walking and cycling between Candlestick Point and the Hunters Point Shipyard, thereby enhancing the connection between these two Project areas and reducing automobile use and the demand for parking. Without the bridge, walking and cycling distance between the center of Candlestick Point and the center of Hunter Point

Shipyard would increase by 2/3 mile or 50 percent compared to conditions with the bridge. Without the bridge, pedestrians and cyclists would travel through an industrial area with heavy truck traffic, several intersections, and few amenities. Some of these differences may be reduced with the construction of the Bay Trail around Yosemite Slough. The trail, however, would be open only during park hours from 8:00 A.M. to sunset. The bridge lighting would provide security in the evening hours, when recreational fields at the Shipyard would be in use. (C&R-66-67.)

In addition, the Candlestick Point State Recreation Area Reconfiguration, Improvement and Transfer Agreement provides that the bridge will serve as a part of the open space network on all days when it is not open to private motor vehicle traffic. The bridge would be required to function primarily for public transit, bicycle, and pedestrian use, and would be closed to private motor vehicle traffic except on days when football games are held at the stadium on the Shipyard. Without the bridge, the unique recreational and viewing benefits provided for pedestrians and cyclists using the bridge would not occur.

(d) Environmental Impacts: This alternative would have a smaller development area than the Project, no new stadium, no State Parks agreement, and no bridge and would reduce or avoid the Project's construction and operational impacts related to these development reductions. Except for the potentially significant impacts specifically associated with the new stadium and the bridge, this alternative would have similar potentially significant impacts and require implementation of the Project mitigation measures to reduce those impacts to less than significant. (Table ES-2a, C&R-2243-2247.) This alternative would avoid the Project impacts associated with the bridge. The Draft EIR determined, and the Comments and Responses document (particularly, Master Response 3) provided additional supporting facts, analysis, and expert opinion based on the facts demonstrating, that all of the potential biological impacts associated with the bridge would be reduced to less than significant with implementation of the prescribed mitigation measures, all of which are adopted as part of the Project approval. This alternative would also avoid the Project's significant and unavoidable traffic and noise impacts associated with the stadium. All of the Project's other significant and unavoidable impacts associated with transportation, air quality, noise, and cultural resources would occur under this alternative. (C&R Table ES-1d.)

This alternative would have an adverse impact on CPSRA based on increased use of the park without any additional source of funding for improvements and maintenance to accommodate the increased use. Additionally, the Project's shoreline improvements and protective measures to avoid or reduce the potential for flooding and future sea level rise impacts would not be implemented for the CPSRA.

Thus, this alternative would reduce some of the Project impacts, would avoid impacts associated with the bridge and the stadium, would result in many of the same potentially significant impacts requiring mitigation and significant and unavoidable impacts, including significant and unavoidable transportation and cultural resource impacts, and would have some impacts that would not occur with the Project. Consequently, this alternative would not provide substantial environmental benefits in comparison to the Project.

VI STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to CEQA section 21081 and CEQA Guideline 15093, the Agency Commission hereby finds, after consideration of the Final EIR and the evidence in the record, that each of the specific overriding economic, legal, social, technological and other benefits of the Project as set forth below independently and collectively outweighs these significant and unavoidable impacts and is an overriding consideration warranting approval of the Project. Any one of the reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Agency Commission will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this Section, and in the documents found in the Record of Proceedings, as defined in Section I.

On the basis of the above findings and the substantial evidence in the whole record of this proceeding, the Agency Commission specially finds that there are significant benefits of the proposed Project to support approval of the Project in spite of the unavoidable significant impacts, and therefore makes this Statement of Overriding Considerations. The Agency Commission further finds that, as part of the process of obtaining Project approval, all significant effects on the environment from implementation of the Project have been eliminated or substantially lessened where feasible. All mitigation measures proposed in the FEIR, with the amendment of MM TR-17 as explained above, that are applicable to the Project are adopted as part of this approval action. Furthermore, the Agency Commission has determined that any remaining significant effects on the environment found to be unavoidable are acceptable due to the following specific overriding economic, technical, legal, social and other considerations.

The Project has the following benefits:

- Provides for 10,500 new housing units, approximately 32 percent of which will be offered at below market-rates in order to serve a range of household income levels. The below market-rate housing requirements of the Project exceed what is required under California Redevelopment Law and the City's affordable inclusionary housing laws. The below market-rate housing includes the 1:1 replacement of all 256 public housing units at Alice Griffith. The Project provides for the phased replacement of these public housing units so that residents will be able to move directly into new units without having to relocate off-site.
- Creates or improves more than 300 acres of open space throughout the Project including the improvement of the Candlestick Point State Recreation Area, representing the largest park improvement project in the City's history since the construction of Golden Gate Park. This includes a contribution of \$10 million to fund the ongoing operations and maintenance of the CPSRA. The parks and open space will create a linked system of promenades, plazas, overlooks and play areas providing a variety of public spaces and amenities for both passive and active

recreation. The parks and open space plans include neighborhood parks within Candlestick and HPS Phase II, new waterfront parks around the entire perimeter of the Shipyard, restored habitat areas, and restored public access to the water. The Project will provide a network of pedestrian and bike pathways that connect Project uses to the adjacent neighborhoods and provide unrestricted public access to the parks and open space on the Project site and the Bay shoreline. Enhanced connectivity of on-site and off-site facilities and new neighborhood parks will allow integration of new and existing facilities into the citywide park network. (DEIR III P-15)

- Provides 255,000 square feet of new and renovated replacement studio space for the existing Shipyard artist tenants, including land for a potential Arts Center.
- Invests more than \$2 billion in infrastructure to serve the site including \$404 million in transportation improvements.
- Provides space and infrastructure for a new United Nations Global Compact Center at the Shipyard.
- Provides a robust package of additional community benefits including:
 - \$3,500,000 for a scholarship fund to provide scholarships for local residents;
 - \$10,000,000 for an education improvement fund to improve or construct educational facilities in the area;
 - \$2,000,000 for community health facilities, including a potential pediatric health and wellness center;
 - The funding of a community benefits fund through the payment of 0.5 percent of the initial sale of each market rate home, as well as 50 percent of profits above the specified threshold, if any;
 - \$8,925,000 to fund workforce training and placement programs for local residents, which the City's Office of Economic and Workforce Development will match with compatible programs in the Bayview area;
 - A community builder program designed to support the participation of local builders in the construction of both market-rate and affordable housing;
 - \$2,500,000 for construction assistance programs designed to provide technical assistance and contractor workshops in conjunction with local hiring and disadvantaged business programs;
 - \$1,000,000 contribution towards the Agency's surety bond program designed to assist local contractors in obtaining insurance and credit support; and

- A community realtor program designed to provide specific opportunities for licensed brokers in the area.
- Provides 4.8 acres of improved land for additional community facilities as determined by a local community process.
- Provides 65,000 square feet of built space for additional community facilities, including space for the International African Marketplace and library reading rooms.
- Creates approximately 5,582 construction job opportunities onsite over the build-out of the Project. Total annual payroll during peak periods is estimated to be \$44 million. Construction spending will indirectly generate an additional 1,600 jobs total in San Francisco over a 20-year build out.¹²
- Creates approximately 10,000 permanent jobs. Permanent jobs at CP-HPS Phase II are estimated to generate an annual payroll of \$750 million. In addition, economic activity from CP-HPS Phase II businesses is projected to generate multiplier effects on other businesses and employment, creating a projected additional 8,000 jobs from indirect and induced expenditures in the San Francisco economy.
- Will generate over \$2 billion annually in business revenue from economic activity by CP-HPS Phase II businesses. This business activity, in turn, will produce additional indirect spending by vendors to the CP-HPS Phase II businesses, estimated to be over \$900 million annually. Induced spending by employee households as a result of direct and indirect activity will result in over \$700 million in spending.
- Provides an opportunity site for a new 49ers football stadium at the Shipyard.
- At full build-out provides more than \$8 billion in net new property value.

The revitalization of the Bayview Hunters Point and the betterment of the quality of life for the residents of this community is one of the City's highest priorities. Having considered these benefits, including the benefits discussed in Section I above, and as described in Section V above "Reasons for Selection of the Project" which is incorporated by reference under this Section VI, the Agency Commission finds that the benefits of the Project outweigh the unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable.

¹² *Fiscal and Economic Impact Analysis of the Candlestick Point/Hunters Point Shipyard Phase II Redevelopment Project*, prepared by Economic & Planning Systems, Inc., May 2010

ATTACHMENT B

MITIGATION MONITORING AND REPORTING PROGRAM

CANDLESTICK POINT-HUNTERS POINT SHIPYARD PHASE II

DEVELOPMENT PLAN PROJECT

Mitigation Monitoring and Reporting Program

SECTION 1: AUTHORITY

This Environmental Mitigation Monitoring and Reporting Program has been prepared pursuant to Section 21081.6 of the *California Environmental Quality Act*, known as CEQA (Public Resources Code Section 21000 et seq.), to provide for the monitoring of mitigation measures required of the Candlestick Point–Hunters Point Shipyard Phase II Development Plan (Project), as set forth in the Final Environmental Impact Report (Final EIR) prepared for the Project. This report will be kept on file in the offices of the San Francisco Redevelopment Agency (Agency), One South Van Ness Avenue, Fifth Floor, San Francisco, CA, 94103 and at the City Planning Department (City), 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103.

SECTION 2: MONITORING SCHEDULE

Prior to the issuance of building permits, while detailed development plans are being prepared for approval by Agency and/or City staff, Agency and/or City staff will be responsible for ensuring compliance with mitigation monitoring applicable to the project construction, development, and design phases. Agency and/or City staff will prepare or cause to be prepared reports identifying compliance with mitigation measures. Once construction has begun and is underway, monitoring of the mitigation measures associated with construction will be included in the responsibilities of designated Agency and/or City staff, who shall prepare or cause to be prepared reports of such monitoring no less than once a month until construction has been completed. Once construction has been completed, the Agency and/or City will monitor the project as deemed necessary.

SECTION 3: CHANGES TO MITIGATION MEASURES

Any substantive change in the monitoring and reporting plan made by Agency and/or City staff shall be reported in writing to the City Environmental Review Officer. Reference to such changes shall be made in the monthly/yearly Environmental Mitigation Monitoring Report prepared by City staff. Modifications to the mitigation measures may be made by City staff subject to one of the following findings, documented by evidence included in the record:

- a. The mitigation measure included in the Final EIR and the Mitigation Monitoring and Reporting Program is no longer required because the significant environmental impact identified in the Final EIR has been found not to exist, or to occur at a level which makes the impact less than significant as a result of changes in the project, changes in conditions of the environment, or other factors.

OR

- b. The modified or substitute mitigation measure to be included in the Mitigation Monitoring and Reporting Program either provides corrections to text without

any substantive change in the intention or meaning of the original mitigation measure, or provides a level of environmental protection equal to or greater than that afforded by the mitigation measure included in the Final EIR and the Mitigation Monitoring and Reporting Program; and

The modified or substitute mitigation measures do not have significant adverse effects on the environment in addition to or greater than those which were considered by the responsible hearing bodies in their decisions on the Final EIR and the proposed project; and

The modified or substitute mitigation measures are feasible, and the City, through measures included in the Mitigation Monitoring and Reporting Program or other City procedures, can assure their implementation.

SECTION 4: SUPPORT DOCUMENTATION

Findings and related documentation supporting the findings involving modifications to mitigation measures shall be maintained in the project file with the Mitigation Monitoring and Reporting Program and shall be made available to the public upon request.

SECTION 5: FORMAT OF MITIGATION MONITORING MATRIX

The mitigation monitoring matrix on the following pages identifies the environmental issue areas for which monitoring is required, the required mitigation measures, the time frame for monitoring, and the responsible implementing and monitoring agencies.

If any mitigation measures are not being implemented, the Agency and/or City may pursue corrective action. Penalties that may be applied include, but are not limited to, the following: (1) a written notification and request for compliance; (2) withholding of permits; (3) administrative fines; (4) a stop-work order; (5) criminal prosecution and/or administrative fines; (6) forfeiture of security bonds or other guarantees; and (7) revocation of permits or other entitlements.

SECTION 6: DEFINITIONS

For purposes of this MMRP, the following definitions are used:

- **Arena Operator**—An individual who or business that operates the retail business constructed at the Arena site.
- **City's Environmental Review Officer**—The Environmental Review Officer at the San Francisco Planning Department, referred to herein as "ERO."
- **Developer**—An individual who or business that prepares raw land for the construction of buildings or causes to be built physical building space for use primarily by others. This includes contractors of an individual or business that is a developer.
- **Development/Construction Phases**—During construction, three major phases of activities would be expected: abatement and demolition, site preparation and earthwork/grading, and building construction. Within each of these phases are sub-phases generally identified by area. For each parcel, a lot application would be required and individual building permits.

- **Project Applicant**—A Developer or Vertical Developer.
- **Stadium Operator**—An individual who or business that enters into an agreement with the Agency to operate the Stadium constructed at the Stadium site.
- **SFRA**—San Francisco Redevelopment Agency, referred to herein as “Agency” or “SFRA.”
- **Vertical Developer**—An individual who or business that constructs urban land uses. This term shall be construed to mean the subsequent developer(s) who constructs or extends urban land uses through subdivision of land and construction or alteration of structures. Vertical developer includes contractors of an individual or business that is a vertical developer.

Ordering and Pagination of Mitigation Measures in Table

Mitigation Measures	Starts on Page Number
Section III.D (Transportation and Circulation) MM TR-1 through MM TR-51	MMRP-6
Section III.E (Aesthetics) MM AE-2 through MM AE-7b.2	MMRP-33
Section III.G (Wind) MM W-1a	MMRP-35
Section III.H (Air Quality) MM AQ-2.1 through MM AQ-6.2	MMRP-36
Section III.I (Noise and Vibration) MM NO-1a.1 through MM NO-7.2	MMRP-38
Section III.J (Cultural Resources and Paleontological Resources) MM CP-1b.1 through MM CP-3a	MMRP-42
Section III.K (Hazards and Hazardous Materials) MM HZ-1a through MM HZ-15	MMRP-52
Section III.L (Geology and Soils) MM GE-2a through MM GE-11a	MMRP-64
Section III.M (Hydrology and Water Quality) MM HY-1a.1 through MM HY-14	MMRP-77
Section III.N (Biological Resources) MM BI-4a.1 through MM BI-20a.2	MMRP-97
Section III.O (Public Services) MM PS-1	MMRP-133
Section III.P (Recreation) MM RE-2	MMRP-134
Section III.Q (Utilities) MM UT-2 through MM UT-7a	MMRP-134
Section III.S (Greenhouse Gas Emissions) MM GC-1 through MM GC-4	MMRP-136

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance

SECTION III.D (TRANSPORTATION AND CIRCULATION)

MM TR-1 Candlestick Point-Hunters Point Shipyard Phase II Construction Traffic Management Program. The Project Applicant shall develop and implement a Candlestick Point-Hunters Point Shipyard Phase II Construction Traffic Management Program to minimize impacts of the Project and its contribution to cumulative impacts related to construction activities and construction traffic. The program shall provide necessary information to various contractors and agencies as to how to maximize the opportunities for complementing construction management measures and to minimize the possibility of conflicting impacts on the roadway system, while safely accommodating the traveling public in the area. The program shall supplement and expand, rather than modify or supersede any manual, regulations, or provisions set forth by SFMTA, DPW or other City departments and agencies.

Project Applicant

Program shall be implemented at first sub-phase application and updated with each subsequent sub-phase application

San Francisco Municipal Transportation Agency (SFMTA)/ Department of Public Works (DPW)/SFRA/DBI

SFRA/DBI

Confirm establishment as part of Phase 1 approval; Project Applicant shall update the program prior to approval of development plans for Phase 1, Phase 3, and Phase 4

SFMTA and DPW to approve program prior to each sub-phase approval; SFMTA and DPW to undertake ongoing enforcement during construction.

Preparation of the Construction Management Program shall be the responsibility of the Project Applicant, and shall be reviewed and approved by SFMTA and DPW prior to initiation of construction. The Project Applicant shall update the program prior to approval of development plans for Phase 2, Phase 3, and Phase 4 of construction to reflect any change to Project development schedule, reflect transportation network changes, to update status of other development construction activities, and to reflect any changes to City requirements.

The program shall:

- Identify construction traffic management practices in San Francisco, as well as other jurisdictions that although not being implemented in the City could provide useful

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>guidance for a project of this size and characteristics.</p> <ul style="list-style-type: none"> ■ Describe procedures required by different departments and/or agencies in the City for implementation of a construction management plan, such as reviewing agencies, approval process, and estimated timelines. ■ Describe coordination efforts associated with the Navy remediation efforts and scheduling regarding construction vehicle routing via the Crisp gate. ■ Identify construction traffic management strategies and other elements for the Project, and present a cohesive program of operational and demand management strategies designed to maintain acceptable levels of traffic flow during periods of construction activities in the Bayview Hunters Point area. These could include construction strategies, demand management strategies, alternate route strategies, and public information strategies. ■ Coordinate with other projects in construction in the immediate vicinity, so that they can take an integrated approach to construction-related traffic impacts. ■ Present guidelines for selection of construction traffic management strategies. <p>MM TR-2 TDM Plan. The Project Applicant shall prepare and implement a final TDM plan, which shall include the following elements:</p> <ul style="list-style-type: none"> ■ Visitor Variable, Market-Rate Parking Pricing ■ Maximum Permitted Parking Ratios ■ Flexible Parking Management Strategies ■ Unbundled Residential Parking ■ Transit Strategies and Support Strategies 	<p>Project Applicant</p>	<p>TDM approval as part of DDA; Timing of mitigation components to be specified within TDM plan.</p>	<p>SFRA</p>	<p>SFRA/CP-HPS Transportation Management Association (TMA)</p>	<p>Confirm establishment of the TDM as part of the Disposition and Development Agreement. Agency to consult with TMA to submit periodic status reports to Agency as specified in the TDM</p>

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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- Central Transit Hub
- Enhanced Transit Service and Bicycle Facilities
- Bicycle Support Facilities
- Wayfinding Signs
- EcoPass for Residents
- Carshare Services
- Employee TDM Programs
 - > Information Boards/Kiosks
 - > In-building Real-Time transit monitors with sightlines of transit hubs
 - > Commuter Benefits
 - > Employee EcoPass
 - > Carpool/Vanpools
 - > Guaranteed Ride Home Program
 - > Compressed Work Weeks, Flex Time, and Telecommuting
- CP-HPS Transportation Management Association
- On-site Transportation Coordinator and Website
- Targeted Marketing
- Monitoring of Transportation Demand
- Monitoring Effectiveness of Congestion-Reducing and Traffic-Calming Efforts

Plan.

The final TDM plan shall be approved as part of the Disposition and Development Agreement (DDA).

MM TR-4 Restripe the northbound and southbound approaches of the intersection of Tunnel/Blanken to provide dedicated left-turn lanes adjacent to shared through/right-turn lanes. The restriping would require prohibition of parking for 160 feet in the southbound approach (loss of eight parking

Project Applicant/SFMTA

Monitor the Tunnel/Blanken intersection biannually by undertaking traffic counts after implementation of the

SFRA/SFMTA

SFRA/SFMTA/ Planning Department

Completed upon implementation of restriping of intersection. If not needed by completion of Project buildout,

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
spaces) and for 100 feet in the northbound approach (loss of five parking spaces). Implementation of the intersection restriping shall be the responsibility of SFMTA, and shall be implemented when intersection improvements associated with the Visitacion Valley Redevelopment Plan (i.e., signalization) are no longer sufficient to maintain acceptable intersection level of service conditions.		intersection improvements associated with the Visitacion Valley Redevelopment Plan (i.e., signalization). When LOS degrades to unacceptable levels, restripe intersection as indicated.			MM TR-4 will not be required.
<u>MM TR-6 Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.</u> The City of Brisbane and Caltrans, as part of the Harney Interchange Project, shall account for existing traffic, background traffic growth, and the most recent forecasts of traffic expected to be associated with each of several adjacent development projects, including the Project. The San Francisco County Transportation Authority (SFCTA) shall coordinate with the City of Brisbane and Caltrans to ensure Project-generated vehicle trips are accounted for in the Harney Interchange analyses and design. Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts, including freeway segment impacts, shall be formulated through the current inter-jurisdictional Bi-County Transportation Study effort being led by the SFCTA, or its equivalent. The Project Applicant shall contribute its fair share to the Harney Interchange Project.	Project Applicant/ San Francisco County Transportation Authority (SFCTA) / SFMTA / SFDPW / Caltrans / City of Brisbane	Ongoing as part of the Harney Interchange Project	SFRA	SFRA	Completed upon payment of fair-share contribution to the Harney Interchange Project.
<u>MM TR-7 Feasibility study of reconfiguring the southbound approach on Illinois Street to provide a dedicated southbound left turn lane and a dedicated right-turn lane.</u> SFMTA shall conduct a	Project Applicant/SFMTA/The Port of San Francisco	Monitor the Amador/Cargo/Illinois intersection biannually by undertaking traffic	SFRA/SFMTA	SFRA/SFMTA/Port of San Francisco	Upon completion of the feasibility study, the applicant shall contribute its fair

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>feasibility study with the Port of San Francisco to determine the feasibility of reconfiguring the southbound approach on Illinois Street to provide a dedicated southbound left turn lane and a dedicated right-turn lane. Sufficient right-of-way is available to implement this improvement; however, provision of two southbound lanes would require narrowing a portion of the island to the west of the southbound approach to Cargo Way. Implementation of the intersection improvements shall be the responsibility of SFMTA and the Port of San Francisco, and shall be implemented when traffic operating conditions with the existing intersection configuration worsens to unacceptable levels. If determined feasible, the Project Applicant shall contribute its fair share to the intersection improvements.</p>		<p>counts five years after occupancy of HPS begins. When LOS degrades to LOS D, SFMTA and the Port of San Francisco shall undertake the feasibility study. Improvements shall be implemented when LOS reaches mid-range LOS D.</p>			<p>share to the intersection improvements.</p>
<p><u>MM TR-8 Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.</u> The City of Brisbane, as part of the Geneva Avenue Extension Project, shall account for existing traffic, background traffic growth, and the most recent forecasts of traffic expected to be associated with each of several adjacent development projects, including the Project. The San Francisco County Transportation Authority (SFCTA) and SFMTA shall coordinate with the City of Brisbane to ensure projected traffic volumes are accounted for in the design of the Geneva Avenue Extension.</p> <p>Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts, including freeway segment impacts, shall be formulated through the current interjurisdictional Bi-County Transportation Study effort being led by the SFCTA, or its equivalent. The Project Applicant shall contribute its fair share to the Harney</p>	<p>Project Applicant/San Francisco County Transportation Authority (SFCTA)/ SFMTA / SFDPW / Caltrans / City of Brisbane</p>	<p>Ongoing as part of the Geneva Avenue Extension Project</p>	<p>SFRA</p>	<p>SFRA</p>	<p>Completed upon payment of fair-share contribution to the Geneva Avenue Extension Project</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
Interchange Project.					
<p>MM TR-16 <u>Widen Harney Way as shown in Figure 5 in the Transportation Study.</u> Prior to issuance of the grading permit for Development Phase 1 of the Project, the Project Applicant shall widen Harney Way as shown in Figure 5 in the Transportation Study. Prior to the issuance of grading permits for Phases 2, 3 and 4, the Project Applicant shall fund a study to evaluate traffic conditions on Harney Way and determine whether additional traffic associated with the next phase of development would result in the need to modify Harney Way to its ultimate configuration, as shown in Figure 6 in the Transportation Study, unless this ultimate configuration has already been built. This study shall be conducted in collaboration with the SFMTA, which would be responsible for making final determinations regarding the ultimate configuration. The ultimate configuration would be linked to intersection performance, and it would be required when study results indicate intersection LOS at one or more of the three signalized intersection on Harney Way at mid-LOS D (i.e., at an average delay per vehicle of more than 45 seconds per vehicle). If the study and SFMTA conclude that reconfiguration would be necessary to accommodate traffic demands associated with the next phase of development, the Project Applicant shall be responsible to fund and complete construction of the improvements prior to occupancy of the next phase.</p>	Project Applicant/SFDPW	Prior to issuance of Grading Permits for Phase 1 of the Project	SFMTA	SFMTA	Completed when improvements to Harney Way as Shown in Figure 5 of the Transportation Study are final.
	Project Applicant/SFMTA	Prior to the issuance of grading permits for Phases 2, 3 and 4 of the Project, monitor traffic conditions on Harney Way by undertaking traffic counts and performing traffic study.	SFRA/SFMTA	SFRA/SFMTA	Upon completion of the traffic study as directed by the SFMTA
	Project Applicant/SFMTA	Upon completion of the traffic study as determined by the SFMTA, reconfigure Harney consistent with Figure 6, if deemed necessary by SFMTA	SFRA/SFMTA	SFRA/SFMTA	Completed when improvements to Harney Way as Shown in Figure 6 of the Transportation Study are final as required by the SFMTA.
<p>MM TR-17 <u>Implement the Project's Transit Operating Plan.</u></p> <p>The Project Applicant shall work with SFMTA to develop and implement the Project's Transit Operating Plan. Upon completion of the Project</p>	Project Applicant/SFMTA	The Project Transit Operating Plan shall be submitted as part of the Disposition and Development Agreement prior to	SFRA/SFMTA	SFRA/SFMTA	Upon approval of DDA containing Project Transit Operating Plan

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>build out, elements of the Project Transit Operating Plan shall include:</p> <ul style="list-style-type: none"> ■ Extension of the 24-Divisadero, the 44-O'Shaughnessy, and the 48-Quintara-24th Street into Hunters Point Shipyard. ■ Increased frequency on the 24-Divisadero to 6 minutes in the AM and PM peak periods. ■ Extension of the 29-Sunset from its current terminus near the Alice Griffith housing development, near Gilman Avenue and Giants Drive, into the proposed Candlestick Point retail area. The 29-Sunset would operate a short line between Candlestick Point and the Balboa Park BART station. This would increase frequencies on the 29-Sunset by reducing headways between buses from 10 minutes to 5 minutes during the AM and PM peak periods between Candlestick Point and the Balboa BART station. Every other bus would continue to serve the Sunset District (to the proposed terminus at Lincoln Drive and Pershing Drive in the Presidio) at 10-minute headways. ■ Convert T-Third service between Bayview and Chinatown via the Central Subway from one-car to two-car trains or comparable service improvement. ■ Extension of the 28L-19th Avenue Limited from its TEP-proposed terminus on Geneva Avenue, just east of Mission Street, into the Hunters Point Shipyard transit center. The 28L-19th Avenue Limited would travel along Geneva Avenue across US-101 via the proposed Geneva Avenue extension and new interchange with US-101, to Harney Way. East of Bayshore Boulevard, the 28L-19th Avenue Limited would operate as BRT, traveling in 		<p>project approval. Implementation of roadway improvements and transit service as specified in Transit Operating Plan and Transportation Plan</p>			

Draft Mitigation Monitoring & Reporting Program

<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>exclusive bus lanes into the Candlestick Point area. The BRT route would travel through the Candlestick Point retail corridor, and cross over Yosemite Slough into the Hunters Point Shipyard transit center.</p> <ul style="list-style-type: none"> ■ The 28L-19th Avenue Limited would operate a short line to the Balboa Park BART station. This would increase frequencies on the 28L-19th Avenue Limited by reducing headways between buses from 10 minutes to 5 minutes for the segment between Hunters Point Shipyard and the Balboa Park BART station. Every other bus would continue to the Sunset District (to the proposed terminus at North Point Street and Van Ness Avenue) at 10-minute headways. If the TEP-proposed extension of the 28L has not been implemented by the SFMTA by the time implementation of this measure is called for in the Transportation Study (Appendix D), the Project Applicant shall fund the extension of that line between its existing terminus and Bayshore Boulevard. ■ New CPX-Candlestick Express to downtown serving the Candlestick Point site, traveling along Harney Way (with potential stops at Executive Park), before traveling on US-101 toward downtown, terminating at the Transbay Terminal. ■ New HPX-Hunters Point Shipyard Express to downtown serving the Hunters Point Shipyard site, traveling from the Hunters Point Shipyard Transit Center, along Innes Avenue, with stops at the India Basin and Hunters View areas, before continuing along Evans Avenue to Third Street, eventually entering I-280 northbound at 25th/Indiana. The HPX would continue non-stop 					

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>to the Transbay Terminal in Downtown San Francisco.</p> <p>The SFMTA may modify or refine components listed above as needed to address changes in the operating environment and service demands, using SFMTA's service planning methodology and public review process, provided that the modifications result in:</p> <ul style="list-style-type: none"> ■ Similar or higher transit mode share to what was projected in the DEIR. As shown in Table III.D-5 in the DEIR, the Proposed Project is anticipated to generate approximately 20 percent of its external person-trips via transit during the weekday PM peak hour. If modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that the changes would still provide for a weekday PM peak hour transit mode share for external trips (i.e., outside of the Candlestick Point–Hunters Point Shipyard Phase II Development Area) of approximately 20 percent or greater. ■ Adequate capacity to serve projected transit ridership. Table III.D-17 in the DEIR presents the transit ridership and capacity utilization percentages for three study area cordons. The cordons are described on page III.D-66 of the DEIR and illustrated in Figure 19 in the project's Transportation Study (included in Appendix D of the DEIR). As shown in Table III.D-17 in the DEIR, most of the study area cordons are projected to operate well within SFMTA's 85 percent capacity utilization standard. If modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that the changes would not cause 	SFMTA, or other Agency, as appropriate	Prior to implementing any changes to Transit Operating Plan	SFRA/ Planning	SFRA/ Planning	Approval by ERO of proposed revisions to Transit Operating Plan

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<p>capacity to deteriorate such that the study area cordons as defined in Table III.D-17 in the DEIR would operate above SFMTA's capacity utilization standard.</p> <ul style="list-style-type: none"> ■ Similar or less severe traffic impacts than identified in Impacts TR-3 through TR-16 in the DEIR. Specifically, if modifications to the transit service described above are proposed, SFMTA (or other agency, as appropriate) shall demonstrate that vehicular traffic congestion (i.e., intersection level of service) would be similar to or better than conditions identified in the DEIR at study intersections along major transit corridors in the study area including Palou Avenue, Gilman Avenue, Harney Way, and Innes Avenue/Hunters Point Boulevard/Evans Avenue. <p>Before implementing any major service changes to the expected components of the Transit Operating Plan, the SFMTA shall submit a memorandum to the San Francisco Planning Department's Environmental Review Officer, describing the proposed changes and technical analysis demonstrating compliance with the above criteria.</p> <p>Nothing in this measure requires the SFMTA to provide any service in advance of the schedule for Transit Improvement Phasing set forth as Table 5 in the Transit Operating Plan or in excess of the criteria set forth above.</p> <p>MM TR-21.1 <u>Maintain the proposed headways of the 9-San Bruno.</u> To address Project impacts to the 9-San Bruno, prior to issuance of a grading permit for Development Phase 1, the Project Applicant in cooperation with SFMTA shall conduct a study to evaluate the effectiveness and feasibility of the following improvements which could reduce Project</p>	<p>Project Applicant/SFMTA</p>	<p>Develop monitoring program for traffic and transit operations related to the 9-San Bruno prior to issuance of a grading permit for Phase I.</p>	<p>SFRA/SFMTA</p>	<p>SFRA/SFMTA</p>	<p>Upon completion of a monitoring program as directed and approved by the SFMTA.</p>

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<p>impacts on transit operations along the San Bruno Avenue corridor, generally between Campbell Avenue and Silver Avenue. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the 9-San Bruno.</p>		As directed by monitoring program, prepare traffic and transit improvement feasibility study to define improvements and schedule.			Feasibility study submitted and approved by SFMTA
<ul style="list-style-type: none"> Install a transit-only lane on northbound San Bruno Avenue for the one-block section (400 feet) between Silliman Street and Silver Avenue. This would involve removal of five metered spaces on the east side of San Bruno Avenue, just south of Silver Avenue. Treatment for transit-only lanes can range from striping to physical elevation changes or barriers to protect transit right-of-way from mixed-flow traffic. 		Based on the schedule/thresholds set forth in the feasibility study.	SFRA/SFMTA	SFRA/SFMTA	Completed when improvements identified in feasibility study are implemented.
<ul style="list-style-type: none"> Install a transit-only lane on southbound San Bruno Avenue at the approach to Dwight Street/Paul Avenue. This lane would function as a so-called "queue-jump" lane, allowing buses to bypass queues on southbound San Bruno Avenue at the intersection. The lane should begin approximately 200 feet north of Dwight Street and extend one block (about 300 feet) south of Paul Avenue to Olmstead Street. This would involve the removal of up to 20 on-street parking spaces on the west side of San Bruno Avenue. This treatment could be limited to peak hours only, which would minimize the impact of the parking loss. The segment of San Bruno Avenue between Dwight Street and Olmstead Street is designated as Bicycle Routes #705 and 5 (Class III signed routes). 					
<ul style="list-style-type: none"> At the intersection of San Bruno/Silver install signal priority treatments on westbound Silver Avenue, where buses waiting to turn left from 					

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>Silver Avenue onto southbound San Bruno Avenue must currently wait through almost an entire signal cycle due to the heavy oncoming traffic on eastbound Silver Avenue. Installation of a transit signal pre-emption at this location that provides a "green" signal for westbound vehicles but holds eastbound vehicles when buses are present would allow transit vehicles to turn left onto San Bruno Avenue without having to wait for opposing eastbound through traffic to clear.</p> <p>The Project Applicant shall fully fund the costs of implementing the transit priority improvements (either the improvements identified above, or alternative improvements of equal or greater effectiveness and comparable cost) as determined by the study and the monitoring program. Other options to be evaluated in the study could include comprehensive replacement of stop-controlled intersections with interconnected traffic signals equipped with transit priority elements.</p>					
<p>MM TR-21.2 <u>Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 9-San Bruno.</u> Should mitigation measure MM TR-21.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 9-San Bruno. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.</p>	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study.	SFRA/SFMTA	SFRA/SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study.
<p>MM TR-22.1 <u>Maintain the proposed headways of the 23-Monterey, 24-Divisidero and the 44-</u></p>	Project Applicant/SFMTA	Develop monitoring program for traffic and	SFRA/SFMTA	SFRA/SFMTA	Upon completion of a monitoring program as

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<p><u>O'Shaughnessy</u>. To address Project impacts to the 23-Monterey, 24-Divisadero and the 44-O'Shaughnessy, prior to issuance of a grading permit for Development Phase 1, the Project Applicant in cooperation with SFMTA shall conduct a study to evaluate the effectiveness and feasibility of the following improvements which could reduce Project impacts on transit operations along the Palou Avenue corridor, generally between Griffith Street and Newhall Street. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the 23-Monterey, 24-Divisadero and the 44-O'Shaughnessy.</p>		<p>transit operations related to the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy prior to issuance of a grading permit for Phase 1.</p> <p>As directed by the monitoring program, prepare traffic and transit improvement feasibility study to define improvements and schedule.I.</p>			<p>directed and approved by the SFMTA.</p> <p>Feasibility study submitted and approved by SFMTA</p>
<ul style="list-style-type: none"> Convert one of the two westbound travel lanes on Palou Avenue between Keith Street and Newhall Street (three blocks) to a transit-only lane at all times. Treatment for transit-only lanes can range from striping to physical elevation changes to protect right-of-way from mixed-flow traffic. Because the westbound lanes between Third Street and Newhall Street are relatively narrow, parking would likely need to be prohibited on the north side of Palou Avenue between Third Street and Newhall Street (approximately 600 feet) during peak periods to maximize the effectiveness of the transit-only lane. Convert one of the two eastbound travel lanes on Palou Avenue between Newhall Street and Third Street (one block) to a transit-only lane at all times. Because the eastbound travel lanes between Newhall Street are relatively narrow, parking would likely need to be prohibited on 	<p>Project Applicant/SFMTA/SFDPW</p>	<p>Based on the schedule/thresholds set forth in the feasibility study.</p>	<p>SFRA/SFMTA</p>	<p>SFRA/SFMTA</p>	<p>Completed when improvements identified in feasibility study are implemented.</p>

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the south side of Palou Avenue between Newhall Street and Third Street (approximately 600 feet) during peak periods to maximize the effectiveness of the transit-only lane. In the eastbound direction, east of Third Street, buses would re-enter the single mixed-flow traffic lane at the bus stop on the far (east) side of Third Street.

- There are currently pedestrian corner bulbs on the northwest and southwest corners of the intersection of Palou Avenue and Third Street. In order to accommodate the transit-only lanes west of Third Street, these bulbouts would be reconfigured or removed. Although removing pedestrian bulb-outs may increase pedestrian crossing distances and is generally inconsistent with the City's desire to prioritize pedestrian activity, in this case, the improvement would offer substantial benefits to transit travel times by allowing a transit-only lane through a congested intersection. This would be consistent with the City's transit-first policy.
- During the PM peak period only, prohibit parking on westbound Palou Avenue for the four-block segment between Griffith Street/Crisp Avenue and Keith Street, to provide for a PM peak period curb transit-only lane along this segment. This would create a continuous westbound transit-only lane on Palou Avenue between Griffith Street/Crisp Avenue and Newhall Street during the PM peak period.

As an alternative to the bulleted measures above, narrow the existing sidewalks on Palou Avenue from Third Street to Crisp Avenue (seven blocks) from 15 feet to 12 feet in width. The pedestrian

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bulb-outs on the west side of Third Street would be removed. The resulting 12-foot-wide sidewalks would be consistent with the Better Streets Plan guidelines. The reduction in sidewalk width would allow for the provision of a 7-foot-wide on-street parking lane, an 11-foot-wide transit-only lane, and a 10-foot-wide mixed-flow lane in each direction on Palou Avenue. This would preserve on-street parking along the corridor and provide a seven-block transit-only lane on Palou Avenue between Griffith Street/Crisp Avenue and Newhall Street. Treatment for transit-only lanes can range from striping to physical elevation changes to protect right-of-way from mixed-flow traffic. Subsequent to publication of the Draft EIR, SFMTA and the Project Applicant conducted an evaluation of this alternative measure and determined that it is a feasible and viable alternative to the four bulleted items above.

The Project Applicant shall fully fund the costs of implementing the transit priority improvements (either the improvements identified above, or alternative improvements of equal or greater effectiveness and comparable cost) as determined by the study and the monitoring program. Other options to be evaluated in the study could include signal priority treatments at other signalized intersections including at Bayshore/Cortland, Bayshore/Industrial, and Bayshore/Oakdale.

MM TR-22.2 Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy. Should mitigation measure MM TR-22.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary

Project Applicant/SFMTA

Based on the schedule/thresholds set forth in the feasibility study.

SFRA/SFMTA

SFRA/SFMTA

Completed when the purchase of additional vehicles is funded as determined by the feasibility study.

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<p>provide two travel lanes, one of which would accommodate on-street parking and one of which would be a mixed-flow travel lane. During the AM and PM peak periods, prohibit on-street parking in the eastbound direction, and operate one of the two eastbound lanes as transit-only lanes. The peak period transit lanes would impact 80 parking spaces.</p> <ul style="list-style-type: none"> ■ As an alternative to the two bulleted measures above, convert one of the two travel lanes in each direction on Gilman Avenue from Third Street to Griffith Street to transit-only. This would allow for the provision of a 7-foot-wide on-street parking lane, an 11-foot-wide transit-only lane, and a 10-foot-wide mixed-flow lane in each direction on Gilman Avenue. This would preserve on-street parking along the corridor and provide four-block transit-only lanes on Gilman Avenue between Griffith Street and Third Street. Treatment for transit-only lanes can range from striping to physical elevation changes to protect right-of-way from mixed-flow traffic. Subsequent to publication of the Draft EIR, SFMTA and the Project Applicant conducted an evaluation of this alternative measure and determined that it is a feasible and viable alternative to the two bulleted items above ■ Prohibit on-street parking on the north side of Paul Avenue, between Third Street and Bayshore Boulevard to create two westbound through lanes. Convert one westbound through lane to transit-only in the AM and PM peak periods. The peak period transit-only lane would impact 40 parking spaces. At the intersection of Paul Avenue and Bayshore Avenue, provide transit signal priority treatment 					

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<p>(i.e., queue jump) to allow transit vehicles to maneuver into the mixed flow left-hand lane, facilitating a left-turn movement immediately west of Bayshore Boulevard from westbound Paul Avenue to southbound San Bruno.</p> <p>The Project Applicant shall fully fund the costs of implementing the transit priority improvements (either the improvements identified above, or alternative improvements of equal or greater effectiveness and comparable cost) as determined by the study and the monitoring program. Other options to be evaluated in the study could include transit priority treatments on San Bruno Avenue, on the portions where the 29-Sunset travels.</p>					
<p>MM TR-23.2 <u>Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 29-Sunset.</u> Should mitigation measure MM TR-23.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 29-Sunset. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.</p>	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study.	SFRA/SFMTA	SFRA/SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study.
<p>MM TR-24.1 <u>Maintain the proposed headways of the 48-Quintara-24th Street.</u></p> <p>To address Project impacts to the 48-Quintara-24th Street, prior to issuance of a grading permit for Development Phase 1, the Project Applicant in cooperation with SFMTA shall conduct a study to evaluate the effectiveness and feasibility of the following improvements which could reduce Project impacts on transit operations along the Evans</p>	Project Applicant/SFMTA	Develop monitoring program for traffic and transit operations related to the 48-Quintara-24 th Street prior to issuance of a grading permit for Phase 1.	SFRA/SFMTA	SFRA/SFMTA	Upon completion of a monitoring program as directed and approved by SFMTA

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Avenue corridor, generally between Hunters Point Boulevard and Napoleon Street. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the 48-Quintara-24 th Street.	Project Applicant/SFMTA	As directed by the monitoring program, prepare traffic and transit improvement feasibility study to define improvements and schedule.	SFRA/SFMTA	SFRA/SFMTA	Feasibility study submitted and approved by SFMTA
<ul style="list-style-type: none"> ■ On Evans Avenue, between Jennings Street and Napoleon Street (a nine-block segment—about 6,000 feet), convert one of the two travel lanes in each direction to a transit-only lane at all times. Treatment for transit-only lanes can range from striping to physical elevation changes or barriers to protect transit right-of-way from mixed-flow traffic. <p>The Project Applicant shall fully fund the costs of implementing the transit priority improvements (either the improvements identified above, or alternative improvements of equal or greater effectiveness and comparable cost) as determined by the study and the monitoring program. Other options to be evaluated in the study could include extension of transit only lanes in one or both directions between Napoleon Street and Cesar Chavez Street or onto Hunters Point Boulevard and Innes Avenue.</p> <p>Or:</p> <p>MM TR-24.2 <u>Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 48-Quintara-24th Street.</u> Should mitigation measure MM TR-24.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to</p>	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study	SFRA/SFMTA	SFRA/SFMTA	Completed when improvements identified in feasibility study are implemented.
	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study	SFRA/SFMTA	SFRA/SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study

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headways on the 48-Quintara-24 th Street. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.					
MM TR-25 <u>Purchase additional transit vehicles to mitigate the Project impacts and Project contribution to cumulative impacts to headways on 54-Felton.</u> SFMTA shall purchase additional transit vehicles to mitigate the Project impacts and Project contribution to cumulative impacts to headways on 54-Felton. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.	Project Applicant/SFMTA	Develop monitoring program for traffic and transit operations related to the 54-Felton prior to issuance of a grading permit for Phase 1.	SFRA/SFMTA	SFRA/SFMTA	Upon completion of a monitoring program as directed and approved by SFMTA.
	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study	SFRA/SFMTA	SFRA/SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study.
MM TR-26.1 <u>Maintain the proposed headways of the T-Third.</u> To address Project impacts to the T-Third, prior to issuance of a grading permit for Development Phase 1 the Project Applicant in cooperation with SFMTA shall conduct a study to evaluate the effectiveness and feasibility of the following improvement that could reduce Project impacts on transit operations along Third Street between Thomas Avenue and Kirkwood Avenue. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the T-Third.	Project Applicant/SFMTA	Develop monitoring program for traffic and transit operations related to the T-Third prior to issuance of a grading permit for Phase 1.	SFRA/SFMTA	SFRA/SFMTA	Upon completion of a monitoring program as directed and approved by SFMTA.
	Project Applicant/SFMTA	As directed by the monitoring program, prepare traffic and transit improvement feasibility study to define improvements and schedule	SFRA/SFMTA	SFRA/SFMTA	Feasibility study submitted and approved by SFMTA
■ Reconfigure the section of Third Street between Thomas Avenue and Kirkwood	Project Applicant/SFMTA/SFDPW	Based on the schedule/thresholds	SFRA/SFMTA	SFRA/SFMTA	Completed when improvements

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<p>Avenue (9 blocks) where the light rail vehicles currently share the travel lane with auto traffic to provide a dedicated transit right-of-way, consistent with the rest of the route. This would require either removal of one travel lane in each direction on Third Street, or removal of on-street parking and some sidewalk bulbouts. In addition, left-turns from Third Street in this segment would be restricted in both directions. Treatment for transit-only lanes can range from striping to physical elevation or barriers to protect transit right-of-way from mixed-flow traffic.</p> <p>Implementation of the roadway reconfiguration shall be the responsibility of SFMTA, and shall be implemented when the results of the study described above indicate transit improvements are necessary. The Project Applicant shall fully fund the costs of implementing the transit priority improvements prior to approval of subsequent phases of development.</p>		set forth in the feasibility study			identified in the feasibility study are implemented.
<p><u>MM TR-26.2 Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the T-Third.</u> Should mitigation measure MM TR-26.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the T-Third. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.</p>	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study	SFRA/SFMTA	SFRA/SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study.
<p><u>MM TR-27.1 Ensure transit preferential treatment is accounted for in the design of the Geneva Avenue</u></p>	Project Applicant/SFMTA/SFCTA	Ongoing as part of the Geneva Avenue	SFRA/SFMTA/SFCTA	SFRA/SFMTA/SFCTA	Upon completion of the Geneva Avenue

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<p><u>Extension.</u> The City of Brisbane, as part of the Geneva Avenue Extension Project, shall account for existing traffic, background traffic growth, and the most recent forecasts of traffic expected to be associated with each of several adjacent development projects, including the Project. The San Francisco County Transportation Authority (SFCTA) and SFMTA shall coordinate with the City of Brisbane to ensure transit preferential treatment is accounted for in the design of the Geneva Avenue Extension.</p>		Extension Project			Extension Project
<p>MM TR-27.2 <u>Purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 28L-19th Avenue/Geneva Limited.</u> Should mitigation measure MM TR-27.1 not be feasible or effective, the Project Applicant shall work with SFMTA to purchase additional transit vehicles as necessary to mitigate the Project impacts and Project contribution to cumulative impacts to headways on the 28L-19th Avenue/Geneva Limited. Funds for the implementation of this mitigation measure are expected to be generated from a combination of Project revenues that accrue to the City, and other funding sources.</p>	Project Applicant/SFMTA	Develop monitoring program for traffic and transit operations related to the 28L-29th Avenue/Geneva Limited prior to issuance of a grading permit for Phase 1.	SFRA/SFMTA	SFRA/SFMTA	Upon completion of a monitoring program as directed and approved by SFMTA.
	Project Applicant/SFMTA	Based on the schedule/thresholds set forth in the feasibility study	SFMTA	SFMTA	Completed when the purchase of additional transit vehicles is funded as determined by the feasibility study.
<p>MM TR-32 <u>Determine the feasibility of relocating Bicycle Routes #70 and #170.</u> Prior to issuance of the grading permit for Development Phase 1, the Project Applicant shall fund a study to determine the feasibility of relocating Bicycle Routes #70 and #170. The study of the bicycle route relocation, necessary environmental clearance documentation, and implementation shall be the responsibility of SFMTA.</p>	Project Applicant/SFMTA	Prior to issuance of the grading permit for Phase 1	SFRA/SFMTA	SFMTA	Upon completion of the feasibility study.
<p>MM TR-38 <u>Transportation Management Plan</u></p>	Stadium Operator/SFMTA	Prior to opening day of	SFRA/SFMTA	SFRA/SFMTA	Approval of the

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<p>(TMP) for the stadium. The stadium operators shall develop and maintain a Transportation Management Plan (TMP) for the stadium. The stadium operator shall work with representatives from the SFMTA, the State Highway Patrol, the Police Department, private charter operators, Caltrain and others on a continuing basis to develop and refine the TMP, as determined appropriate by SFMTA. The final stadium TMP shall be approved by SFMTA. Preparation of the TMP shall be fully funded by the stadium operator, and shall be completed in time for implementation on opening day of the stadium.</p> <p>The following actions shall be included in the TMP:</p> <ul style="list-style-type: none"> ■ Information on transportation options to the stadium, including game day service by the various regional service providers shall be distributed to season ticket holders, employees, and other patrons if possible. ■ A brochure, information packet, and/or web page providing full information on transit access to the stadium, similar to that currently offered at the 49ers website, shall be updated and maintained. ■ The use of charter buses to the stadium shall be encouraged and expanded. A number of measures shall be considered that could be implemented at low-cost to expand the use of group charters, including reduced parking costs, publicize the groups in 49ers publications and mailings, provide priority parking, provide lounges for bus drivers and provide support services for rooter clubs. ■ Residential Permit Parking Program and/or additional parking restrictions, such as time limits, during game days, particularly in the Bayview Hunters Point areas, shall be explored 		<p>the stadium</p>			<p>Transportation Management Plan (TMP) by the SFMTA</p>

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<p>with residents to reduce potential for intrusion of stadium vehicles into the adjacent neighborhood during a football game or secondary event.</p> <ul style="list-style-type: none"> ■ The stadium operator shall implement measures to encourage carpools of 4-plus persons per vehicle. ■ The stadium operator shall charge a higher parking cost for low occupancy vehicles. ■ The stadium operator shall develop a separate TDM plan for employees of the stadium and concessionaires. The plan shall consider measures such as providing employees and concessionaires with free or subsidized transit passes to encourage transit use and reduce vehicular travel to the stadium. Employees shall not receive preferential parking. ■ The stadium operator shall develop measures with CPSRA to ensure that game day spectators do not park in CPSRA day use parking lots. Strategies to be explored include limiting parking in CPSRA lots to a limited duration during game days (e.g., to a two-hour period), or an increase in parking fees equivalent to game day parking, and ticketing and enforcement. ■ The TMP shall ensure that regular transit routes operate acceptably near the stadium. The plan should consider providing alternate routes for those transit lines that do not have exclusive right-of-way on game days (48-Quintara-24th Street, 44-O'Shaughnessy, 29-Sunset) onto transit-only facilities such as the BRT right-of-way to the south and Palou Avenue to the north (which would be a transit-only facility on game days). 					

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<p>MM TR-39 <u>Transit Service during Game Days.</u> SFMTA shall increase frequency on regularly scheduled Muni routes serving the stadium area on game days. In addition, the stadium operator shall fund additional Muni shuttle service between the stadium and regional transit service, including BART (Balboa Park and/or Glen Park Station) and Caltrain (Bayshore Station).</p> <p>Although the specific frequencies of individual routes should be determined based on patron characteristics that may evolve over time, the increased transit service, taken as an aggregate, should generally compensate for the projected shortfall of 3,600 passengers per hour on the existing and proposed transit lines.</p> <p>Prior to opening day at the new stadium, the City and stadium operator shall determine costs associated with the increased service and determine funding sources. Examples of funding sources that shall be considered include a surcharge on game tickets or other such revenue mechanism. Implementation of increased transit service would be the responsibility of SFMTA and the stadium operator, and would be implemented when projected attendance warrants additional service.</p>	<p>Stadium Operator/SFMTA</p>	<p>Prior to opening day of the stadium</p>	<p>SFRA/SFMTA</p>	<p>SFRA/SFMTA</p>	<p>Approval of gameday transit operating plan by SFMTA.</p>
<p>MM TR-46 <u>Traffic Control Officers.</u> The stadium operator shall develop as part of a stadium Transportation Management Plan (TMP), a strategy for coordinating with representatives of SFMTA and the SF Police Department for deploying traffic control officers in the Project vicinity to increase efficiency of pre- and post-event traffic, similar to what would be in place for football game days. The secondary event component of the stadium TMP shall be approved</p>	<p>Stadium Operator/SFMTA</p>	<p>Prior to opening day of the stadium</p>	<p>SFRA/SFMTA</p>	<p>SFRA/SFMTA</p>	<p>Approval of the Transportation Management Plan (TMP) by the SFMTA</p>

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by SFMTA. The stadium operator shall fully fund implementation of the secondary event (i.e., non-49ers football events) measures.

MM TR-47 Transit Service during Secondary Events. SFMTA shall increase frequency on regularly scheduled Muni routes serving the stadium area prior to large special events. In addition, the stadium operator shall fund additional Muni shuttle service between the stadium and regional transit service, including BART (Balboa Park and/or Glen Park stations) and Caltrain (Bayshore station).

Stadium Operator/SFMTA

Prior to opening day of the stadium

SFRA/SFMTA

SFRA/SFMTA

Approval of special-event transit operating plan by SFMTA.

- Routes 24-Divisadero, 28L-19th Avenue Limited, and 44-O'Shaughnessey would already be operating near their maximum frequency. Therefore, this mitigation measure primarily applies to the 48-Quintara-24th Street route and the new HPX service. If each of these routes were increased to have five-minute frequencies (typically considered the maximum frequency that can be regularly maintained), the transit capacity toward the stadium would increase by 828 passengers per hour, for a total of 3,928 passengers. Even with the additional service on these two lines, there would be a shortfall of 1,797 passengers per hour in transit capacity.
- Additional express service to key regional transit destinations and regional charter express service, similar to what is offered on football game days, would offset a portion of the shortfall in transit capacity. The amount and nature of special service to special stadium events would depend on the type and size of the special event. Generally, the capacity of the express service should compensate for the shortfall of 1,797

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>passengers per hour for a 37,500-person event (transit supply, would of course, be designed on a case-by-case basis depending on the expected size of the secondary event).</p> <ul style="list-style-type: none"> ■ SFMTA and the stadium operator shall implement a stadium transportation systems plan similar to that developed for game-day operations (except that the Yosemite Slough bridge shall not be available for private automobiles), on a case-by-case basis depending on the expected size of the secondary event. <p>Prior to opening day at the new stadium, the City and the stadium operator shall determine costs associated with the increased service and determine funding requirements. Examples of funding sources that shall be considered include a surcharge on game tickets, parking or admission surcharge, or other such revenue mechanism. Implementation of increased transit service would be the responsibility of SFMTA and the stadium operator, and would be implemented when projected attendance warrants additional service.</p> <p>MM TR-51 <u>Transportation Management Plan (TMP)</u>. The arena operator shall develop a Transportation Management Plan (TMP) for coordinating with representatives of SFMTA and the SF Police Department for deploying traffic control officers in the Project vicinity to increase efficiency of pre- and post- event traffic, and for developing incentives to increase transit ridership to the arena. If Variants 1, 2 or 2A are implemented, the TMP shall provide for SFMTA to increase the frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena and for the arena operator to</p>	<p>Arena Operators/SFMTA</p>	<p>Prior to opening day of the Arena</p>	<p>SFRA/SFMTA</p>	<p>SFRA/SFMTA</p>	<p>Approval of the Transportation Management Plan (TMP) by the SFMTA</p>

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<p>provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light rail route.</p> <p>Implementation of this mitigation measure would likely speed vehicle entrance and exit to the arena site as well as maintain orderly traffic and transit operations and reduce intrusion onto minor routes to and from the arena. Traffic control officers would facilitate traffic flow at the intersection of Harney/Jamestown which would operate at LOS F conditions with a sell-out arena event. The final arena TMP shall be approved by SFMTA. Preparation of the TMP Plan shall be fully funded by the arena operator, and shall be completed in time for implementation on opening day of the arena.</p>					

SECTION III.E (AESTHETICS)

MM AE-2 Mitigation for Visual Character/Quality Impacts During Construction. Construction documents shall require all construction contractors to strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. Construction equipment shall be parked and staged on the Project site. Staging areas shall be screened from view at street level with solid wood fencing or green fence. Prior to the issuance of building permits, the Project Applicant (through the construction contractor[s]) shall submit a construction staging, access, and parking plan to the San Francisco Department of Building Inspection for review and approval. On-street parking of construction worker vehicles shall be prohibited. Vehicles shall be kept clean and free of mud and dust before leaving the Project site. Project contractors shall sweep surrounding streets

Project Applicant

Requirements in construction documents: Prior to issuance of first permit for each phase of construction. Implementation of requirements: Ongoing through the construction process

SFRA/DBI

Construction Contractor

SFRA and DBI to review construction documents and construction staging, access, and parking plan. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
used for construction access daily and maintain them free of dirt and debris.					
<p>MM AE-7a.1 <u>Lighting Direction/Fixtures and Screening Walls to Minimize Glare and Light Spill.</u> The Project Applicant shall ensure that all parking lot and other security lighting shall be directed away from surrounding land uses and towards the specific location intended for illumination. State-of-the-art fixtures shall be used, and all lighting shall be shielded to minimize the production of glare and light spill onto surrounding use. All parking structures shall be constructed with screening walls of sufficient height to block spill light from vehicle headlights.</p>	Project Applicant	Submission of lighting plan subject to lot application or open space design document review; prior to issuance of building permit	SFRA/DBI/DPW	SFRA/DBI/DPW	SFRA to review designs and specifications as part of lot application or open space design document review. DBI/DPW to issue permits and approve construction completion
<p>MM AE-7a.2 <u>Low-level/Unobtrusive Light Fixtures.</u> The Project Applicant shall ensure that landscape illumination and exterior sign lighting shall be accomplished with low-level, unobtrusive fixtures</p>	Project Applicant	Submission of lighting plan subject to lot application or open space design document review; prior to issuance of building permit	SFRA/DBI/DPW	SFRA/DBI/DPW	SFRA to review designs and specifications as part of lot application or open space design document review. DBI/DPW to issue permits and approve construction completion
<p>MM AE-7a.3 <u>Lighting Plan.</u> The Developer shall prepare a lighting plan for each sub-Phase of the Project and submit it to the Agency prior to approval of a sub-Phase. Outdoor lighting shall maintain a minimum required illumination, as determined appropriate by the Agency for all parking and pedestrian areas. In addition, the plan shall include details such as beam spreads and/or photometric calculation, location and type of fixtures, exterior colors, details on foundations, and arrangement of exterior lighting such that it does not create glare, hazardous interference on</p>	Project Applicant	Submission of lighting plan prior to sub-Phase approval	SFRA	SFRA	SFRA to review design as part of sub-Phase application; DBI to issue permits and approve construction completion

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
adjacent streets, or properties or result in spill light that would adversely impact sensitive receptors in the project area.					
MM AE-7a.4 <u>Non-reflective Exterior Surfaces to Minimize Glare Impacts.</u> The Project Applicant shall ensure that design of the proposed structures shall include the use of textured or other nonreflective exterior surfaces and nonreflective glass.	Project Applicant	At schematic lot application or open space design review and plan check; prior to issuance of building permit	SFRA/DBI	SFRA/DBI	SFRA to review designs and specifications as part of lot application or open space design application
MM AE-7b.1 <u>Testing of the Field-Lighting System.</u> Prior to opening the stadium, the Stadium Operator shall test the installed field-lighting system to ensure that lighting meets operating requirements in the stadium and minimizes obtrusive spill lighting in the ballpark facility. Testing shall include light-meter measurements at selected locations in the vicinity to measure spill lighting from stadium field-lighting fixtures, permit adjustment of lighting fixtures, and confirm that spill-lighting effects shall be within an acceptable range and compatible with typical street lighting fixtures.	Stadium Operator	Prior to opening day of the Stadium	SFRA/DBI	SFRA/DBI	SFRA to review designs and specifications as part of lot application review; DBI to issue schematic permits and approve construction completion
MM AE-7b.2 <u>Stadium Lighting Orientation and Cut-Off Shields.</u> Prior to opening the stadium, the Stadium Operator shall ensure that stadium lighting is oriented in such a manner to reduce the amount of light shed onto sensitive receptors and incorporate "cut-off" shields as appropriate to minimize any increase in lighting at adjacent properties, providing that it still meets the standard of lighting for football operations.	Stadium Operator	At lot application/ schematic design documents submitted for approval	SFRA/DBI	SFRA/DBI	SFRA to review designs and specifications as part of lot application review; DBI to issue permits and approve construction completion

SECTION III.G (WIND)

MM W-1a <u>Building Design Wind Analysis.</u> Prior to design approval of Project buildings for high-rise structures above 100 feet, if recommended by Agency staff, the Project Applicant shall retain a	Project Applicant	At lot application schematic design review and plan check; prior to	SFRA/DBI	SFRA	SFRA to review design and specification as part of lot application
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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>qualified wind consultant to provide a wind review to determine if the exposure, massing, and orientation of the building would result in wind impacts that could exceed the threshold of 26-mph-equivalent wind speed for a single hour during the year. The wind analysis shall be conducted to assess wind conditions for the proposed building(s) in conjunction with the anticipated pattern of development on surrounding blocks to determine if the Project building(s) would cause an exceedance of the wind hazard standard. The analysis shall be conducted as directed by the City's wind study guidelines, including, if required, wind tunnel modeling of potential adverse effects relating to hazardous wind conditions. The Agency shall require the Project Applicant to identify design changes that would mitigate the adverse wind conditions to below the threshold of 26-mph-equivalent wind speed for a single hour of the year. These design changes could include, but are not limited to, wind-mitigating features, such as placing towers on podiums with a minimum 15-foot setback from street edges, placement of awnings on building frontages, street and frontage plantings, articulation of building facades, or the use of a variety of architectural materials.</p>		<p>issuance of bldg permit.</p>			<p>schematic design review; DBI to issue permits and approve construction completion</p>

SECTION III.H (AIR QUALITY)

<p>MM AQ 2.1 <u>Implement Emission Control Device Installation on Construction.</u> To reduce DPM emissions during Project construction, the Project Applicant shall require construction equipment used for the Project to utilize emission control technology such that 50% of the fleet will meet US EPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during the first two years of</p>	<p>Project Applicant</p>	<p>Prior to issuance of construction site permit</p>	<p>SFRA/ DBI</p>	<p>SFRA/DBI</p>	<p>SFRA and DBI to review construction documents; Construction contractor to submit quarterly report and compliance of activity through fourth year of construction, and annually thereafter,</p>
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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
construction activities, increasing to 75% of the fleet in the third year and 100% of the fleet starting in the fourth year and for the duration of the Project.					until deemed complete by SFRA.
MM AQ-2.2 <u>Implement Accelerated Emission Control Device Installation on Construction Equipment Used for Alice Griffith Parcels.</u> In addition to mitigation measure MM AQ-2.1, in order to minimize the potential impacts to residents living in Alice Griffith from the construction activities in that area, the Project Applicant will require that all construction equipment used in the Alice Griffith parcels (CP01 through CP06) would utilize equipment which meets the US EPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) throughout the entire duration of construction activities on those parcels.	Project Applicant	Prior to issuance of construction site permit	SFRA /DBI	SFRA/DBI	SFRA and DBI to review construction documents; Construction contractor to submit quarterly report and compliance of activity through duration, until deemed complete by SFRA.
MM AQ-6.1 If a facility with sources of TAC emission wishes to locate on a plot size smaller than 1 acre, an analysis will be required to show the facility, in conjunction with all other TAC emitting facilities in the R&D areas, will not cause thresholds of a residential cancer risk of 10 in one million and a chronic noncancer HI of 1.0 to be exceeded at the nearest residential locations.	Project Applicant	Lot size submitted at time of sub-phase application; if lot size is less than 1 acre, TAC analysis required prior to building occupancy	SFRA/DBI	SFRA/DBI	SFRA and DBI to review sub-phase application; for lots under once acre SFRA and DBI to review TAC analysis prior to building occupancy. ,
MM AQ-6.2 Each facility with sources of TAC emissions on a plot of 1 acre or larger will limit their emissions such that residential cancer risk and chronic non-cancer hazard index evaluated at the facility boundary does not exceed 10 in one million or 1.0, respectively. If these thresholds are exceeded at the boundary, an analysis will be required to show the facility, in conjunction with all other TAC emitting facilities in the R&D areas, will	Project Applicant	Lot size submitted at time of sub-phase application; if lot size is equal to or greater than 1 acre, TAC analysis required annually. If thresholds exceeded, additional analysis required at	SFRA/DBI	SFRA/DBI	Ongoing requirement

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
not cause these thresholds to be exceeded at the nearest residential locations.		direction of SFRA			

SECTION III.I (NOISE AND VIBRATION)

<p>MM NO-1a.1 Construction Document Mitigation to Reduce Noise Levels during Construction. The Project Applicant shall incorporate the following practices into the construction documents to be implemented by the Project contractor:</p> <ul style="list-style-type: none"> ■ Provide enclosures and mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy operations on the site ■ Use construction equipment with lower noise emission ratings whenever possible, particularly air compressors ■ Provide sound-control devices on equipment no less effective than those provided by the manufacturer ■ Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors ■ Prohibit unnecessary idling of internal combustion engines ■ Require applicable construction-related vehicles and equipment to use designated truck routes to access the Project site ■ Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets. The placement of such attenuation measures will be reviewed and approved by the Director of Public Works prior to issuance of development permits for construction activities. ■ Designate a Noise Disturbance Coordinator who shall be responsible for responding to 	Project Applicant	Prior to issuance of construction site permit	SFRA/DBI/DPW	SFRA/DBI/DPW	Review and approve contract specifications; Project Applicant to submit quarterly report to SFRA
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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>complaints about noise during construction. The telephone number of the Noise Disturbance Coordinator shall be conspicuously posted at the construction site and shall be provided to the City. Copies of the construction schedule shall also be posted at nearby noise-sensitive areas.</p>					
<p>MM NO-1a.2 <u>Noise-reducing Pile Driving Techniques and Muffling Devices.</u> The Project Applicant shall require its construction contractor to use noise-reducing pile driving techniques if nearby structures are subject to pile driving noise and vibration. These techniques include pre-drilling pile holes (if feasible, based on soils) to the maximum feasible depth, installing intake and exhaust mufflers on pile driving equipment, vibrating piles into place when feasible, and installing shrouds around the pile driving hammer where feasible. Contractors shall be required to use construction equipment with state-of-the-art noise shielding and muffling devices. In addition, at least 48 hours prior to pile-driving activities, the Project Applicant shall notify building owners and occupants within 500 feet of the Project site of the dates, hours, and expected duration of such activities.</p>	Project Applicant	Prior to issuance of construction site permit	SFRA/DBI/DPW	SFRA /DBI/DPW	Review and approve contract specifications ; Project Applicant to submit quarterly report to SFRA
<p>MM NO-2a <u>Pre-construction Assessment to Minimize Pile Driving Impacts.</u> The Project Applicant shall require its geotechnical engineering contractor to conduct a pre-construction assessment of existing subsurface conditions and the structural integrity of nearby buildings subject to pile driving impacts prior to receiving a building permit. If recommended by the geotechnical engineer, for structures or facilities within 50 feet of pile driving, the Project Applicant shall require ground borne vibration monitoring of nearby structures. Such methods and technologies shall</p>	Project Applicant	Assessment prior to issuance of construction site permit; Monitoring: Ongoing through construction process	SFRA/DBI	SFRA/DBI/DPW	Review and approve corrective measures as identified throughout construction process quarterly report

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>be based on the specific conditions at the construction site such as, but not limited to, the following:</p> <ul style="list-style-type: none"> ■ Pre-pile driving surveying of potentially affected structures. ■ Underpinning of foundations of potentially affected structures, as necessary. ■ The construction plan shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of an excavation. Monitoring results shall be submitted to DBI. In the event of unacceptable ground movement, as determined by DBI inspections, all pile driving work shall cease and corrective measures shall be implemented. The pile driving program and ground stabilization measures shall be reevaluated and approved by DBI. 					
<p>MM NO-7.1 <u>Mitigation to Minimize Game/Concert-related Temporary Increases in Ambient Noise Levels at Nearby Residences.</u> To ensure that stadium game-and event-induced interior L_{max} noise levels do not exceed an interior noise level of 60 dBA and interfere with speech and other indoor activities in the existing Hunters Point Hill residential community closest to and north of the proposed Stadium (i.e., as identified by the R3 stadium noise model receiver), the Stadium Operator shall:</p> <ul style="list-style-type: none"> ■ After stadium operator enters into lease agreement with Agency, send notification of the establishment of a stadium noise mitigation program (SNMP) to the residential property owners in the identified neighborhood potentially affected by noise from the proposed Stadium 	<p>Stadium Operator</p>	<p>After stadium operator enters lease agreement with SFRA</p>	<p>SFRA</p>	<p>SFRA</p>	<p>Complete upon payment of qualified property owners as identified by the acoustical survey.</p> <p>Stadium operator to report to SFRA upon establishment SNMP and yearly threshold until SNMP is completely implemented; continue monitoring through creation of ad hoc community working group.</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<ul style="list-style-type: none"> ■ Allow property owners an appropriate time after the date of notification about the SNMP to apply for the program, with a reminder sent to the owners before the end of the application period ■ Determine if responding property owners meet qualifications ■ Compile for property-owners reference and send to them a summary of standard types of structural acoustical mitigations ■ Choose a qualified acoustical consultant to survey the potentially affected residential units and recommend sound reduction measures appropriate to offset the modeled stadium noise impacts, which may include: <ul style="list-style-type: none"> > Acoustical upgrades to windows and doors > Acoustical stripping around doors and other openings > Ventilation improvements ■ Estimates cost of recommended sound reduction measures, which shall include labor and materials, permit fees, and City inspections; material costs will, as much as possible, be based on "like-for-like", that is, for replacement of existing materials similar in quality or appearance ■ Pay each qualifying property owner the amount of this estimate after obtaining a release from future claims for stadium event noise impacts at each property with each property owner responsible for implementing the sound reduction improvements ■ Establish an ad hoc community working group of neighbors to develop a mediation process should any future disputes arise over the effectiveness of the SNMP in eliminating 					

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>stadium noise intrusions</p> <p>MM NO-7.2 Residential Use Plan Review by Qualified Acoustical Consultant. To ensure that stadium game-and event-induced interior Lmax noise levels do not exceed an interior noise level of 60 dBA and interfere with speech and other indoor activities in the proposed on-site residential uses closest to the proposed Stadium, the Project Applicant shall choose a qualified acoustical consultant to review plans for the new residential uses planned for areas closest to the proposed Stadium and follow their recommendations to provide acoustic insulation or other equivalent measures to ensure that interior peak noise events would not exceed 60 dBA L_{max}.</p>	Project Applicant	Design review lot application	SFRA /DBI	SFRA /DBI	Review in all design documents

SECTION III.J (CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES)

<p>MM CP-1b.1 Mitigation to Minimize Impacts on Historic Resources at HPS Phase II. To reduce the adverse effect on historical resources, prior to any structural demolition and removal activities, the Project Applicant shall retain a professional who meets the Secretary of the of the Interior's Professional Qualifications Standards for Architectural History to prepare written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District, as identified in the report titled <i>Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Draft Historic Resources Survey and Technical Report</i>, July 2009, prepared by Circa Historic Property Development.</p> <p>The documentation for the property shall be prepared based on the National Park Services' (NPS) Historic American Building Survey (HABS) / Historic American Engineering Record (HAER) Historical Report Guidelines. This type of</p>	Project Applicant	Prior to issuance of any demolition and removal activities of historic resources	SFRA/Planning Department	SFRA	All written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District shall be approved by the SFRA prior to issuance and permits for any demolition and removal activities.
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documentation is based on a combination of both HABS/HAER standards (Levels II and III) and NPS new policy for NR-NHL photographic documentation as outlined in the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion (March 2005).

The written historical data for this documentation shall follow HABS / HAER Level I standards. The written data shall be accompanied by a sketch plan of the property. Efforts should also be made to locate original construction drawings or plans of the property during the period of significance. If located, these drawings should be photographed, reproduced, and included in the dataset. If construction drawings or plans cannot be located as-built drawings shall be produced.

Either HABS / HAER standard large format or digital photography shall be used. If digital photography is used, the ink and paper combinations for printing photographs must be in compliance with NR-NHL photo expansion policy and have a permanency rating of approximately 115 years. Digital photographs will be taken as uncompressed.TIF file format. The size of each image will be 1600x1200 pixels at 300 ppi (pixels per inch) or larger, color format, and printed in black and white. The file name for each electronic image shall correspond with the index of photographs and photograph label.

Photograph views for the dataset shall include (a) contextual views; (b) views of each side of each building and interior views, where possible; (c) oblique views of buildings; and (d) detail views of character-defining features, including features on the interiors of some buildings. All views shall be referenced on a photographic key. This photograph key shall be on a map of the property and shall

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show the photograph number with an arrow indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the dataset.

All written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District shall be approved by the SFRA, in consultation with the ERO, prior to any demolition and removal activities.

MM CP-1b.2 Interpretive Displays Depicting History of HPS. Interpretive displays related to the history of HPS shall be installed at Heritage Park at Dry Dock Nos. 2 and 3. The number and type of displays shall be approved by the SFRA, in consultation with the ERO.

Project Applicant

Schematic design review for Heritage Park

SFRA/Planning Department

SFRA

Displays approved by SFRA; Project Applicant to provide report to SFRA once installed

MM CP-2a Mitigation to Minimize Impacts to Archaeological Resources at Candlestick Point. Based on a reasonable presumption that archaeological resources may be present within the Project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the Project on buried or submerged historical resources.

Overview: The Project Applicant shall retain the services of a qualified archaeological consultant having expertise in California prehistoric and urban historical archeology. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the archaeological consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure and with the requirements of the Project Archaeological Research Design and Treatment

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<p>Plan (Archeo-Tec. Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California, 2009) at the direction of the City's Environmental Review Officer (ERO). In instances of inconsistency between the requirement of the Project Archaeological Research Design and Treatment Plan and of this archaeological mitigation measure, the requirement of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the Project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce potential effects on a significant archaeological resource as defined in CEQA Guidelines Section 15064.5(a)(c) to a less-than-significant level.</p> <p><u>Archaeological Testing Program:</u> The archaeological consultant shall prepare and submit to the ERO for review and approval an archaeological testing plan (ATP). The archaeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archaeological resource(s) that potentially could be adversely affected by the Project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program will be to determine</p>	Project Applicant	<p>Testing Plan: Completed prior to issuance of any permit authorizing soils disturbance</p> <p>Testing program: Completed Prior to commencement of any soils disturbing construction activity</p> <p>Testing Report: Completed prior to</p>	SFRA, ERO	SFRA, ERO	<p>Quarterly MMRP reports to SFRA, to include reporting on any Archeo Mit Measure tasks completed</p> <p>Testing Plan complete upon approval by ERO of Final Testing Plan</p> <p>Testing Program and Report deemed</p>

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<p>to the extent possible the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA.</p>		<p>commencement of any soils disturbing activity</p>			<p>complete upon approval by ERO Final Testing Report</p>
<p>At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings for submittal to the ERO. If, based on the archaeological testing program, the archaeological consultant finds that significant archaeological resources may be present, the ERO (in consultation with the archaeological consultant) shall determine if additional measures are warranted. Additional measures that may be undertaken include, but are not necessarily limited to, additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. If the ERO determines that a significant archaeological resource is present and that the resource could be adversely affected by the Project, the Project Applicant shall either:</p> <ol style="list-style-type: none"> a. Re-design the Project so as to avoid any adverse effect on the significant archaeological resource; or b. Implement a data recovery program, unless the ERO determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible. 					<p>Prior to project construction demolition and remediation</p>
<p><u>Archaeological Monitoring Program:</u> If the ERO, in consultation with the archaeological consultant, determines that an Archaeological Monitoring Program (AMP) shall be implemented, the AMP shall include the following provisions, at a minimum:</p>	<p>Project Applicant</p>	<p>Monitoring Program: Development of program work scope prior to commencement of soils disturbing</p>	<p>SFRA; ERO</p>	<p>SFRA; ERO</p>	<p>Quarterly MMRP reports to SFRA, to include reporting on any Archeo Mit Measure tasks completed</p>

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<ul style="list-style-type: none"> The archaeological consultant, Project Applicant, and ERO shall meet and consult on the scope of the AMP prior to the commencement of any Project-related soils disturbing activities. The ERO, in consultation with the archaeological consultant, shall determine what Project activities shall be archaeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), and site remediation, shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context. The archaeological consultant shall train all Project construction personnel who could reasonably be expected to encounter archaeological resources of the expected resource(s), how to identify the evidence of the expected resource(s), and the appropriate protocol in the event of apparent discovery of an archaeological resource. The archaeological monitor(s) shall be present on the Project site according to a schedule agreed upon by the archaeological consultant and the ERO until the ERO has, in consultation with the archaeological consultant, determined that Project construction activities could have no effects on significant archaeological deposits. The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis. 		<p>construction activity; monitoring activity to occur during site excavation and construction, as per monitoring program</p> <p>Monitoring Report: Report submitted to ERO upon completion of monitoring Program</p>			<p>Monitoring program and Report deemed Complete upon approval by ERO of Final Monitoring Report</p>

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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- If an intact archaeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be authorized to temporarily halt demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If, in the case of pile driving activity (foundation, shoring, etc.), the archaeological monitor has cause to believe that the pile driving activity may affect an archaeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archaeological consultant shall immediately notify the ERO of any encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit and present the findings of this assessment to the ERO as expeditiously as possible.
- Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archaeological Data Recovery Program: The archaeological data recovery program shall be conducted in accord with an Archaeological Data Recovery Plan (ADRP). The archaeological consultant, Project Applicant, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archaeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is

Project Applicant

Data Recovery Plan: Development of Program work scope, in conjunction with work scope for Archeo Monitoring Program prior to commencement of soils disturbance construction activity. More specific or

SFRA; ERO

SFRA; ERO

Quarterly MMRP reports to SFRA, to include reporting on any Archeological Mit Measure tasks completed

Data Recovery Plan and Program deemed complete upon

Draft Mitigation Monitoring & Reporting Program

<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the Project. Destructive data recovery methods shall not be pursued if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.
- Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and other potentially damaging activities.

Final Report. Description of proposed report format and distribution of results.

- Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation

detailed subsequent work scope may be required by ERO upon completion of Archeo Monitoring Program and Report

Data Recovery program: Activity to occur during and subsequent to construction activity, as per Data Recovery Program

approval by ERO of Final report indicating completion of data recovery program.

Draft Mitigation Monitoring & Reporting Program

Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
facilities, and a summary of the accession policies of the curation facilities.					
<p><u>Human Remains and Associated or Unassociated Funerary Objects:</u> The treatment of human remains and associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC), which shall appoint a Most Likely Descendant (MLD) (PRC Sec. 5097.98). The archaeological consultant, Project Applicant, and MLD shall make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines Sec. 15064.5(d)). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.</p>	Project Applicant	Upon discovery, if applicable	Coroner; SFRA	Applicant to notify SFRA, Coroner, and, if applicable, California State Native American Heritage Commission	Upon approval by ERO of Final Archaeo Resources Report
<p><u>Final Archaeological Resources Report:</u> The archaeological consultant shall submit a Draft Final Archaeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s). Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.</p>	Project Applicant	Upon completion of testing, monitoring and data recovery programs:	SFRA; ERO	SFRA; ERO	Upon approval by ERO of Final Archaeo Resources Report
		For Horizontal Developer – prior to determination of substantial completion of infrastructure @ each sub-phase;			

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than presented above.		For Vertical Developer – Prior to issuance of Certificate of Temporary or Final Occupancy, whichever occurs first			
MM CP-3a Paleontological Resources Monitoring and Mitigation Program. The Project Applicant shall retain the services of a qualified paleontological consultant having expertise in California paleontology to design and implement a Paleontological Resources Monitoring and Mitigation Program (PRMMP). The PRMMP shall include a description of when and where construction monitoring would be required; emergency discovery procedures; sampling and data recovery procedures; procedures for the preparation, identification, analysis, and curation of fossil specimens and data recovered; preconstruction coordination procedures; and procedures for reporting the results of the monitoring program.	Project Applicant	Design of Paleo Resources Monitoring and Mitigation Program (PRMMP) prior to soils disturbing activity Monitoring of site for paleo resources pursuant to PRMMP, to occur throughout soils disturbing activity	SFRA; ERO	SFRA; ERO	Approval by ERO of final design for PRMMP Quarterly MMRP reports to SFRA, to include reporting on any Paleo Mit Measure tasks completed
The PRMMP shall be consistent with the Society for Vertebrate Paleontology (SVP) Standard Guidelines for the mitigation of construction-related adverse impacts to paleontological resources and the requirements of the designated repository for	Project Paleontologist	During project soils disturbing activities	SFRA, ERO	SFRA, ERO	During project soil disturbing activities. ERO to review and approve PRMMP and determine whether

Draft Mitigation Monitoring & Reporting Program

Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring/Actions/ Verification of Compliance
<p>any fossils collected. During construction, earth-moving activities shall be monitored by a qualified paleontological consultant having expertise in California paleontology in the areas where these activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Monitoring need not be conducted in areas where the ground has been previously disturbed, in areas of artificial fill, in areas underlain by nonsedimentary rocks (serpentinite, greenstone), or in areas where exposed sediment would be buried, but otherwise undisturbed.</p> <p>The consultant's work shall be conducted in accordance with this measure and at the direction of the City's Environmental Review Officer (ERO). Plans and reports prepared by the consultant shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Paleontological monitoring and/or data recovery programs required by this measure could suspend construction of the Project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce potential effects on a significant paleontological resource as previously defined to a less-than-significant level.</p>					suspension of work is required.

SECTION III.K (HAZARDS AND HAZARDOUS MATERIALS)

<p>MM HZ-1a <u>Article 22A Site Mitigation Plans.</u> (Applies only to Candlestick Point.) Prior to obtaining a site, building or other permit from the City for development activities involving subsurface disturbance at portions of Candlestick Point bayward of the high tide line, the Project Applicant</p>	Project Applicant/SFRA	Prior to obtaining a site, building or other permit from the City for development activities involving subsurface	SFRA/DPH/California Department of Parks and Recreation if CDPR implements improvements	SFRA/DPH/California Department of Parks and Recreation if CDPR implements improvements	Approval of the site mitigation plan consistent with Article 22A
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Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>shall comply with the requirements of San Francisco Health Code Article 22A. If the site investigation required by Article 22A (or, in the case of development activity in CPSRA, which is not subject to Article 22A, a comparable site investigation that is carried out to comply with this measure, and which involves notification to California State Parks if a site mitigation plan is prepared), indicates the presence of a hazardous materials release, a site mitigation plan must be prepared. The site mitigation plan must specify the actions that will be implemented to mitigate the significant environmental or health and safety risks caused or likely to be caused by the presence of the identified release of hazardous materials. The site mitigation plan shall identify, as appropriate, such measures as excavation, containment, or treatment of the hazardous materials, monitoring and follow-up testing, and procedures for safe handling and transportation of the excavated materials, or for protecting the integrity of the cover or for addressing emissions from remedial activities, consistent with the requirements set forth in Article 22A.</p> <p>To the extent that Article 22A does not apply to state-owned land at CPSRA, prior to undertaking subsurface disturbance activities at CPSRA, the Agency and the California Department of Parks and Recreation shall enter into an agreement to follow procedures equivalent to those set forth in Article 22A for construction and development activities conducted at Candlestick Point State Recreation Area.</p> <p>MM HZ-1b <u>Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents.</u> (Applies only to HPS Phase II) Prior to obtaining a grading,</p>	<p>Project Applicant</p>	<p>disturbance at portions of Candlestick Point bayward of the high tide line</p> <p>Prior to obtaining a grading, excavation, site, building or other permit from the City</p>	<p>SFRA/DPH</p>	<p>SFRA/DPH</p>	<p>DPH to determine Project Applicant's compliance with Cleanup Decision</p>

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>excavation, site, building or other permit from the City for development activity at HPS Phase II involving subsurface disturbance, the Project Applicant shall submit documentation acceptable to the San Francisco Department of Public Health that the work will be undertaken in compliance with all notices, restrictions and requirements imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOST, FOSET or FOSL, including notices, restrictions and requirements imposed in deeds, covenants, leases, easements, and LIFOs, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, Community Involvement Plans and health and safety plans. Such restrictions, imposed by federal and state regulatory agencies as a condition on the Navy transfer of the property to the Agency, will ensure that the property after transfer will be used in a manner that is protective of the environment and human health. The City/Agency may choose to implement this measure by requiring these actions as part of amendments to San Francisco Health Code Article 31, which currently sets forth procedural requirements for development in HPS Phase I, or through an equivalent process established by the City or Agency.</p>		<p>for development activity at HPS Phase 2 involving subsurface disturbance</p>			<p>Documents and Property Transfer Documents</p>
<p>MM HZ-2a.1 Unknown Contaminant Contingency Plan. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.) Prior to obtaining the first site, building or other permit for development activities involving subsurface disturbance, the Project Applicant shall prepare and the San Francisco Department of Public Health shall approve a contingency plan to address unknown contaminants encountered during development activities. This plan, the conditions of which shall</p>	<p>Project Applicant</p>	<p>Prior to obtaining the first site, building or other permit for development activities involving subsurface disturbance</p>	<p>SFRA/DPH</p>	<p>SFRA/DPH</p>	<p>DPH to approve contingency plan</p>

Draft Mitigation Monitoring & Reporting Program

<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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be incorporated into the first permit and any applicable permit thereafter, shall establish and describe procedures for implementing a contingency plan, including appropriate notification to nearby property owners, schools and residents and appropriate site control procedures, in the event unanticipated subsurface hazards or hazardous material releases are discovered during construction. Control procedures would include, but would not be limited to, further investigation and, if necessary remediation of such hazards or releases, including off-site removal and disposal, containment or treatment. In the event unanticipated subsurface hazards or hazardous material releases are discovered during construction, the requirements of this unknown contaminant contingency plan shall be followed. The contingency plan shall be amended, as necessary, in the event new information becomes available that could affect the implementation of the plan. This measure shall be implemented for HPS Phase II through additions to Article 31 or through an equivalent process established by the City or Agency as explained in MM HZ-1b.

MM HZ-2a.2 Site-Specific Health and Safety Plans. (Applies to Candlestick Point, HPS Phase II, and off-site improvements.) Prior to obtaining the first site, building or other permit for the Project from the City for development activities involving subsurface disturbance, the Project Applicant shall prepare and submit to SFDPH a site-specific health and safety plan (HASP) in compliance with applicable federal and state OSHA requirements and other applicable laws to minimize impacts to public health and the environment. development of the plan shall be required as a condition of any applicable permit. The plan shall include

Project Applicant

Prior to obtaining the first site, building or other permit for the Project from the City for development activities involving subsurface disturbance

SFRA/DPH

SFRA/DPH

DPH to approve HASP.

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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identification of chemicals of concern, potential hazards, personal protective equipment and devices, and emergency response procedures. The HASP shall be amended, as necessary, in the event new information becomes available that could affect the implementation of the plan.

This measure shall be implemented for HPS Phase II through additions to Article 31 or through an equivalent process established by the City or Agency as explained in MM HZ-1b.

MM HZ-5a Foundation Support Piles Installation Plan. (Applies to Candlestick Point and HPS Phase II.)

Prior to obtaining a permit from the City that authorizes installation of deep foundation piles, the Project Applicant shall prepare and submit a plan acceptable to the City stating that pilot boreholes for each pile would be drilled through the artificial fill materials so the piles can be installed without damage or misalignment and to prevent potentially contaminated fill materials from being pushed into the underlying sediments or groundwater. This measure shall be implemented for Candlestick Point through implementation of mitigation measure MM HZ-1a. This measure shall be implemented for HPS Phase II through additions to Article 31 or through an equivalent process established by the City or Agency as explained in MM HZ-1b.

Project Applicant/
SFRA/DBI

Prior to obtaining a permit from the City that authorizes installation of deep foundation piles

SFRA/DBI/DPH

SFRA/DBI/DPH

DPH/DBI to approve plan

MM HZ-9 Navy-approved workplans for construction and remediation activities on Navy-owned property. (Applies only to the portions of HPS Phase II on Navy-owned property). Construction activities and remediation activities conducted on behalf of the Agency or the Project Applicant, on Navy-owned property shall be

Project Applicant/SFRA/City

Prior to construction and remediation activities on Navy-owned property.

City/SFRA

City/SFRA

Navy to approve construction and remediation activities workplan.
Construction Contractor to submit quarterly report of

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>conducted in compliance with all required notices, restrictions, or other requirements set forth in the applicable lease, easement, or license or other form of right of entry and in accordance with a Navy-approved workplan. This mitigation measure also requires that such activities be conducted in accordance with applicable health and safety plans, dust control plans, stormwater pollution prevention plans, community involvement plans, or any other documents or plans required under applicable law. The City/Agency will access Navy property through a lease, license, or easement. The City/Agency shall not undertake any activity or approve any Project Applicant activity on Navy-owned property until the Navy and other agencies with approval authority have approved a workplan for the activity. The requirement to comply with the approved work plans shall be incorporated into and made a condition of any City/Agency approvals related to activities on Navy property. This measure shall be implemented for HPS Phase II through a process established by the City or Agency as explained in MM HZ-1b.</p> <p>MM HZ-10b <u>Regulatory Agency-Approved Workplans and Permits for Shoreline Improvements.</u> Prior to undertaking any shoreline improvement activities that would affect sediment at HPS Phase II, the Agency or its contractor or Project Applicant shall prepare appropriate design documents and submit to US EPA, DTSC, RWQCB, and, if necessary, the Navy and CDPH for approval. A Dredged Material Management Office (DMMO) permit shall be obtained. The design documents shall incorporate the necessary shoreline improvements required for each specific area (e.g., including, but not limited to, rock buttressing, pile replacement, backfilling, riprap, or</p>	<p>Project Applicant/Construction Contractor/SFRA</p>	<p>Prior to undertaking any shoreline improvement activities that would affect sediment at HPS Phase II</p>	<p>SFRA</p>	<p>US EPA, DTSC, RWQCB, and, if necessary, the Navy and CDPH</p>	<p>compliance activity, until deemed complete by SFRA.</p> <p>Appropriate regulatory agencies to approve f design documents.</p>

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>installation of natural-looking shoreline protection using fill and ACB mats) such that remediation (removal of sediment and any necessary dredging) and structural improvements are performed under the same regulatory approvals and permits.</p> <p>Prior to undertaking any shoreline improvement activities that could affect contaminated sediments left in place and covered or capped with a Navy-installed remedial measure, or that would involve pile replacement in such areas, the Agency or its contractor or Project Applicant shall prepare appropriate design documents that: (1) describes how the cover or cap would be inspected to determine whether proposed shoreline improvements would adversely affect the cover or cap; and (2) describes how construction activities would be performed to mitigate environmental risk and to restore the cover or cap. The design documents shall be submitted to US EPA, DTSC, RWQCB, and, if necessary, the Navy and CDPH for approval. A DMMO permit shall be obtained, as applicable.</p> <p>Prior to undertaking any shoreline improvements that could encounter contaminated sediments, the Agency or its contractor or Project Applicant shall comply with all requirements incorporated into the design documents, work plans, health and safety plans, dust control plans, and any other document or plan required under the Administrative Order of Consent. This includes all restrictions imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOSET, including restrictions imposed in deeds, covenants, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans and health and safety plans. Prior to obtaining a grading, excavation, site, building, or other permit from the City that</p>					

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>authorizes remedial activities, SFDPH shall confirm that the work proposed complies with the applicable plans required by the Administrative Order of Consent. This measure shall be implemented through additions to Article 31 or through an equivalent process established by the City or Agency as explained in MM HZ-1b.</p> <p>MM HZ-12 Compliance with Administrative Order on Consent at Early Transferred Parcels. (Applies only at HPS Phase II.) Prior to undertaking any remediation activities at HPS Phase II on property that the Navy has transferred to the Agency as part of an early-transfer, the Agency or its contractor or Project Applicant shall comply with all requirements incorporated into remedial design documents, work plans, health and safety plans, dust control plans, community involvement plans, and any other document or plan required under the Administrative Order on Consent. This includes all notices, restrictions, and requirements imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOSET, including restrictions imposed in deeds, covenants, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, community involvement plans, and health and safety plans. Prior to obtaining a grading, excavation, site, building, or other permit from the City that authorizes remedial activities, SFDPH shall confirm that the work proposed complies with the applicable plans required by the Administrative Order on Consent. This measure shall be implemented through a requirement in the potential additions to Article 31 imposing requirements to parcels other than Parcel A or through an equivalent process established by the City or Agency.</p>	Project Applicant/ SFRA	Prior to obtaining a grading, excavation, site, building, or other permit from the City that authorizes remedial activities	SFRA/DPH	SFRA/DPH	DPH to determine compliance with Administrative Order on Consent.
MM HZ-15 Asbestos Dust Mitigation Plans and	Project Applicant	Prior to obtaining a	BAAQMD/DPH	BAAQMD/DPH	BAAQMD and DPH to

Draft Mitigation Monitoring & Reporting Program

Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p><u>Dust Control Plans.</u> Prior to obtaining a grading, excavation, site, building or other permit from the City that includes soil disturbance activities, the Project Applicant shall obtain approval of an Asbestos Dust Mitigation Plan (ADMP) from BAAQMD for areas over 1 acre that potentially contain naturally occurring asbestos and approval of a Dust Control Plan (DCP) from SFDPH for all areas at HPS Phase II and for areas over 0.5 acre at Candlestick Point. Compliance with the ADMP and DCP shall be required as a condition of the permit.</p>		<p>grading, excavation, site, building or other permit from the City that includes soil disturbance activities. Ongoing throughout construction activity</p>			<p>approve site specific DCP and ADMP and to monitor compliance throughout construction activity</p>
<p>The ADMP shall be submitted to and approved by the BAAQMD prior to the beginning of construction, and the Project Applicant must ensure the implementation of all specified dust control measures throughout the construction Project. The ADMP shall require compliance with the following specific control measures to the extent deemed necessary by the BAAQMD to meet its standard:</p>					
<ul style="list-style-type: none"> ■ For construction activities disturbing less than one acre of rock containing naturally occurring asbestos, the following specific dust control measures must be implemented in accordance with the asbestos ATCM before construction begins and each measure must be maintained throughout the duration of the construction Project: <ul style="list-style-type: none"> > Limit construction vehicle speed at the work site to 15 miles per hour > Sufficiently wet all ground surfaces prior to disturbance to prevent visible dust emissions from crossing the property line > Keep all graded and excavated areas around soil improvement operations, visibly dry unpaved roads, parking and staging areas wetted at least three times 					

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>per shift daily with reclaimed water during construction to prevent visible dust emissions from crossing the property line. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour</p> <ul style="list-style-type: none"> > Adequately wet all storage piles, treat with chemical dust suppressants, or cover piles when material is not being added to or removed from the pile > Wash down all equipment before moving from the property onto a paved public road > Clean all visible track out from the paved public road by street sweeping or a HEPA filter equipped vacuum device within 24 hours <ul style="list-style-type: none"> ■ For construction activities disturbing greater than one acre of rock containing naturally occurring asbestos, construction contractors are required to prepare an ADMP specifying measures that will be taken to ensure that no visible dust crosses the property boundary during construction. The plan must specify the following measures, to the extent deemed necessary by the BAAQMD to meet its standard: <ul style="list-style-type: none"> > Prevent and control visible track out from the property onto adjacent paved roads. Sweep with reclaimed water at the end of each day if visible soil material is carried out from property > Ensure adequate wetting or covering of active storage piles > Hydroseed or apply non-toxic soil stabilizers to disturbed surface areas and storage piles greater than ten cubic yards 					

Draft Mitigation Monitoring & Reporting Program

<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil that will remain inactive for seven days or more.

- > Control traffic on on-site unpaved roads, parking lots, and staging areas—including a maximum vehicle speed of 15 miles per hour or less
- > Control earth moving activities
- > Provide as much water as necessary to control dust (without creating run-off) in any area of land clearing, earth movement, excavation, drillings, and other dust-generating activity
- > Control dust emissions from off-site transport of naturally occurring asbestos containing materials
- > Stabilize disturbed areas following construction

If required by the BAAQMD, air monitoring shall be implemented to monitor for off-site migration of asbestos dust during construction activities, and appropriate protocols shall be established and implemented for notification of nearby schools, property owners and residents when monitoring results indicate asbestos levels that have exceeded the standards set forth in the plan.

The DCP shall be submitted to and approved by the SFDPH prior to the beginning of construction, and the site operator must ensure the implementation of all specified dust control measures throughout the construction Project. The DCP shall require compliance with the following specific mitigation measures to the extent deemed necessary by the SFDPH to achieve no visible dust at the property boundary:

Draft Mitigation Monitoring & Reporting Program					
Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<ul style="list-style-type: none"> ■ Submission of a map to the Director of Health showing all sensitive receptors within 1,000 feet of the site. ■ Keep all graded and excavated areas, areas around soil improvement operations, visibly dry unpaved roads, parking and staging areas wetted at least three times per shift daily with reclaimed water during construction to prevent visible dust emissions from crossing the property line. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour ■ Analysis of wind direction and placement of upwind and downwind particulate dust monitors. ■ Record keeping for particulate monitoring results. ■ Requirements for shutdown conditions based on wind, dust migration, or if dust is contained within the property boundary but not controlled after a specified number of minutes. ■ Establishing a hotline for surrounding community members who may be potentially affected by Project-related dust. Contact person shall respond and take corrective action within 48 hours. Post publicly visible signs around the site with the hotline number as well as the phone number of the BAAQMD and make sure the numbers are given to adjacent residents, schools, and businesses. ■ Limiting the area subject to construction activities at any one time. ■ Installing dust curtains and windbreaks on windward and downwind sides of the property lines, as necessary. Windbreaks on windward side should have no more than 50% air 					

Draft Mitigation Monitoring & Reporting Program

Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>porosity.</p> <ul style="list-style-type: none"> ■ Limiting the amount of soil in trucks hauling soil around the job site to the size of the truck bed and securing with a tarpaulin or ensuring the soil contains adequate moisture to minimize or prevent dust generation during transportation. ■ Enforcing a 15 mph speed limit for vehicles entering and exiting construction areas. ■ Sweeping affected streets with water sweepers at the end of the day. ■ Hiring an independent third party to conduct inspections for visible dust and keeping records of those inspections. ■ Minimizing the amount of excavated material or waste materials stored at the site. ■ Prevent visible track out from the property onto adjacent paved roads. Sweep with reclaimed water at the end of each day if visible soil material is carried out from property <p>For all areas, this measure shall be implemented through Article 22B (areas over one half acre) or for HPS Phase II through a requirement in the potential additions to Article 31 imposing requirements to parcels other than Parcel A or through an equivalent process established by the City or Agency.</p>					

SECTION III.L (GEOLOGY AND SOILS)

<p>MM GE-2a <u>Mitigation to Minimize Dewatering Impacts during Construction.</u> Prior to the issuance of any permit for a construction activity that would involve dewatering that could affect structures on adjacent or nearby properties, the Applicant shall, in compliance with Section 1803.1 of the <i>San Francisco Building Code</i> (SFBC), include in the permit application methods and techniques to</p>	Project Applicant	Prior to the issuance of any permit for a construction activity that would involve dewatering that could affect structures on adjacent or nearby properties	DBI	DBI	Approval of permit applications
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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>ensure that dewatering would not lower the water table such that unacceptable settlement (as determined by a California Certified Engineering Geologist [CEG] or California Registered Geotechnical Engineer [GE]) at adjacent or nearby properties would occur. Such methods and technologies shall be based on the specific conditions at the construction site and could include, but are not necessarily limited to, the following:</p> <ul style="list-style-type: none"> ■ Excavating below the groundwater table in confined areas with steel sheet piling driven below the base elevation of the proposed excavation, installation of bracing to support the excavation walls as required and, if necessary, underpinning the foundations of adjacent structures. Subsequently, the excavation would be carried out and seepage that enters the dammed area would be pumped out. ■ Perform dewatering using methods such as wellpoint systems, drainage ditches, and sump pumps. <p>The excavation or dewatering methods shall be monitored to detect ground settlement and to monitor individual dewatering activities in the vicinity of an excavation. Monitoring results shall be submitted to the San Francisco Department of Building Inspection (DBI). In the event of unacceptable ground movement, as determined by DBI inspections and/or the review of monitoring results, all excavation work shall cease and corrective measures (including, for example, different dewatering methods and/or ground stabilization methods) shall be determined by the Project CEG or GE and reviewed and approved by DBI. No construction permit involving dewatering</p>	<p>Project Applicant</p>	<p>During excavation and dewatering activities</p>	<p>DBI</p>	<p>DBI</p>	<p>Approval of corrective measures. Ongoing throughout construction activity</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>would be issued until the Project CEG or GE and DBI have approved dewatering and/or ground stabilization methods. The Project CEG or GE shall implement the corrective measures and continue monitoring activities.</p> <p>MM GE-3 <u>Mitigation to Minimize Rock Fragmentation Impacts during Construction.</u> Prior to the issuance of any permit for a construction activity that would involve controlled rock fragmentation that could cause settlement or lateral movement of structures on adjacent or nearby properties, the Applicant shall, in compliance with Section 1803.1 of the <i>San Francisco Building Code</i> (SFBC), include in the permit application methods and techniques to ensure that controlled rock fragmentation would not cause unacceptable vibration and/or settlement or lateral movement of structures at adjacent or nearby properties. Such methods and technologies shall be based on the specific conditions at the construction site such as, but not limited to, the following:</p> <ul style="list-style-type: none"> ■ Pre-excavation surveying of potentially affected structures. ■ Underpinning of foundations of potentially affected structures, as necessary. <p>The excavation plan shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of an excavation. Monitoring results shall be submitted to DBI. In the event of unacceptable ground movement, as determined by DBI inspections, all excavation work shall cease and corrective measures shall be implemented. The controlled rock fragmentation program and ground stabilization measures shall be reevaluated and approved by the DBI.</p>	<p>Project Applicant</p>	<p>Prior to the issuance of any permit for a construction activity that would involve controlled rock fragmentation</p>	<p>DBI</p>	<p>DBI</p>	<p>Approval of permit applications</p>
		<p>During controlled rock fragmentation activities</p>	<p>DBI</p>	<p>DBI</p>	<p>Approval of corrective measures. Ongoing throughout controlled rock fragmentation activities</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance	
<p>MM GE-4a.1 <u>Site-Specific Geotechnical Investigation with Seismic Analyses.</u> Prior to the issuance of any building permits for the Project site:</p> <ul style="list-style-type: none"> ■ The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC), the Seismic Hazards Mapping Act, and requirements contained in CGS Special Publication 117A "Guidelines for Evaluating and Mitigating Seismic Hazards in California." In addition, all engineering practices and analyses of peak ground accelerations and structural design shall be consistent with SFBC standards to ensure that structures can withstand expected ground accelerations. The CEG or GE shall determine and DBI shall approve design requirements for foundations and all other improvements associated with the permit application. ■ DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all necessary geotechnical mitigation measures. No permits shall be issued by DBI until the 	<p>Project Applicant</p>	<p>Prior to issuance of construction site permit</p>	<p>DBI</p>	<p>DBI</p>	<p>Approval of design requirements for foundations and all other improvements associated with the permit application.</p> <p>Ongoing throughout construction activity</p>	
	<p>DBI</p>	<p>Prior to approval of site-specific geotechnical investigations</p>	<p>DBI</p>	<p>DBI</p>	<p>Approval of site-specific geotechnical investigations.</p> <p>Ongoing throughout construction activity.</p>	

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actors/ Verification of Compliance
<p>GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods.</p> <ul style="list-style-type: none"> ■ All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations. ■ The Project CEG or GE shall be responsible for ensuring compliance with these requirements. 					
<p>MM GE-4a.2 <u>Seismic Design Compliance Documentation.</u> Prior to the issuance of building permits for the replacement of the Alice Griffith Public Housing site, the Applicant shall submit any and all seismic design compliance documentation to the HUD, as required by that agency. The Project Developer shall confirm, by copy of all documents submitted, including transmittal, compliance with this requirement to DBI. The Project California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE) shall be responsible for verifying Project compliance with this requirement.</p>	Project Applicant	Prior to the issuance of building permits for the replacement of the Alice Griffith Public Housing site	DBI/HUD	DBI	Approval of site-specific geotechnical investigations for the replacement of the Alice Griffith Public Housing site.
<p>MM GE-4a.3 <u>Site-specific Seismic Analyses to Ensure Safety of Bridge Design.</u> Prior to the issuance of any building permits for the Project site, the California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE) for the Project shall confirm that the design-level geotechnical investigation for the Yosemite Slough bridge is based on Caltrans specifications (<i>Bridge Design Specifications, Section 20 of Bridge Memos to Designers, Seismic Design Criteria</i> as previously described) and meets the San Francisco Department of Public Works Bureau of Engineering (BOE) requirements. The</p>	Project Applicant	Prior to the issuance of building permits for the Yosemite Slough bridge	DPW	DPW	Approval of site-specific geotechnical investigations for the Yosemite Slough bridge

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>Project CEG or GE and California Registered Structural Engineer (SE) shall approve bridge design. No building permits shall be issued until the CEG or GE and SE verify that the Project's bridge design complies with all Caltrans specifications and BOE requirements.</p>					
<p>MM GE-5a Site-Specific Geotechnical Investigation with Analyses of Liquefaction, Lateral Spreading and/or Settlement. Prior to issuance of building permits for the Project site:</p> <ul style="list-style-type: none"> ■ The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC), the Seismic Hazards Mapping Act, and requirements contained in CGS Special Publication 117A "Guidelines for Evaluating and Mitigating Seismic Hazards in California." In addition, all engineering practices, and analyses of structural design shall be consistent with SFBC standards to ensure seismic stability, including reduction of potential liquefaction hazards. 	Project Applicant/Project Geologist	Prior to issuance of building permits for the Project site	DBI	DBI	Approval of site-specific geotechnical investigations
<ul style="list-style-type: none"> ■ DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all 	DBI	Prior to approval of site-specific geotechnical investigations	DBI	DBI/GPRC	Approval of site-specific geotechnical investigations

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>necessary geotechnical mitigation measures. No permits shall be issued by DBI until the GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods.</p> <ul style="list-style-type: none"> ■ All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations. ■ The site-specific Project plans shall incorporate the mitigation measures contained in the approved site-specific geotechnical reports to reduce liquefaction hazards. The engineering design techniques to reduce liquefaction hazards shall include proven methods generally accepted by California Certified Engineering Geologists, subject to DBI and GPRC review and approval, including, but not necessarily limited to: <ul style="list-style-type: none"> > Structural Measures <ul style="list-style-type: none"> ○ Construction of deep foundations, which transfer loads to competent strata beneath the zone susceptible to liquefaction, for critical utilities and shallow foundations ○ Structural mat foundations to distribute concentrated load to prevent damage to structures > Ground Improvement Measures <ul style="list-style-type: none"> ○ Additional over-excavation and replacement of unstable soil with engineering-compacted fill ○ Dynamic compaction, such as Deep Dynamic Compaction (DDC) or Rapid Impact Compaction (RIC), to densify loose soils below the groundwater 					

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>table</p> <ul style="list-style-type: none"> ○ Vibro-compaction, sometimes referred to as vibro-floatation, to densify loose soils below the groundwater table ○ Stone columns to provide pore pressure dissipation pathways for soil, compact loose soil between columns, and provide additional bearing support beneath foundations ○ Soil-cement columns to densify loose soils and provide additional bearing support beneath foundations <ul style="list-style-type: none"> ■ The Project CEG or GE shall be responsible for ensuring compliance with these requirements. 					
<p>MM GE-6a Site-Specific Geotechnical Investigation with Landslide Risk Analyses. Prior to issuance of building permits for the Project site:</p> <ul style="list-style-type: none"> ■ The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC), the Seismic Hazards Mapping Act, and requirements contained in CGS Special Publication 117A "Guidelines for Evaluating and Mitigating Seismic Hazards in California." In addition, all engineering practices, and analyses of structural design shall be consistent with SFBC standards to ensure seismic stability, including reduction of potential landslide hazards. 	Project Applicant	Prior to issuance of building permits for the Project site	DBI	DBI	Approval of site-specific geotechnical investigations

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<ul style="list-style-type: none"> ■ DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all necessary geotechnical mitigation measures. No permits shall be issued by DBI until the GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods. ■ All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations. ■ The site-specific Project plans shall incorporate the mitigation measures contained in the approved site-specific geotechnical reports to reduce landslide hazards. The engineering design techniques to reduce landslide hazards shall include proven methods generally accepted by California Certified Engineering Geologists, subject to DBI and GPRC review and approval. The design-level geologic and geotechnical studies shall identify the presence of landslides and potentially unstable slopes and shall identify means to avoid the hazard or support the design of engineering procedures to stabilize the slopes, as required by Chapter 18 (Soils and Foundations) of the SFBC, as well as the procedures outlined in CGS Special Publication 117A. SFBC Sections 1803 through 1812 contain the formulae, tables, and graphs by which the 	<p>DBI</p>	<p>Prior to approval of site-specific geotechnical investigations</p>	<p>DBI</p>	<p>DBI/GPRC</p>	<p>Approval of site-specific geotechnical investigations</p>

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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Project engineer shall develop the Project's slope-stability specifications, including the appropriate foundation designs for structures on slopes and which would be used by DBI to verify the applicability of the specifications. If the presence of unstable slopes is identified, appropriate support and protection procedures shall be designed and implemented to maintain the stability of slopes adjacent to newly graded or re-graded access roads, work areas, and structures during and after construction, and to minimize potential for damage to structures and facilities at the Project site. These stabilization procedures, including, but not necessarily limited to, the following:

- > Retaining walls, rock buttresses, screw anchors, or concrete piers
- > Slope drainage or removal of unstable materials
- > Rockfall catch fences, rockfall mesh netting, or deflection walls
- > Setbacks at the toe of slopes
- > Avoidance of highly unstable areas

- The Project CEG or GE shall be responsible for ensuring compliance with these requirements.

MM GE-10a Site-Specific Geotechnical Investigation with Expansive Soils Analyses. Prior to issuance of building permits for the Project site:

- The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project

Project Applicant

Prior to issuance of building permits for the Project site

DBI

DBI/GPRC

Approval of site-specific geotechnical investigations

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC). In addition, all engineering practices, and analyses of structural design shall be consistent with SFBC standards to ensure soils stability, including reduction of potential soil expansion hazards.</p>		<p>Prior to approval of site-specific geotechnical investigations</p>	<p>DBI</p>	<p>DBI/GPRC</p>	<p>Approval of site-specific geotechnical investigations</p>
<ul style="list-style-type: none"> ■ DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all necessary geotechnical mitigation measures. No permits shall be issued by DBI until the GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods. ■ All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations. ■ The site-specific Project plans shall incorporate the mitigation measures contained in the approved site-specific geotechnical reports to reduce expansive soils hazards. The engineering design techniques to reduce expansive soils hazards shall include proven methods generally accepted by California Certified Engineering Geologists, subject to DBI and GPRC review and approval. The design-level geologic and geotechnical studies shall identify the presence of expansive soils and potentially unstable soils and shall identify 	<p>DBI</p>	<p>Prior to approval of site-specific geotechnical investigations</p>	<p>DBI</p>	<p>DBI/GPRC</p>	<p>Approval of site-specific geotechnical investigations</p>

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<p>means to avoid the hazard or support the design of engineering procedures to stabilize the soils, as required by Chapter 18 (Soils and Foundations) of the SFBC. SFBC Sections 1803 through 1812 contain the formulae, tables, and graphs by which the Project engineer shall develop the Project's soil-stability specifications, including the appropriate foundation designs for structures on expansive soils and which would be used by DBI to verify the applicability of the specifications. If the presence of expansive soils is identified, appropriate support and protection procedures shall be designed and implemented to maintain the stability of soils adjacent to newly graded or re-graded access roads, work areas, and structures during and after construction, and to minimize potential for damage to structures and facilities at the Project site.</p> <ul style="list-style-type: none"> ■ The Project CEG or GE shall be responsible for ensuring compliance with these requirements. 					
<p>MM GE-11a <u>Site-Specific Geotechnical Investigation with Corrosive Soils Analyses</u>. Prior to issuance of building permits for the Project site:</p> <ul style="list-style-type: none"> ■ The Applicant shall submit to the San Francisco Department of Building Inspection (DBI) for review and approval a site-specific, design-level geotechnical investigation prepared by a California Certified Engineering Geologist (CEG) or California Registered Geotechnical Engineer (GE), as well as project plans prepared in compliance with the requirements of the San Francisco Building Code (SFBC). In addition, all engineering practices, and analyses of structural design 	Project Applicant	Prior to issuance of building permits for the Project site	DBI	DBI/GPRC	Approval of site-specific geotechnical investigations

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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<p>shall be consistent with SFBC standards to ensure soils stability, including reduction of potential hazards from corrosive soils.</p> <ul style="list-style-type: none"> ■ DBI shall employ a third-party CEG and California Registered Professional Engineer (Civil) (PE) to form a Geotechnical Peer Review Committee (GPRC), consisting of DBI and these third-party reviewers. The GPRC shall review the site-specific geotechnical investigations and the site-specific structural, foundation, infrastructure, and other relevant plans to ensure that these plans incorporate all necessary geotechnical mitigation measures. No permits shall be issued by DBI until the GPRC has approved the geotechnical investigation and the Project plans, including the factual determinations and the proposed engineering designs and construction methods. ■ All Project structural designs shall incorporate and conform to the requirements in the site-specific geotechnical investigations. ■ The site-specific Project plans shall incorporate the mitigation measures contained in the approved site-specific geotechnical reports to reduce potential hazards from corrosive soils. The engineering design techniques to reduce corrosive soils hazards shall include proven methods generally accepted by California Certified Engineering Geologists, subject to DBI and GPRC review and approval. The design-level geologic and geotechnical studies shall identify the presence of corrosive soils and shall identify means to avoid the hazard, as required by Chapter 18 (Soils and Foundations) of the SFBC. SFBC Sections 1803 through 1812 contain the formulae, tables, and graphs by which the 	<p>DBI</p>	<p>Prior to approval of site-specific geotechnical investigations</p>	<p>DBI</p>	<p>DBI/GPRC</p>	<p>Approval of site-specific geotechnical investigations</p>
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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>Project engineer shall develop the Project's structural design specifications, including the appropriate foundation designs for structures on corrosive soils and which would be used by DBI to verify the applicability of the specifications. If the presence of corrosive soils is identified, appropriate protection procedures shall be designed and implemented to minimize potential for damage from corrosive soils to structures and facilities at the Project site.</p> <ul style="list-style-type: none"> The Project CEG or GE shall be responsible for ensuring compliance with these requirements. 					

SECTION III.M (HYDROLOGY AND WATER QUALITY)

<p>MM HY-1a.1 Storm Water Pollution Prevention Plan: Combined Storm Sewer System. In compliance with the Article 4.1 of the Public Works Code and the City's Construction Site Water Pollution Prevention Program, the Project Applicant shall submit a site-specific Storm Water Pollution Prevention Plan (SWPPP) to the SFPUC for approval, prior to initiating construction activities in areas draining to the combined sewer system. The SFPUC requires implementation of appropriate Best Management Practices (BMPs) from the California Stormwater Quality Association Stormwater BMP Handbook- Construction or the Caltrans Construction Site BMPs Manual. In accordance with SFPUC's requirements, the SWPPP shall include:</p> <ul style="list-style-type: none"> An Erosion and Sediment Control Plan that includes a site map illustrating the BMPs that will be used to minimize on-site erosion and the sediment discharge into the combined sewer system, and a narrative description of 	Project Applicant	Submit site-specific SWPPP to SFPUC for approval prior to initiating construction activity in any area draining to <i>combined</i> sewer system	SFPUC	SFPUC	SWPPP for each site undergoing construction in areas draining to combined sewer system to be approved by SFPUC
		Inspection before and after storm event, and once per 24-hour period during storm event	SFPUC	SFPUC	Quarterly MMRP reports to SFPUC, to include reporting on compliance with this measure, until completion of construction

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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those BMPs. Appropriate BMPs for Erosion and Sediment Control Plan may include:

- > Scheduling—Develop a schedule that includes sequencing of construction activities with the implementation of appropriate BMPs. Perform construction activities and control practices in accordance with the planned schedule. Schedule work to minimize soil-disturbing activities during the rainy season. Schedule major grading operations for the dry season when practical. Monitor the weather forecast for rainfall and adjust the schedule as appropriate.
- > Erosion Control BMPs—Preserve existing vegetation where feasible, apply mulch or hydroseed areas with native, non-invasive species, until permanent stabilization is established, and use soil binders, geotextiles and mats, earth dikes and drainage swales, velocity dissipation devices, slope drains, or polyacrylamide to protect soil from erosion.
- > Wind Erosion BMPs—Apply water or other dust palliatives to prevent dust nuisance; prevent overwatering which can cause erosion. Alternatively, cover small stockpiles or areas that remain inactive for seven or more days.
- > Sediment Control BMPs—Install silt fences, sediment basins, sediment traps, check dams, fiber rolls, sand or gravel bag barriers, straw bale barriers, approved chemical treatment, and storm drain inlet protection to minimize the discharge of sediment. Employ street sweeping to remove sediment from streets.

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<ul style="list-style-type: none"> > Tracking Controls—Stabilize the construction site entrance to prevent tracking of sediment onto public roads by construction vehicles. Stabilize on-site vehicle transportation routes immediately after grading to prevent erosion and control dust. Install a tire wash area to remove sediment from tires and under carriages. ■ Non-Stormwater Management BMPs that may include water conservation practices; dewatering practices that minimize sediment discharges; and BMPs for: paving and grinding activities; identifying illicit connections and illegal dumping; irrigation and other planned or unplanned discharges of potable water; vehicle and equipment cleaning, fueling, and maintenance; concrete curing and finishing; temporary batch plants; implementing shoreline improvements and working over water. Discharges from dewatering activities shall comply with the SFPUC's Batch Wastewater Discharge Requirements that regulate influent concentrations for various constituents. ■ Waste Management BMPs shall be implemented for material delivery, use, and storage; stockpile management; spill prevention and control; solid and liquid waste management; hazardous waste management; contaminated soil management; concrete waste management; and septic/sanitary waste management. ■ SWPPP Training Requirements—Construction personnel will receive training on the SWPPP and BMP implementation. ■ Site Inspections and BMP Maintenance—An inspector identified in the SWPPP will inspect 	SFPUC	Before and after a storm event, and once	SFPUC	SFPUC	Ongoing throughout

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>the site on a regular basis, before and after a storm event, and once each 24-hour period during extended storms to identify BMP effectiveness and implement corrective actions if required. The SWPPP shall include checklists that document when the inspections occurred, the results of the inspection, required corrective measures, and when corrective measures were implemented. Required BMP maintenance related to a storm event shall be completed within 48 hours of the storm event.</p>		each 24-hour period during extended storms			construction activity
<p>MM HY-1a.2 Stormwater Pollution Prevention Plan: Separate Storm Sewer System. Consistent with the requirements of the SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbing Activities (Construction General Permit), the Project Applicant shall undertake the proposed Project in accordance with a project-specific Storm Water Pollution Prevention Plan (SWPPP) prepared by Qualified SWPPP Developer, who shall consult with California State Parks on those elements of the SWPPP that cover the Candlestick Park State Recreation Area, including selection of best management practices and other SWPPP improvements. The SFRWQCB, the primary agency responsible for protecting water quality within the project area, is responsible for reviewing and ensuring compliance with the SWPPP. This review is based on the Construction General Permit issued by the SWRCB.</p> <p>The SWPPP shall include, as applicable, all Best Management Practices (BMPs) required in Attachment C of the Construction General Permit for Risk Level 1 dischargers, Attachment D for Risk Level 2 dischargers, or Attachment E for Risk Level 3 dischargers. In addition, recommended BMPs,</p>	Project Applicant	<p>Submit site-specific SWPPP to SFRWQCB for approval prior to initiating construction activity in any area draining to <i>separate</i> storm sewer system (see also MM HY-1a.3 for more specific requirements related to groundwater dewatering)</p> <p>Construction monitoring and reporting ongoing throughout construction period</p> <p>Post construction BMPs monitoring and</p>	SFRWQCB	SFRWQCB; SFRA	<p>SWPPP for each site undergoing construction in areas draining to separate storm sewer system to be approved by SFRWQCB</p> <p>Quarterly reporting to SFRWQCB and SFRA, to include reporting on compliance with this measure, until completion of construction</p> <p>Annual post-construction period</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>subject to review and approval by the SFRWQCB, include the measures listed below. However, the measures themselves may be altered, supplemented, or deleted during the SFRWQCB's review process, since the SFRWQCB has final authority over the terms of the SWPPP.</p> <ul style="list-style-type: none"> ■ Scheduling: <ul style="list-style-type: none"> > To reduce the potential for erosion and sediment discharge, schedule construction to minimize ground disturbance during the rainy season. Schedule major grading operations during the dry season when practical, and allow enough time before rainfall begins to stabilize the soil with vegetation or to install sediment-trapping devices. > Sequence construction activities to minimize the amount of time that soils remain disturbed. > Stabilize all disturbed soils as soon as possible following the completion of ground disturbing work. > Install erosion and sediment control BMPs prior to the start of any ground-disturbing activities. ■ Erosion and Sedimentation: <ul style="list-style-type: none"> > Preserve existing vegetation in areas where no construction activity is planned or where construction activity will occur at a later date. > Stabilize and re-vegetate disturbed areas as soon as possible after construction with planting, seeding, and/or mulch (e.g., straw or hay, erosion control blankets, hydromulch, or other similar material) except in actively cultivated areas. Planting 		<p>maintenance in accordance with SWPPP</p>			<p>reporting to SFRWQCB and SFRA, to include reporting on compliance with this measure</p>

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and seeding shall use native, non-invasive species.

- > Install silt fences, coir rolls, and other suitable measures around the perimeter of the areas affected by construction and staging areas and around riparian buffers, storm drains, temporary stockpiles, spoil areas, stream channels, swales, down-slope of all exposed soil areas, and in other locations determined necessary to prevent off-site sedimentation.
- > Install temporary slope breakers during the rainy season on slopes greater than 5 percent where the base of the slope is less than 50 feet from a water body, wetland, or road crossing at spacing intervals required by the SFRWQCB.
- > Use filter fabric or other appropriate measures to prevent sediment from entering storm drain inlets.
- > Detain and treat stormwater using sedimentation basins, sediment traps, baker tanks, or other measures to ensure that discharges to receiving waters meet applicable water quality objectives.
- > Install check dams, where applicable, to reduce flow velocities. Check dams reduce erosion and allow sediment to settle out of runoff.
- > Install outlet protection/energy dissipation, where applicable, to prevent scour of the soil caused by concentrated high velocity flows.
- > Implement control measures such as spraying water or other dust palliatives to alleviate nuisance caused by dust.

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- Groundwater/Dewatering:
 - > Prepare a dewatering plan prior to excavation specifying methods of water collection, transport, treatment, and discharge of all water produced by construction site dewatering.
 - > Impound water produced by dewatering in sediment retention basins or other holding facilities to settle the solids and provide other treatment as necessary prior to discharge to receiving waters. Locate sedimentation basins and other retention and treatment facilities away from waterways to prevent sediment-laden water from reaching streams.
 - > Control discharges of water produced by dewatering to prevent erosion.
 - > If contaminated groundwater is encountered, contact the SFRWQCB for appropriate disposal options. Depending on the constituents of concern, such discharges may be disallowed altogether, or require regulation under a separate general or individual permit that would impose appropriate treatment requirements prior to discharge to the stormwater drainage system.
- Tracking Controls:
 - > Grade and stabilize construction site entrances and exits to prevent runoff from the site and to prevent erosion.
 - > Install a tire washing facility at the site access to allow for tire washing when vehicles exit the site.
 - > Remove any soil or sediment tracked off paved roads during construction by street

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sweeping.

■ **Non-stormwater Controls:**

- > Place drip pans under construction vehicles and all parked equipment.
- > Check construction equipment for leaks regularly.
- > Wash construction equipment in a designated enclosed area regularly.
- > Contain vehicle and equipment wash water for percolation or evaporative drying away from storm drain inlets.
- > Refuel vehicles and equipment away from receiving waters and storm drain inlets, contain the area to prevent run-on and run-off, and promptly cleanup spills.
- > Cover all storm drain inlets when paving or applying seals or similar materials to prevent the discharge of these materials.

■ **Waste Management and Hazardous Materials Pollution Control:**

- > Remove trash and construction debris from the project area daily.
- > Locate sanitary facilities a minimum of 300 feet from receiving waters. Maintain sanitary facilities regularly.
- > Store all hazardous materials in an area protected from rainfall and stormwater run-on and prevent the off-site discharge of hazardous materials.
- > Minimize the potential for contamination of receiving waters by maintaining spill containment and cleanup equipment on site, and by properly labeling and disposing of hazardous wastes.
- > Locate waste collection areas close to

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<p>construction entrances and away from roadways, storm drains, and receiving waters.</p> <ul style="list-style-type: none"> > Inspect dumpsters and other waste and debris containers regularly for leaks and remove and properly dispose of any hazardous materials and liquid wastes placed in these containers. > Train construction personnel in proper material delivery, handling, storage, cleanup, and disposal procedures. > Implement construction materials management BMPs for: <ul style="list-style-type: none"> > Road paving, surfacing and asphalt removal activities. > Handling and disposal of concrete and cement. ■ BMP Inspection, Maintenance, and Repair: <ul style="list-style-type: none"> > Inspect all BMPs on a regular basis to confirm proper installation and function. Inspect BMPs daily during storms. > Immediately repair or replace BMPs that have failed. Provide sufficient devices and materials (e.g., silt fence, coir rolls, erosion blankets, etc.) throughout project construction to enable immediate corrective action for failed BMPs. ■ Monitoring and Reporting: <ul style="list-style-type: none"> > Provide the required documentation for SWPPP inspections, maintenance, and repair requirements. Personnel that will perform monitoring and inspection activities shall be identified in the SWPPP. > Maintain written records of inspections, spills, BMP-related maintenance activities, 					

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<p>corrective actions, and visual observations of off-site discharges of sediment or other pollutants, as required by the SFRWQCB.</p> <ul style="list-style-type: none"> > Monitor the water quality of discharges from the site to assess the effectiveness of control measures. ■ Implement Shoreline Improvements and work over water BMPs to minimize the potential transport of sediment, debris, and construction materials to the Lower Bay during construction of shoreline improvements. ■ Post-construction BMPs: <ul style="list-style-type: none"> > Re-vegetate all temporarily disturbed areas as required after construction activities are completed. Re-vegetation shall use native, non-invasive species. > Remove any remaining construction debris and trash from the project site and area upon project completion. > Phase the removal of temporary BMPs as necessary to ensure stabilization of the site. > Maintain post-construction site conditions to avoid formation of unintended drainage channels, erosion, or areas of sedimentation. > Correct post-construction site conditions as necessary to comply with the SWPPP and any other pertinent SFRWQCB requirements. ■ Train construction site personnel on components of the SWPPP and BMP implementation. Train personnel that will perform inspection and monitoring activities. 					
MM HY-1a.3 <u>Groundwater Dewatering Plan</u> , Prior	Project Applicant	Groundwater	SFRWQCB	SFRWQCB; SFRA	SWPPP for each site

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<p>to commencement of construction activities and to minimize potential impacts to receiving water quality during the construction period, the Project Applicant shall through the proper implementation of this dewatering plan, show compliance with SFRWQCB/NPDES requirements, whichever are applicable.</p> <p>The Dewatering Plan shall specify how the water would be collected, contained, treated, monitored, and/or discharged to the vicinity drainage system or Lower Bay. Subject to the review and approval of the SFRWQCB, the Dewatering Plan shall include, at a minimum:</p> <ul style="list-style-type: none"> ■ Identification of methods for collecting and handling water on site for treatment prior to discharge, including locations and capacity of settling basins, infiltration basins (where not restricted by site conditions), treatment ponds, and/or holding tanks ■ Identification of methods for treating water on site prior to discharge, such as filtration, coagulation, sedimentation settlement areas, oil skimmers, pH adjustment, and other BMPs ■ Procedures and methods for maintaining and monitoring dewatering operations to ensure that no breach in the process occurs that could result in an exceedance of applicable water quality objectives ■ Identification of discharge locations and inclusion of details on how the discharge would be conducted to minimize erosion and scour ■ Identification of maximum discharge rates to prevent exceedance of storm drain system capacities ■ Additional requirements of the applicable General Permit or NPDES Permit/WDR 		<p>Dewatering Plan to be a specific component of SWPPP, to be submitted to SFRWQCB for approval prior to initiating construction activity in any area draining to <i>separate</i> sewer system</p>			<p>undergoing construction in areas draining to separate storm sewer system to be approved by SFRWQCB</p> <p>Quarterly reporting to SFRWQCB and SFRA, to include reporting on compliance with this measure, until completion of construction</p>

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(including effluent and discharge limitations and reporting and monitoring requirements, as applicable) shall be incorporated into the Dewatering Plan

Any exceedance of established narrative or numeric water quality objectives shall be reported to the SFRWQCB and corrective action taken as required by the SFRWQCB and the Dewatering Plan. Corrective action may include increased residence time in treatment features (e.g., longer holding time in settling basins) and/or incorporation of additional treatment measures (e.g., addition of sand filtration prior to discharge).

MM HY-6a.1 *Regulatory Stormwater Requirements.* The Project Applicant shall comply with requirements of the Municipal Stormwater General Permit and associated City SWMP, appropriate performance standards established in the Green Building Ordinance, and performance standards established by the SFPUC in the San Francisco Stormwater Design Guidelines.

Project Applicant

Stormwater Control Plan (SCP) and Stormwater Drainage Master Plan (SDMP) to be submitted to SFPUC as part of development application.

SFPUC; SFRA

SFPUC; SFRA

Approval by SFPUC of SCP and SDMP

The Draft San Francisco Stormwater Design Guidelines have been developed to satisfy the Municipal Stormwater General Permit requirements for new development and redevelopment projects in areas served by separate storm sewers, and are expected to be adopted by December 2009. The Project Applicant shall comply with requirements of the Draft San Francisco Stormwater Design Guidelines. Upon adoption of the Final Stormwater Design Guidelines, the Project shall comply with the Final San Francisco Stormwater Design Guidelines unless discretionary permits have been approved.

Per the Draft San Francisco Stormwater Design Guidelines, the Project Applicant shall submit a

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SCP to the SFPUC, as part of the development application submitted for approval. The SCP shall demonstrate how the following measures would be incorporated into the Project:

- Low impact development site design principles (e.g., preserving natural drainage channels, treating stormwater runoff at its source rather than in downstream centralized controls)
- Source control BMPs in the form of design standards and structural features for the following areas, as applicable:
 - > Commercial areas
 - > Restaurants
 - > Retail gasoline outlets
 - > Automotive repair shops
 - > Parking lots
- Source control BMPs for landscaped areas shall be documented in the form of a Landscape Management Plan that relies on Integrated Pest Management and also includes pesticide and fertilizer application guidelines.
- Treatment control measures (e.g., bioretention, porous pavement, vegetated swales) targeting the Project-specific COCs: sediment, pathogens, metals, nutrients (nitrogen and phosphorus compounds), oxygen-demanding substances, organic compounds (e.g., PCBs, pesticides), oil and grease, and trash and debris. The SCP shall demonstrate that the Project has the land area available to support the proposed BMP facilities sized per the required water quality design storm. Volume-based BMPs shall be sized to treat runoff resulting from 0.75 inches of rainfall (LEED® SS6.2), and flow-based BMPs shall be sized to treat runoff resulting from a rainfall intensity of

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<p>0.2 inches per hour. Treatment trains shall be used where feasible.</p> <p>Additional requirements:</p> <ul style="list-style-type: none"> ■ LEED® SS6.2: BMPs used to treat runoff shall be designed to remove 80 percent of the average annual post-development total suspended solids loads. BMPs are considered to meet these criteria if they are designed in accordance with SFPUC requirements. ■ The SCP shall include an Operations and Maintenance Plan that demonstrates how the treatment control BMPs would be maintained in the long term, what entities would be responsible for BMP maintenance within the public and private rights-of-way, funding mechanisms, and what mechanisms would be used to formalize maintenance and access agreements. ■ The Project Applicant shall also prepare a Stormwater Drainage Master Plan (SDMP) for approval by the SFPUC. The SDMP shall include plans for the storm drain infrastructure and plans for stormwater management controls (e.g., vegetated swales, dry wells). The storm drain infrastructure shall illustrate conveyance of the 5-year storm event in a separate storm drain piped system, and conveyance of the 100-year storm event in the street and drainage channel rights-of-way. 	Project Applicant	Prior to approval of site specific development plans	SFPUC/DPW	SFPUC/DPW	Approval of the SDMP
<p>MM HY-6a.2 Recycled Water Irrigation Requirements. Prior to application of recycled water at the Project site for landscape irrigation, the Project Applicant shall demonstrate compliance with all terms and conditions of the SFPUC's Operations and Maintenance Plan and the Recycled Water General Permit conditions for the</p>	Project Applicant	Prior to application of recycled water at project site for landscaping irrigation, Applicant to submit Operations and Management Plan,	SWRCB/SFPUC	SWRCB/SFPUC	Approval of Operations and Management Plan and Irrigation Management Plan by SFPUC

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<p>use of recycled water. As required by the Recycled Water General Permit, the Project Applicant shall submit an Operations and Maintenance Plan and an Irrigation Management Plan to the SWRCB. The Project Applicant shall also submit the Operations and Maintenance Plan and the Irrigation Management Plan to the SFPUC. Prior to on-site application of recycled water, the Project Applicant shall obtain written confirmation from the SFPUC that the Project Operations and Maintenance Plan and the Irrigation Management Plan is in compliance with the SFPUC's Operations and Maintenance Plan, and other SFPUC requirements for the use of recycled water.</p> <p>All recycled water provided to Project Applicant, pursuant to the Recycled Water General Permit, shall be treated in and managed in conformance with all applicable provisions of the Recycled Water Policy and shall meet Title 22 Requirements for disinfected tertiary recycled water as described in CCR Title 22, sections 60301.230 and 60301.320.</p> <p>In accordance with the Recycled Water General Permit, the Project Applicant's Operations and Maintenance Plan shall describe methods and procedures for complying with recycled water regulations, and the maintenance of equipment and emergency backup systems to maintain compliance with the General Permit conditions and California Department of Public Health (CDPH) requirements. The Project Applicant shall ensure that all users of recycled water comply with the Operations and Maintenance Plan by developing educational materials (e.g., pamphlet or brochure) that convey key operational elements (e.g., prevention of cross-connections) of the plan.</p> <p>In accordance with the Recycled Water General Permit, the Project Applicant's Irrigation</p>		<p>and Irrigation Management Plan to both SWRCB and SFPUC</p> <p>Monthly monitoring of recycled water applied</p>	<p>SWRCB/SFPUC/ SFRA</p>	<p>SWRCB/SFPUC; SFRA</p>	<p>Ongoing reporting to SFPUC and SFRA</p>

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Management Plan shall include measures to ensure the use of recycled water occurs at an agronomic rate while employing practices to minimize application of salinity constituents. The Irrigation Management Plan shall account for soil characteristics, recycled water characteristics, plant species irrigation requirements, climatic conditions, supplemental nutrient additions to support plant growth, and management of impoundments used to store or collect recycled water. The Irrigation Management Plan shall describe any conditions of approval required by the City, CDPH, or SWRCB.

The Project Applicant shall implement the following landscape irrigation BMPs in accordance with Recycled Water General Permit Requirements:

- The Operations and Maintenance Plan shall include leak detection methods and correction within 72 hours of identifying a leak or prior to the release of 1,000 gallons.
- Recycled water shall not be applied during precipitation events.
- Impoundment areas shall be managed such that no discharge occurs from storms smaller than the 25-year, 24-hour event.

The Project Applicant shall also implement BMPs for general operational controls, protection of workers and the public (e.g., education about not drinking recycled water), and efficient irrigation (e.g., dedicated landscape water meters for monitoring water usage and leak detection).

The Project Applicant shall conduct monthly monitoring to quantify the volume of recycled water applied, the locations and total area of application, and the mass of nitrogen and salinity constituents applied.

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<p>MM HY-6b.1 <u>Limitations on Stormwater Infiltration.</u> Infiltration BMPs on HPS Phase II shall be prohibited. Alternative BMPs for stormwater quality control, reuse, and treatment shall be used. For instance, biofiltration BMPs can be implemented with an impervious liner and subdrain system to treat stormwater runoff while preventing infiltration. Overland flow (greater than the five-year and up to the 100-year storm) shall be conveyed in lined channels or other conveyances that will not result in infiltration.</p>	Project Applicant	With respect to Hunters Point Shipyard Phase II, the SCP and SDMP referred to in HY-6a.1 will avoid infiltration BMPs	SFPUC	SFPUC	Approval by SFPUC of SCP and SDMP
<p>MM HY-6b.2 <u>Industrial General Permit.</u> The Facility Operator shall apply for an Industrial General Permit prior to operational activities for facilities requiring coverage under the Industrial General Permit, which is determined based on the facility's SIC. The Facility Operator shall comply with all provisions in the Industrial General Permit, including implementation of a SWPPP, to effectively control pollutants to the BAT/BCT during the normal course of operations. Primary components and pollution prevention measures that the SWPPP shall address are described below. The Facility Operator shall refer to the California Stormwater Quality Association Stormwater Best Management Practice Handbook – Industrial and Commercial or equivalent for details on BMP implementation. The SFRWQCB is responsible for overseeing Industrial General Permit activities, including SWPPP compliance. The following BMPs shall be incorporated into the SWPPP.</p> <p><u>Non-Structural BMPs</u></p> <ul style="list-style-type: none"> ■ Good Housekeeping: Good housekeeping generally consists of practical procedures to 	Project Applicant/Site Specific Facility Operator	Prior to facility operation	SWRCB/SFPUC	SWRCB/SFPUC	Approval by SFRWQCB

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<p>maintain a clean and orderly facility.</p> <ul style="list-style-type: none"> ■ Preventive Maintenance: Regular inspection and maintenance of structural stormwater controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems. ■ Spill Response: Spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak. ■ Material Handling and Storage: Procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to stormwater and authorized non-stormwater discharges. ■ Employee Training: Training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing stormwater. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held. ■ Waste Handling/Recycling: Procedures or processes to handle, store, or dispose of waste materials or recyclable materials. ■ Recordkeeping and Internal Reporting: Procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel. ■ Erosion Control and Site Stabilization: This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other 					

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sediment control devices, etc.

- Inspections: This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPP revisions are made as needed.
- Quality Assurance: Procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

Structural BMPs to be Considered

- Overhead Coverage: Structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with stormwater and authorized non-stormwater discharges.
- Retention Ponds: Basins, ponds, surface impoundments, etc. that do not allow stormwater to discharge from the facility.
- Control Devices: Berms or other devices that channel or route run-on and runoff away from pollutant sources.
- Secondary Containment Structures: This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.
- Treatment: This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc. that reduce the pollutants in stormwater discharges and authorized non-stormwater discharges. However, because of extensive site constraints, use of infiltration BMPs shall be limited.

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<p>MM HY-6b.3 <u>Clean Marinas California Program.</u> The marina operator shall obtain certification under the Clean Marinas California Program. The Clean Marinas California Program has developed marina BMPs and an inspection and certification process for marinas that meet the program standard for BMP implementation. The marina operator shall implement BMPs that address the following sources of pollution: petroleum containment, topside boat maintenance and cleaning, underwater boat hull cleaning, marina operations, marina debris, boat sewage discharge, solid waste, liquid waste, fish waste, hazardous materials, and stormwater runoff.</p>	Project Applicant	Prior to marina operation	SFRWQCB/SFRA	SFRWQCB/SFRA	Upon certification of the Clean Marinas Program
<p>MM HY-12a.1 <u>Finished Grade Elevations Above Base Flood Elevation.</u> The Project site shall be graded such that finished floor elevations are 3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all housing and structures above the existing and potential future flood hazard area. If the FIRM for San Francisco is not finalized prior to implementation of the Project, the Project Applicant shall work with the City Surveyor to revise the City's Interim Floodplain Map. If the FIRM for San Francisco is finalized prior to implementation of the Project, the Project Applicant shall request that the Office of the City Administrator (Floodplain Manager) request a Letter of Map Revision based on Fill (LOMR-F) from FEMA that places the Project outside SFHA and requires that the FIRM is updated by FEMA to reflect revised regulatory floodplain designations.</p>	Project Applicant	Prior to issuance of construction permits	DPW/DBI	DPW/DBI	Upon revision of the City's interim Floodplain Map OR: Upon issuance of LOMAR-F from FEMA
<p>MM HY-12a.2 <u>Shoreline Improvements for Future Sea-Level Rise.</u> Shoreline and public access</p>	Project Applicant	Prior to issuance of construction permits	SFRA/DPW	SFRA/DPW	Upon approval of development permits

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<p>improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing adequate setbacks to allow for future elevation increases of at least 3 feet from the existing elevation along the shoreline. Before the first Small Lot Final Map is approved, the Project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the Project. Prior to the sale of the first residential unit within the Project, the governing body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the protective improvements.</p>		for shoreline improvements			
<p>MM HY-14 <u>Shoreline Improvements to Reduce Flood Risk.</u> To reduce the flood impacts of failure of existing shoreline structures, the Project Applicant shall implement shoreline improvements for flood control protection, as identified in the Candlestick Point/Hunters Point Development Project Proposed Shoreline Improvements report. Where feasible, elements of living shorelines shall be incorporated into the shoreline protection improvement measures.</p>	Project Applicant	Prior to issuance of construction permits for shoreline improvements	SFRA/DPW	SFRA/DPW	Upon approval of development permits

SECTION III.N (BIOLOGICAL RESOURCES)

MM BI-4a.1 <u>Wetlands and Jurisdictional/Regulated</u>	Project Applicant	Prior to initiation of	CDFG, the USACE, the	SFRA	Obtain and comply
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Waters Mitigation for Temporary and/or Permanent Impacts. Wetlands and jurisdictional waters shall be avoided to the maximum extent practicable for all Project components. For example, any measures taken to improve the existing shoreline of Candlestick Point or HPS Phase II for purposes of flood control, erosion control, or repair or stabilization of existing structures shall minimize the amount of fill to be placed in jurisdictional areas.

Where avoidance of existing wetlands and drainages is not feasible, and before any construction activities are initiated in jurisdictional areas, the Applicant shall obtain the following permits, as applicable to the activities in question:

- CWA Section 404 permit from the USACE.
- Section 10 *Rivers and Harbors Act* Permit from the USACE.
- CWA Section 401 water quality certification from the RWQCB, and/or Report of Waste Discharge for Waters of the State.
- CWA Section 402/National Pollution Discharge Elimination System permit from SWRCB [requiring preparation of a Stormwater Pollution Prevention Plan (SWPPP)].
- CDFG Section 1602 streambed alteration agreement from CDFG.
- A permit from the BCDC.
- Dredging permits from the USACE and BCDC as required, obtained through the Dredged Material Management Office (DMMO) process.

Copies of these permits shall be provided to the contractor, along with the construction specifications. The Project Applicant shall be responsible for complying with all of the conditions set forth in these permits, including any financial

construction activities

BCDC, SFRWQCB; and City/SFRA

with applicable permits

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responsibilities.

Compensation for impacts to wetlands and jurisdictional waters shall be required to mitigate any permanent impacts to these habitats to less-than significant-levels. Such mitigation shall also be developed (separately from the CEQA process) as a part of the permitting process with the USACE, or for non-USACE-jurisdictional wetlands, during permitting through the SFRWQCB, BCDC, and/or CDFG. The exact mitigation ratio shall be established during the permitting process, and depends on a number of factors, including the type and value of the wetlands permanently affected by the Project; however, mitigation shall be provided at a ratio of no less than 1:1 (at least 1 acre of mitigation for every 1 acre of waters of the US/State permanently filled). Mitigation could be achieved through a combination of on-site restoration or creation of wetlands or aquatic habitats (including removal of on-site fill or structures such as piers, resulting in a gain of wetland or aquatic habitats); off-site restoration/creation; and/or mitigation credits purchased at mitigation banks within the San Francisco Bay Region. However, any mitigation for impacts to jurisdictional waters providing habitat for special-status fish such as the green sturgeon, Central California Coast steelhead, Chinook salmon, and longfin smelt must result in the restoration or creation (at a minimum 1:1 ratio) of suitable habitat for these species, and any mitigation for impacts to jurisdictional wetlands or other waters that are considered EFH by the NMFS must result in the restoration or creation (at a minimum 1:1 ratio) of EFH. Suitably planned mitigation sites may satisfy mitigation requirements for jurisdictional areas, special-status fish, and EFH

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>simultaneously (i.e., in the same mitigation areas) if the mitigation satisfies all these needs.</p> <p>For funding of off-site improvements or purchase of mitigation bank credits, the Project Applicant shall provide written evidence to the City/Agency that either (a) compensation has been established through the purchase of a sufficient number of mitigation credits to satisfy the mitigation acreage requirements of the Project activity, or (b) funds sufficient for the restoration of the mitigation acreage requirements of the Project activity have been paid to the BCDC, CCC, or other entity or agency that offers mitigation credits in the San Francisco Bay Area.</p>	Project Applicant	Prior to initiation of construction activities	CDFG, the USACE, the BCDC, SFRWQCB; and SFRA	SFRA	Written evidence to the City/SFRA for funding of off-site improvements or purchase of mitigation bank credits
<p>For areas to be restored, to mitigate for temporary or permanent impacts, the Project Applicant shall prepare and implement a Wetland and Jurisdictional Waters Mitigation Monitoring Plan (Mitigation Monitoring Plan). The Plan shall be submitted to the regulatory agencies along with permit application materials for approval, along with a copy to the City/Agency.</p> <p>The Project Applicant shall retain a restoration ecologist or wetland biologist to develop the Wetland and Jurisdictional Waters Mitigation and Monitoring Plan, and it shall contain the following components (or as otherwise modified by regulatory agency permitting conditions):</p> <ol style="list-style-type: none"> 1. Summary of habitat impacts and proposed mitigation ratios, along with a description of any other mitigation strategies used to achieve the overall mitigation ratios, such as funding of off-site improvements and/or purchase of mitigation bank credits 2. Goal of the restoration to achieve no net loss of habitat functions and values 	Project Applicant	Prior to initiation of construction activities	CDFG, the USACE, the BCDC, SFRWQCB; and SFRA	SFRA	Preparation and implementation of Wetland and Jurisdictional Waters Mitigation and Monitoring Plan. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>3. Location of mitigation site(s) and description of existing site conditions</p> <p>4. Mitigation design:</p> <ul style="list-style-type: none"> ■ Existing and proposed site hydrology ■ Grading plan if appropriate, including bank stabilization or other site stabilization features ■ Soil amendments and other site preparation elements as appropriate ■ Planting plan ■ Irrigation and maintenance plan ■ Remedial measures/adaptive management, etc. <p>5. Monitoring plan (including final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc.)</p> <p>6. Contingency plan for mitigation elements that do not meet performance or final success criteria.</p> <p>Restoration and/or creation of wetlands or aquatic habitats could occur on site or off site and at one or more locations, as approved by the regulatory agencies. Impacts occurring due to activities on Candlestick Point may be mitigated by restoration or creation activities on HPS Phase II and vice versa. For example, loss of open water habitat that might result from construction of shoreline treatments could potentially be mitigated by the removal of fill or structures from aquatic habitat on HPS Phase II.</p> <p>The Project Applicant, or its agent, shall implement the Wetland and Jurisdictional Waters Mitigation Monitoring Plan. At least five years of monitoring (or more if required as a condition of the permits)</p>	Project Applicant	During construction activities, for at least 5 years	CDFG, the USACE, the BCDC, SFRWQCB; and City/SFRA	SFRA	At least 5 years of monitoring, and preparation of annual monitoring reports to

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
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shall be conducted to document whether the success criteria (that are determined as part of the mitigation plan) are achieved, and to identify any remedial actions that must be taken if the identified success criteria are not met. Annual monitoring reports (described below) shall be submitted to CDFG, the USACE, the BCDC, the City/Agency, and the SFRWQCB. Each report shall summarize data collected during the monitoring period, describe how the habitats are progressing in terms of the success criteria, and discuss any remedial actions performed. Additional reporting requirements imposed by permit conditions shall be incorporated into the Wetland and Jurisdictional Waters Mitigation Monitoring Plan and implemented.

Success criteria for specified years of monitoring for vegetated mitigation wetlands are as follows (though these may be subject to change pending development of specific Mitigation and Monitoring Plans and consultation during the permit process):

- Year 1 after restored areas reach elevations suitable for colonization by wetland plants: 10 percent combined area and basal cover (rhizomatous turf) of all vegetation in the preserve wetland; at least two hydrophytic plants co-dominant with whatever other vegetative cover exists.
- Year 3 after restored areas reach colonization elevation: 50 percent combined area and basal cover (rhizomatous turf) of all vegetation; prevalence of hydrophytic species in terms of both cover and dominant species composition of the vegetation; native vascular species shall comprise 95 percent of the vegetation in the preserve wetland.
- Year 5 after restored areas reach colonization

be submitted to CDFG, USACE, BCDC, SFRA, and SFRWQCB. Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>elevation: 70 percent combined area and basal cover (rhizomatous turf) of all vegetation; more than 50 percent dominance in terms of both cover and species composition of facultative (FAC), facultative wetland (FACW), and obligate (OBL) species; native vascular species shall comprise 95 percent of the vegetation in the preserve wetlands.</p> <p>Other success criteria shall be developed for open water/mud flat habitats (which would not be expected to support vegetation) or for wetland complexes specifically designed to contain extensive areas of channels, pannes, or flats that would not be vegetated. In addition, the final Project design shall avoid substantial adverse effects to the pre-Project hydrology, water quality, or water quantity in any wetland that is to be retained on site. This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through an on-site Wetland Protection Plan that shall be prepared by a restoration ecologist or wetland biologist that is retained by the Project Applicant, and submitted to regulatory agencies for approval, along with a copy to the City/Agency. If such indirect effects cannot be avoided, compensatory mitigation shall be provided for the indirectly affected wetlands at a minimum 1:1 ratio, as described above. Mitigation for indirectly impacted wetlands shall be described in the Wetland and Jurisdictional Waters Mitigation and Monitoring Plan.</p>	Project Applicant	Prior to initiation of construction activities	CDFG, the USACE, the BCDC, SFRWQCB; and City/SFRA	SFRA	Preparation of an on-site Wetland Protection Plan. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.
Project features resulting in impacts to open water areas as a result of the marina, bridge, and breakwater construction shall be designed to be the minimum size required to meet their designated need. The opening in the breakwater shall be large	Project Applicant	During Project design	SFRA	SFRA	Approval of final design

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
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enough and positioned such that it would allow for a complete daily exchange of water within the marina that would otherwise result from normal tidal flow, as determined by a coastal engineer and an aquatic biologist. This opening shall be designed to minimize disruption to the local hydrology generated by the breakwater and allow for normal tidal flow to ensure the daily exchange of nutrients.

MM BI-4a.2 Wetlands and Jurisdictional/Regulated Waters Impact Minimization for Construction-Related Impacts. The Project Applicant shall ensure that the contractor minimizes indirect construction-related impacts on wetlands and jurisdictional/regulated waters throughout the Study Area by implementing the following Best Management Practices (BMPs):

- Prior to any construction activities on the site, a protective fence shall be installed a minimum of one foot (or greater, if feasible) from the edge of all wetland habitat to be avoided in the immediate vicinity of the proposed construction areas. Prior to initiation of construction activities, a qualified biologist shall inspect the protective fencing to ensure that all wetland features have been appropriately protected. No encroachment into fenced areas shall be permitted during construction and the fence shall remain in place until all construction activities within 50 feet of the protected feature have been completed.
- Construction inspectors shall routinely inspect protected areas to ensure that protective measures remain in place and effective until all

Project Applicant

Prior to initiation of construction activities

DBI/SFRA ; CDFG, USACE, BCDC, SFRWQCB

DBI/SFRA, in consultation with other regulatory agencies, as necessary

SFRA and DBI to review construction documents and construction staging, access, and parking plan. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>construction activities near the protected resource have been completed. The fencing shall be removed immediately following construction activities.</p> <ul style="list-style-type: none"> ■ To maintain hydrologic connections, the Project design shall include culverts for all seasonal and perennial drainages that are waters of the United States and/or Waters of the State. ■ Sediment mitigation measures shall be in place prior to the onset of Project construction and shall be monitored and maintained until construction activities have been completed. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be disposed of at a regional landfill or at another approved and/or properly permitted location. Stockpiles that are to remain on the site throughout the wet season shall be protected to prevent erosion. ■ Where determined necessary by regulatory agencies, geotextile cushions and other appropriate materials (i.e., timber pads, prefabricated equipment pads, geotextile fabric) shall be used in saturated conditions to minimize damage to the substrate and vegetation. ■ Exposed slopes and banks shall be stabilized immediately following completion of construction activities to reduce the effects of erosion on the drainage system. ■ In highly erodible areas, such as Yosemite Slough, banks shall be stabilized using a non-vegetative material that shall bind the soil initially and break down within a few years. If, 					

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<p>during review of the grading permit for this area, the City/Agency determines that more aggressive erosion control treatments are needed, the contractor shall be directed to use geotextile mats, excelsior blankets, or other soil stabilization products.</p>					
<ul style="list-style-type: none"> ■ The contractors shall develop a Storm Water Pollution Prevention Plan (SWPPP) prior to construction. As discussed in the Regulatory Framework of the Hydrology and Water Quality section of this EIR, the SWPPP will comply with applicable local, state, and federal requirements. Erosion control BMPs may include, but are not limited to, the application of straw mulch; seeding with fast growing grasses; construction of berms, silt fences, hay bale dikes, stormwater detention basins, and other energy dissipaters. BMPs shall be selected and implemented to ensure that contaminants are prevented from entering the San Francisco Bay during construction and operation of the facilities shall protect water quality and the marine species in accordance with all regulatory standards and requirements. 					
<ul style="list-style-type: none"> ■ Testing and disposal of any dredged sediment shall be conducted as required by the USACE and the Long-Term Management Strategy (LTMS)¹³ 					
<ul style="list-style-type: none"> ■ All temporarily impacted wetlands and other jurisdictional waters, whether in tidal or non-tidal areas, shall be restored to pre-construction contours following construction. Such impact areas include areas that are 					

¹³ US Army Corps of Engineers, US Environmental Protection Agency, San Francisco Bay Conservation and Implementation Commission, and San Francisco Bay Regional Water Quality Control Board. Long-term Management Strategy for the Placement of Dredge Material in the San Francisco Bay, Management Plan 2001.

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<p>dewatered (e.g., using coffer dams) and/or used for construction access. Temporarily impacted wetlands that were vegetated prior to construction shall be revegetated in accordance with a Wetlands and Jurisdictional Waters Mitigation and Monitoring Plan as described above.</p> <ul style="list-style-type: none"> ■ For impacts to tidal habitats: <ul style="list-style-type: none"> > Conduct all work in dewatered work areas > Install sediment curtains around the worksite to minimize sediment transport > Work only during periods of slack, tide (minimal current) and low wind to minimize transport of sediment laden water <p>MM BI-4c <u>Mitigation for Shading Impacts to Jurisdictional/Regulated Waters.</u> Mud flats and aquatic habitats impacted by permanent shading from the Yosemite Slough bridge shall be mitigated by the creation or restoration, either on site, off site, and/or via purchase of mitigation bank credits, at a 0.5:1 (mitigation :impacted) ratio. Aside from the mitigation ratio, such mitigation shall be provided as described for mitigation measure MM BI-4a.1.</p> <p>MM BI-5b.1 <u>Avoidance of Impacts to Eelgrass.</u> As the design of shoreline treatments progresses, and a specific Shoreline Treatment Plan is determined,</p>	<p>Project Applicant</p> <p>Project Applicant</p>	<p>Prior to initiation of construction activities</p> <p>During the design of shoreline treatments</p>	<p>DBI/SFRA; CDFG, USACE, BCDC, SFRWQCB</p> <p>NMFS; SFRA</p>	<p>DBI/SFRA, in consultation with other regulatory agencies, as necessary</p> <p>SFRA</p>	<p>Written evidence to the City/SFRA for funding of off-site improvements or purchase of mitigation bank credits; preparation of Wetland and Jurisdictional Waters Mitigation and Monitoring Plan and subsequent annual monitoring reports for areas to be restored shall be submitted to CDFG, the USACE, the BCDC, the City/SFRA, and the SFRWQCB.</p> <p>Approval of Shoreline Treatment Plan; Construction</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>the Plan shall minimize any in-water construction required for installation of any treatment measures near either of the two eelgrass locations noted above.</p>					<p>Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.</p>
<p>MM BI-5b.2 Eelgrass Survey. Prior to the initiation of construction of the Yosemite Slough bridge or construction of shoreline treatments, an update to the existing eelgrass mapping shall be conducted to determine the precise locations of the eelgrass beds. For the shoreline treatments, this survey shall occur when a final Shoreline Treatment Plan has been prepared. The survey shall be conducted by a biologist(s) familiar with eelgrass identification and ecology and approved by NMFS to conduct such a survey. The area to be surveyed shall encompass the mapped eelgrass beds, plus a buffer of 750 feet around any in-water construction areas on Hunters Point or associated with the Yosemite Slough bridge. Survey methods shall employ either SCUBA or sufficient grab samples to ensure that the bottom was adequately inventoried. The survey shall occur between August and October and collect data on eelgrass distribution, density, and depth of occurrence for the survey areas. The edges of the eelgrass beds shall be mapped. At the conclusion of the survey a report shall be prepared documenting the survey methods, results, and eelgrass distribution within the survey area. This report shall be submitted to NMFS for approval. The survey data shall feed back into the shoreline treatment design process so that Project engineers can redesign the treatments to avoid or minimize any direct impacts to eelgrass beds.</p>	<p>Project Applicant</p>	<p>When a final Shoreline Treatment Plan has been prepared</p>	<p>NMFS; SFRA</p>	<p>SFRA</p>	<p>Submittal of a report for NMFS approval documenting survey methods, results, and eelgrass distribution within the survey area. Submit report and proof of NMFS approval to SFRA.</p>
<p>If the shoreline treatments can be adjusted so that no direct impacts to eelgrass beds would occur, no</p>					

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>further mitigation under this measure would be required for shoreline treatment construction. Management of water quality concerns is addressed through mitigation measure MM BI-5b.4 and shall be required to minimize sediment accumulation on the eelgrass. If direct impacts to eelgrass beds cannot be avoided either by Hunters Point shoreline treatments or Yosemite Slough bridge construction, mitigation measure MM BI-5b.3 shall be implemented.</p>					
<p>MM BI-5b.3 Compensatory Eelgrass Mitigation. If direct impacts to eelgrass beds cannot be avoided, compensatory mitigation shall be provided in conformance with the Southern California Eelgrass Mitigation Policy. Mitigation shall entail the replacement of impacted eelgrass at a 3:1 (mitigation:impact) ratio on an acreage basis, based on the eelgrass mapping described in mitigation measure MM BI-5b.2 and detailed designs of the feature(s) that would impact eelgrass beds. Such mitigation could occur either off site or on site.¹⁴ Off-site mitigation could be achieved through distribution of a sufficient amount of funding to allow restoration or enhancement of eelgrass beds at another location in the Bay. If this option is selected, all funds shall be distributed to the appropriate state or federal agency or restoration-focused non-governmental agency (i.e., CDFG restoration fund, California Coastal Conservancy, Save the Bay, etc). The Project Applicant shall provide written evidence to the City/Agency that either a) compensation has been established through the purchase of a sufficient number of mitigation credits to satisfy the mitigation</p>	<p>Project Applicant</p>	<p>Upon the determination that direct impacts to eelgrass beds cannot be avoided, and off-site mitigation would be appropriate (prior to in-water construction)</p>	<p>NMFS /SFRA</p>	<p>SFRA</p>	<p>Written evidence to the City/SFRA for the compensation of off-site mitigation credits or funds</p>

¹⁴ NMFS, Southwest Regional Office, Southern California Eelgrass Mitigation Policy, as revised August 30, 2005. Website: http://swr.nmfs.noaa.gov/hcd/policies/EELPOLrev11_final.pdf. Accessed July 20, 2009.

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<p>acreage requirements of the Project activity, or b) funds sufficient for the restoration of the mitigation acreage requirements of the Project activity have been paid. These funds shall be applied only to eelgrass restoration within the Bay.</p>	Project Applicant	<p>Upon the determination that direct impacts to eelgrass beds cannot be avoided, and on-site mitigation would be appropriate (prior to in-water construction)</p>	NMFS/ SFRA	SFRA	<p>Preparation and implementation of an Eelgrass Mitigation Plan if on-site mitigation occurs.</p>
<p>MM BI-5b.4 Eelgrass Water Quality BMPs. To prevent sediment that could be suspended during construction from settling out onto eelgrass, for any</p>	Project Applicant	<p>Prior to and during in-water construction</p>	NMFS/SFRA	SFRA	<p>BMPs deemed appropriate by NMFS</p>

¹⁵ NMFS, Southwest Regional Office, Southern California Eelgrass Mitigation Policy, as revised August 30, 2005. Website: http://swr.nmfs.noaa.gov/hcd/policies/EELPOLrev11_final.pdf. Accessed July 20, 2009.

¹⁶ US Army Corps of Engineers, US Environmental Protection Agency, San Francisco Bay Conservation and Implementation Commission, and San Francisco Bay Regional Water Quality Control Board. Long-term Management Strategy for the Placement of Dredge Material in the San Francisco Bay, Management Plan 2001; Appendix F – ESA and EFH Consultation.

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shoreline treatments within 750 feet of identified eelgrass beds, the Project Applicant shall require the selected contractor to implement appropriate BMPs that could include any or all of the following options, or others deemed appropriate by NMFS:

1. Conduct all work in dewatered work areas
2. Conduct all in-water work during periods of eelgrass dormancy (November 1-March 31)
3. Install sediment curtains around the worksite to minimize sediment transport
4. Work only during periods of slack tide (minimal current) and low wind to minimize transport of sediment laden water

MM BI-6a.1 Impact Avoidance and Pre-Construction Surveys for Nesting Special-Status and Legally Protected Avian Species.

The following measures shall be implemented by the Project Developer to avoid impacts to nesting birds.

1. Not more than 15 days prior to construction activities that occur between February 1 and August 31, surveys for nesting birds shall be conducted by a qualified biologist (one familiar with the breeding biology and nesting habits of birds that may breed in the Project vicinity) that is selected by the Project Developer, and approved by the City/Agency. Surveys shall cover the entire area to be affected by construction and the area within a 250-foot buffer of construction or ground-disturbing activities. The results of the surveys, including survey dates, times, methods, species observed, and a map of any discovered nests, shall be submitted to the City/Agency. If no active avian nests (i.e. nests with eggs or young) are identified on or within 250 feet of

Project Applicant

Not more than 15 days prior to construction activities that occur between February 1 and August 31

CDFG

SFRA

Submittal of nesting bird survey findings to the SFRA and consultation with CDFG as appropriate

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<p>the limits of the disturbance area, no further mitigation is necessary. Phased construction work shall require additional surveys if vegetation or building removal has not occurred within 15 days of the initial survey or is planned for an area that was not previously surveyed. Alternatively, to avoid impacts, the Project Developer shall begin construction after the previous breeding season for local raptors and other special-status species has ended (after August 31) and before the next breeding season begins (before February 1).</p>					
<p>2. If active nests (with eggs or young) of special-status or protected avian species are found within 250 feet of the proposed disturbance area, a minimum 250-foot no-disturbance buffer zone surrounding active raptor nests and a minimum 100-foot buffer zone surrounding nests of other special-status or protected avian species shall be established until the young have fledged. Project activities shall not occur within the buffer as long as the nest is active. The size of the buffer area may be reduced if a qualified biologist familiar with the species' nesting biology (as approved by the City/Agency) and CDFG determine it would not be likely to have adverse effects on the particular species. Alternatively, certain activities may occur within the aforementioned buffers, with CDFG concurrence, if a qualified biologist monitors the activity of nesting birds for signs of agitation while those activities are being performed. If the birds show signs of agitation suggesting that they could abandon the nest, activities would cease within the buffer area. No action other than avoidance shall be taken without CDFG consultation.</p>					

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<p>3. Completion of the nesting cycle (to determine when construction near the nest can commence) shall be determined by a qualified biologist experienced in identification and biology of the specific special-status or protected species.</p> <p>MM BI-6a.2 Burrowing Owl Protocol Surveys and Mitigation. Because burrowing owls may take refuge in burrows any time of year, species-specific measures are necessary to avoid take of this species. The following measures shall be undertaken by the Project Developer to protect burrowing owls.</p> <p>Prior to construction activities, focused pre-construction surveys shall be conducted for burrowing owls where suitable habitat is present within the construction areas. Surveys shall be conducted by a qualified biologist (i.e., one who is familiar with burrowing owl ecology and experienced in performing surveys for them, approved by the City/Agency) no more than 30 days prior to commencement of construction activities. These surveys shall be conducted in accordance with the CDFG burrowing owl survey protocol contained within California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation Guidelines, or any more current equivalent should new guidelines be released before construction.</p> <p>1. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the City/Agency and CDFG, and no further mitigation is necessary.</p> <p>2. If unoccupied burrows are found during the non-breeding season, prior to construction</p>	<p>Project Applicant</p>	<p>No more than 30 days prior to commencement of construction activities</p>	<p>CDFG</p>	<p>SFRA</p>	<p>Submittal of burrowing owl survey findings to the SFRA and consultation with CDFG as appropriate</p>
<p>2. If unoccupied burrows are found during the non-breeding season, prior to construction</p>	<p>Project Applicant</p>	<p>Upon determination that impacts to</p>	<p>CDFG</p>	<p>SFRA</p>	<p>If unoccupied burrows are found during non-</p>

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<i>Mitigation Measure</i>	<i>Responsibility for Implementation</i>	<i>Mitigation Timing</i>	<i>Enforcement Responsibility</i>	<i>Monitoring Responsibility</i>	<i>Monitoring Actions/ Verification of Compliance</i>
<p>activities, the Project Developer shall collapse the unoccupied burrows, or otherwise obstruct their entrances to prevent owls from entering and nesting in the burrows. This measure would prevent inadvertent impacts during construction activities.</p>		<p>occupied burrows are unavoidable and prior to construction activities</p>			<p>breeding season, unoccupied burrows will be collapsed. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.</p>
<p>3. If occupied burrows are found, a letter report documenting survey methods and findings (including a map showing the locations of the occupied burrows) shall be submitted to the City/Agency and CDFG. Impacts to the burrows shall be avoided by providing a construction-free buffer of 250 feet during the nesting season (February 1 through August 31). A buffer of 165 feet from the active burrows should be provided during the non-breeding season (September 1 through January 31) if feasible, though a reduced buffer is acceptable during the non-breeding season as long as construction avoids direct impacts to the burrow(s) used by the owls. The size of the buffer area may be reduced if the CDFG determines it would not be likely to have adverse effects on the owls. No Project activity shall commence within the buffer area until a qualified biologist (as approved by the City/Agency) confirms that the burrow is no longer occupied. If the burrow is occupied by a nesting pair, as recommended by the California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation Guidelines, a minimum of 6.5 acres of foraging habitat contiguous (immediately adjacent) to the burrow shall be maintained until the nesting</p>	<p>Project Applicant</p>	<p>Prior to construction activities upon completion of preconstruction focused surveys for burrowing owls</p>	<p>CDFG</p>	<p>SFRA</p>	<p>If occupied burrows are found, a letter report of findings will be submitted to CDFG and the City/SFRA. Avoidance of occupied burrows and compensatory habitat mitigation, as appropriate, shall occur as stated. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.</p>

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<p>season is over. If the foraging habitat contiguous to the occupied burrow is currently less than 6.5 acres, the entire foraging habitat shall be maintained until the nesting season is over.</p>					
<p>4. If impacts to occupied burrows are unavoidable, passive relocation techniques approved by CDFG shall be used to evict owls from burrows within the construction area prior to construction activities. However, no occupied burrows shall be disturbed during the nesting season unless a qualified biologist (as approved by the City/Agency) verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival, or verifies the owls have not yet laid eggs. If any breeding owls must be relocated (i.e., after the nesting season has ended), mitigation of impacts to lost foraging and nesting habitat for relocated pairs shall follow guidelines provided in the California Burrowing Owl Consortium's April 1995 Burrowing Owl Survey Protocol and Mitigation Guidelines, which depending upon conditions detailed in the guidance (such as mitigation habitat quality), range from 7.5 to 19.5 acres per pair. This mitigation may take the form of the purchase of credits in a burrowing owl mitigation bank or the preservation and management of the required habitat acreage on site (e.g., in the Grasslands Ecology Park) or off site. If mitigation is provided via on-site or off-site habitat preservation and management, a Burrowing Owl Habitat Management Plan shall be prepared by a qualified biologist and submitted to the CDFG for review and approval, along</p>	<p>Project Applicant</p>	<p>Upon determination that impacts to occupied burrows are unavoidable and prior to construction activities</p>	<p>CDFG</p>	<p>SFRA</p>	<p>If mitigation is required and provided via on-site or off-site habitat preservation and management, a Burrowing Owl Habitat Management Plan to be prepared by qualified biologist and submitted to the CDFG for review and approval, along with a copy to the City/SFRA. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.</p>

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>with a copy to the City/Agency. This plan shall detail the location of the mitigation site, the means of preservation of the site (i.e., via a conservation easement), any enhancement and management measures necessary to ensure that habitat for burrowing owls is maintained in the long term, a monitoring program, and the size of an endowment established for the long-term maintenance of the site.</p>					
<p>MM BI-6b American Peregrine Falcon Nest Protection Measures. To protect the nest of peregrine falcons during construction, the following measures shall be implemented by the Project Developer prior to construction or other disturbance within 500 feet of the Re-gunning crane nest.</p> <ol style="list-style-type: none"> 1. Not more than 30 days prior to construction activities that occur between February 1 and August 15, surveys for nesting peregrine falcons shall be conducted on the Re-gunning crane, and within a 500-foot buffer surrounding the potential nesting location. Surveys shall be performed by a qualified biologist (i.e., one familiar with falcon biology and nesting) that is selected by the Project Developer, and approved by the City/Agency. The results of the surveys shall be submitted to the City/Agency and the CDFG. If no active peregrine falcon nests, eggs, or breeding activity, are identified on or within 500 feet of the limits of the disturbance area, no further mitigation is necessary. Alternatively, to avoid impacts, the Project Developer can begin construction after the previous breeding season has ended (after August 31) and before the next breeding season begins (before February 1). 	Project Applicant	Not more than 30 days prior to construction activities that occur between Feb. 1 st and August 15 th .	CDFG	SFRA	Survey for nesting peregrine falcons and submittal of results to CDFG and the City/SFRA. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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<p>2. If active peregrine nests or breeding activity are observed within the survey area, a minimum 250-foot no disturbance buffer zone surrounding the nesting location shall be established until the young have fledged. Within this buffer, no Project construction activities shall occur while the nest is active. The size of the buffer area may be reduced if a qualified biologist and CDFG determine it would not be likely to have adverse effects on the falcons. No action other than avoidance shall be taken without CDFG consultation.</p> <p>3. No new Project construction activity shall commence within the buffer area until young have fledged and the nest is no longer active, or until nesting has been terminated for reasons unrelated to Project activities. Completion of the nesting cycle shall be determined by a qualified biologist who is experienced in peregrine falcon breeding biology (as determined and approved by the City/Agency).</p>					
<p>MM BI-7b <u>Enhancement of Raptor Foraging Habitat.</u> The Draft Parks, Open Space, and Habitat Concept Plan shall implement, at a minimum, the following measures in open space areas outside the CPSRA, and if allowed, within the CPSRA area:</p> <ul style="list-style-type: none"> ■ Restoration and Management of Grasslands: To maintain grassland-associated wildlife species on the site, grasslands extensive enough to support such species shall be maintained and enhanced through the restoration of native grasses. Such grassland habitat shall not be well manicured or regularly mown. No trees shall be planted within such areas, and shrub cover would be 	<p>Project Applicant</p>	<p>Throughout the construction phase</p>	<p>SFRA</p>	<p>SFRA</p>	<p>Approval of Plan by SFRA and, if applicable, by CPSRA. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.</p>

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<p>limited to a few small, scattered patches of low-statured coastal scrub plants. At a minimum, replacement of non-native grassland impacted at HPS Phase II with native-dominated grassland shall occur at a ratio of 1:1 (1 acre of native-dominated grassland restored: 1 acre of non-native grassland impacted).</p>					
<p>■ Increase in Tree/Shrub Cover: Trees and shrubs (particularly natives) shall be planted and maintained outside the designated grassland restoration area to provide foraging habitat for raptors and other migratory birds, and cover for mammals, reptiles, and smaller birds that may serve as raptor prey. While native vegetation shall be favored, site-appropriate non-native trees and shrubs that provide food or structural resources that are particularly valuable to native wildlife shall also be considered. Approximately 10,000 net new trees shall be planted at the Project site and in the community, in addition to trees that will be replaced as required by the Urban Forestry Ordinance or MM BI-14a.</p>					
<p>The elements identified above shall be reviewed and approved by a qualified biologist (one familiar with the ecology of the Project site), and the Draft Parks, Open Space, and Habitat Concept Plan shall be implemented during construction of the Project. This plan shall be approved by the City/Agency prior to construction, and its preparation and implementation shall be the financial responsibility of the Project Applicant.</p>	Project Applicant	Plan to be approved by City/SFRA prior to construction, and implemented throughout the construction phase of the Project	SFRA	SFRA	Approval and implementation of the Draft Parks, Open Space, and Habitat Concept Plan. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.
<p>MM BI-9b <u>Pile Driving Design and Minimization Measures.</u> To minimize impacts on fish and marine mammals, the Project Applicant shall be</p>					

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<p>implemented the following measure to reduce the amount of pressure waves generated by pile driving. The first set of measures shall be implemented during Project design. The second set of measures shall be implemented during construction.</p> <p>Design Measures:</p> <ol style="list-style-type: none"> 1. Engineer structures to use fewer or smaller piles, where feasible, and preferably, solid piles. 2. Design structures that can be installed in a short period of time (i.e., during periods of slack tide when fish movements are lower). 3. Do not use unsheathed creosote-soaked wood pilings. <p>The City/Agency, with consultation from a qualified biologist who is familiar with marine biology, as approved by the City/Agency, shall review the final Project design to ensure that these design requirements have been incorporated into the Project.</p>	Project Applicant	During Project design	DBI/SFRA	DBI/SFRA	Approval of final plans
<p>Construction Measures:</p> <ol style="list-style-type: none"> 1. Drive piles with a vibratory device instead of an impact hammer if feasible. 2. Restrict pile driving of steel piles to the June 1 to November 30 work window, or as otherwise recommended by NMFS (driving of concrete piles would not be subject to this condition). 3. Avoid installation of any piles during the Pacific herring spawning season of December through February. Consult with the CDFG regarding actual spawning times if pile installation occurs between October and April. 4. If steel piles must be driven with an impact hammer, an air curtain shall be installed to 	Project Applicant	During construction activities	DBI/SFRA, in consultation with NMFS and CDFG, if necessary	DBI/SFRA, in consultation with NMFS and CDFG, if necessary	Monitoring of pile driving activities. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

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Mitigation Measure	Responsibility for Implementation	Mitigation Timing	Enforcement Responsibility	Monitoring Responsibility	Monitoring Actions/ Verification of Compliance
<p>disrupt sound wave propagation, or the area around the piles being driven shall be dewatered using a cofferdam. The goal of either measure is to disrupt the sound wave as it moves from water into air.</p>					
<p>5. If an air curtain is used, a qualified biologist shall monitor pile driving to ensure that the air curtain is functioning properly and Project-generated sound waves do not exceed the threshold of 180-decibels generating 1 micropascal (as established by NMFS guidelines). This shall require monitoring of in-water sound waves during pile driving.</p>					
<p>6. Unless the area around the piles is dewatered during pile driving, a qualified biologist shall be present during pile driving of steel piles to monitor the work area for marine mammals. Driving of steel piles shall cease if a marine mammal approaches within 250 feet of the work area or until the animal leaves the work area of its own accord.</p>					
<p>MM BI-12a.1 Seasonal Restrictions on In-Water Work. In-water work when juvenile salmonids are moving through the estuary on the way to the ocean or when groundfish and prey species could be directly impacted shall be avoided. Because steelhead are potentially present, the allowed dredge window for this area of the San Francisco Bay is June 1 through November 30. All in-water construction shall occur during this window. If completion of in-water work within this period is not feasible due to scheduling issues, new timing guidelines shall be established and submitted to NMFS and CDFG for review and approval.</p>	Project Applicant	During construction between June 1 st and November 30 th	NMFS and CDFG	SFRA, in consultation with NMFS and CDFG, as necessary	Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.
<p>MM BI-12a.2 Worker Training. Personnel involved in in-water construction and deconstruction</p>	Project Applicant	Prior to construction activities	DBI/SFRA	DBI/SFRA	Construction Contractor to submit

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<p>activities shall be trained by a qualified biologist (experienced in construction monitoring, as approved by the City/Agency) in the importance of the marine environment to special-status fish, birds, and marine mammals and the environmental protection measures put in place to prevent impacts to these species, their habitats, and Essential Fish Habitat. The training shall include, at a minimum, the following:</p> <ul style="list-style-type: none"> ■ A review of the special-status fish, birds, and marine mammals and sensitive habitats that could be found in work areas ■ Measures to avoid and minimize adverse effects to special-status fish, birds, marine mammals, their habitats, and Essential Fish Habitat ■ A review of all conditions and requirements of environmental permits, reports, and plans (i.e., USACE permits) 	Project Applicant	During construction activities	USACE; NMFS	SFRA, in consultation with NMFS and USACE, as necessary	quarterly report of compliance activity, until deemed complete by SFRA.
<p>MM BI-4a.1 and MM BI-4a.2 would also apply to this impact.</p> <p>MM BI-12b.1 Essential Fish Habitat Avoidance and Minimization Measures.</p> <p>The following mitigation measures have been adapted from Amendment 11 of the West Coast Groundfish Plan¹⁷ and Appendix A of the Pacific Coast Salmon Plan.¹⁸ Incorporation of the following, or equivalent mitigation as otherwise required by the USACE or NMFS, would reduce the impacts to Essential Fish Habitat (EFH) to a level considered less than significant. Unless</p>	Project Applicant	During construction activities	USACE; NMFS	SFRA, in consultation with NMFS and USACE, as necessary	Approval of dredging permits. Construction Contractor to submit quarterly report of compliance activity, until deemed complete by SFRA.

¹⁷ PFMC 1998. Essential Fish Habitat – West Coast Groundfish, Amendment 11.

¹⁸ PFMC 1999. Appendix A: Identification and description of Essential Fish Habitat, Adverse Impacts, and Recommended Conservation Measures for Salmon. In Pacific Coast Salmon Plan (1997) as amended through Amendment 14. Website: <http://www.pcouncil.org/salmon/salfmp/a14.html>.

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<p>modified by the federal permitting agencies (NMFS or USACE), these measures shall be implemented during construction by the Project Applicant. Any reporting required shall be specified in the USACE permits and reports shall be submitted to the USACE and NMFS.</p>					
<ul style="list-style-type: none"> ■ If dredging is required, permits will be obtained through the Dredged Material Management Office (DMMO) process, and the following mitigation from the Long-Term Management Strategy (LTMS) shall be implemented: <ul style="list-style-type: none"> > Dredging shall avoid areas with submerged aquatic vegetation (eelgrass beds or other EFH areas of particular concern) especially where the action could affect groundfish, prey of outmigrating juvenile salmon or groundfish, larval marine species, or habitat for native oysters > Sediments shall be tested for contaminants as per EPA and USACE requirements. Contaminated sediments shall be disposed of in accordance with EPA and USACE guidelines > Slopes of the dredged area shall be gradual enough so that sloughing is unlikely to occur. Verification of these conditions shall be achieved through follow-up bathymetric surveys > To minimize turbidity and potential resuspension of contaminated sediments, dredging shall use suction equipment, or similar equipment, when feasible. Where an equipment type may generate significant turbidity (i.e., clamshell), dredging shall be conducted using adequate engineering and best 					