A dot (●) indicates material that has been revised since publication of the Draft EIR.

CANDLESTICK POINT–HUNTERS POINT SHIPYARD PHASE II DEVELOPMENT PLAN PROJECT

Comments & Responses

Volume IV: Final EIR Comments & Responses
(Section A through Letter 49)

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One South Van Ness Avenue, Fifth Floor, San Francisco, California 94103, *and*
City and County of San Francisco Planning Department
1650 Mission Street, Suite 400, San Francisco, California 94103

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CHAPTER IX Comments and Responses

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Comments and Responses

A. INTRODUCTION

A.1 Purpose of the Comments and Responses Document

In accordance with Section 15088 of the *California Environmental Quality Act* (CEQA),[1] the City and County of San Francisco (City) Planning Department and the San Francisco Redevelopment Agency (Agency), serving as co-Lead Agencies, have reviewed and considered both written and oral comments on environmental issues raised from agencies, organizations, and persons who reviewed the Draft Environmental Impact Report (EIR) and have prepared written responses to those comments. The Lead Agencies have responded to comments received during the comment period, as well as comments received after the close of the comment period. The comments and responses to all comments received are provided in the Comments & Responses (C&R) document, which is included as Volume VII, Volume VIII, and Volume IX of this EIR. All appendices to the C&R document are contained in Volume X of this EIR.

The Comments and Responses document will be included in the Final EIR, which, together with the Mitigation Monitoring and Reporting Program (MMRP), Findings of Fact, and Statement of Overriding Considerations, serves as the environmental document used by the Lead Agencies when considering approval of the Project. A Final EIR is defined by Section 15362(b) of the CEQA Guidelines as "… containing the information contained in the Draft EIR; comments, either verbatim or in summary received in the review process; a list of persons commenting; and the responses of the Lead Agency to the comments received."

A.2 Environmental Review Process

Lennar Urban filed an Environmental Evaluation application (EE application) with the Planning Department on August 27, 2007. The filing of the EE application initiated the environmental review process. The EIR process provides an opportunity for the public to review and comment upon the Project's potential environmental effects and to further inform the environmental analysis. As a first step in complying with the procedural requirements of CEQA, the Notice of Preparation (NOP) process was used to determine whether any aspect of the Project, either individually or cumulatively, may cause a significant effect on the environment and, if so, to narrow the focus (or scope) of the environmental analysis.

The Agency and City filed the NOP with the California Office of Planning and Research, State Clearinghouse, as an indication that an EIR would be prepared. In turn, the State Clearinghouse distributed the NOP to public agencies and interested parties for a 30-day public review period that began on August 31, 2007. The NOP was distributed to responsible or trustee agencies in accordance with Section 15082 of the CEQA Guidelines. In addition, the NOP was also sent to organizations, companies, and/or individuals

[1] A complete list of acronyms and abbreviations used in this document is provided in Section F.31 (Changes to Chapter VIII [Acronyms/Abbreviations and Glossary]).

that the Agency and the City believed might have an interest in the Project. In response to the NOP, nine comment letters were submitted to the City by public agencies, organizations, and individuals.

The Agency and the City held two public scoping meetings for the EIR, on September 17, 2007, and September 25, 2007. The scoping meetings provided the public and affected governmental agencies with an opportunity to present environmental concerns regarding the Project. Agencies or interested persons that did not respond during the NOP public review period or the scoping meetings also had an opportunity to comment during the public review period for the Draft EIR, as well as at scheduled hearings on the Project.

The Draft EIR for the Candlestick Point–Hunters Point Shipyard Phase II Development Plan (the Project) was circulated on November 14, 2009, for review and comment to the public, other interested parties, agencies that commented on the Initial Study (IS)/NOP, and surrounding jurisdictions for a 45-day public review period that was to conclude on December 28, 2009. However, at the San Francisco Redevelopment Agency Commission (Agency Commission) public hearing conducted on December 15, 2009, the Agency Commission voted to extend the comment period to January 12, 2010, and scheduled a second Agency Commission public hearing on the Project for January 5, 2010. The San Francisco Planning Commission (SFPC) concurred with the Agency Commission's decision to extend the comment period. The Draft EIR was circulated to State agencies for review through the State Clearinghouse. In addition, the Draft EIR was also circulated to federal, regional, or local agencies that have discretionary authority over some aspect of the Project, as well as organizations or individuals that requested a copy of the Draft EIR or those who might have an interest in the Project. Copies of the Draft EIR were also available for public review during normal business hours at the following locations:

San Francisco Planning Department
1650 Mission Street, Fourth Floor
San Francisco, CA 94103

San Francisco Redevelopment Agency
One South Van Ness Street, Fifth Floor
San Francisco, CA 94103

The EIR was also posted for public review at http://www.sfplanning.org and www.sfgov.org/sfra.

After completing the C&R document, and before approving the Project, the Lead Agencies must make the following three certifications as required by Section 15090 of the CEQA Guidelines:

- That the Final EIR has been completed in compliance with CEQA
- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information in the Final EIR prior to approving the project
- That the Final EIR reflects the Lead Agency's independent judgment and analysis

Pursuant to Section 15091(a) of the CEQA Guidelines, if an EIR that has been certified for a Project identifies one or more significant environmental effects, the Lead Agency must adopt "Findings of Fact." For each significant impact, the Lead Agency must make one of the following findings:

> (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

Each finding must be accompanied by a brief explanation of the rationale for the finding. The Findings of Fact are presented in a separate stand-alone document that will be presented to the Lead Agencies, if they elect to approve the Project.

Additionally, pursuant to Section 15093(b) of the CEQA Guidelines, when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the agency must state in writing its reasons for supporting the approved action. This "Statement of Overriding Considerations" must be supported by substantial information in the record, which includes the Final EIR. Because the Project would result in significant unavoidable impacts, the Lead Agencies would be required to adopt a Statement of Overriding Considerations, if they elect to approve the Project.

Pursuant to Section 15091(d) of the CEQA Guidelines, the Lead Agency must adopt, in conjunction with the findings, a program for reporting or monitoring the changes that it has either required in the Project or made a condition of approval to avoid or substantially lessen environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures. This program is referred to as the MMRP, and it is provided as a stand-alone document, separate from this EIR.

A.3 Document Organization

This Comments and Responses document is organized into the following sections:

- Section **A: Introduction**—This section describes the purpose of the C&R document; provides a summary of the environmental review process through certification of the EIR; and describes the organization of the C&R document.
- **Section B: Refinements Since Publication of the Draft EIR**—This section describes refinements to the Project, variants, mitigation measures, and/or alternatives that have occurred since publication of the Draft EIR.
- **Section C: Project Approvals**—This section describes the land uses and components of the Project, variants, and/or alternatives that could be approved. It also describes the various ancillary documents that would require approval along with certification of the EIR, including, but not necessarily limited to, the Design for Development (also sometimes referred to as the D4D), Disposition and Development Agreement (also sometimes referred to as the DDA), and General Plan and Redevelopment Plan amendments.
- **Section D: List of Persons Commenting**—This section contains a list of the agencies, organizations, and individuals who submitted written comments during the public review period or spoke at one or more of the public hearings on the Draft EIR. Letter numbers were assigned to each comment letter as it was received. Two tables are provided, each showing letter number, commenter, date of comment letter, page number where comment letter begins, and page number where response begins. One of the tables organizes the letters numerically (by letter number) and the other table organizes the letters by federal, state, regional, and local agencies, boards, and commissions; organizations; and individuals.

- **Section E: Comments and Responses**—This section contains responses to all significant environmental issues raised with respect to the contents of the Draft EIR. Each comment letter has been assigned a comment code, and comments in each letter are assigned a number. For example, the letter from the California State Lands Commission is Letter 93. The comments in the letter are numbered beginning 93-1 through the end, and the responses are similarly numbered. The comment letter is inserted in its entirety, followed by the responses to the individual comments.

  Any text changes that clarify or correct information in the Draft EIR in response to a comment on the Draft EIR are contained in this section. Single-underlined text is used to represent language added or modified in the Draft EIR; ~~strikethrough~~ is used to represent language deleted from the Draft EIR. In addition, figures have also been revised and/or added. A figure that is provided to simply clarify a response will only appear in the C&R document and not in the Draft EIR; these figures are assigned a C&R figure number, and they are located in Section E (Comments and Responses) of this document. Revised Draft EIR figures are indicated with the word "Revised" next to the title, and new Draft EIR figures are indicated with the word "New" next to the title.
- **Section F: Draft EIR Revisions**—This section contains all text changes to the Draft EIR, including those that are made in response to comments received or as staff-initiated text changes. The text changes are presented in the order of the Draft EIR table of contents. New and/or revised Draft EIR figures are also located in this section.
- **Section G: References**—This section contains all references used in this document.

B. REFINEMENTS SINCE PUBLICATION OF THE DRAFT EIR

The Draft EIR analyzes the maximum build-out that could occur on the Project site assuming implementation of the Project's land use plan and the proposed amendments to the Bayview Hunters Points (BVHP) and Hunters Point Shipyard (HPS) Redevelopment Plans. Consequently, the Draft EIR assumes a total number of dwelling units for residential uses; a maximum square footage for retail, office, research and development (R&D), community services, and art-related uses; a total number of hotel rooms; a total number of seats for the football stadium and performance venue; a total number of slips for the marina; an overall acreage of parks and open space; and a total number of parking spaces.

Subsequent to circulation of the Draft EIR, the Applicant, City, and Agency have made minor refinements to the Project, two of the variants, and one of the alternatives in response to public comments, to reduce impacts, to provide additional flexibility for Project implementation, and/or to respond to changing construction technologies, community priorities, site-specific urban design goals, and real estate market demands while meeting the Project objectives. This section provides a summary of the refinements that are analyzed in Section F (Draft EIR Revisions) of this document. The Project 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. For example, minor revisions have been made that redistribute some housing units from one location on Candlestick Point to another on Candlestick Point, but the total amount of units to be developed does not change. Likewise, the effects of refinements of Project variants (Variant 2A and Variant 3 [new Tower Variant D]) are within the range of effects identified in the Draft EIR for the Project and its variants. As substantiated by the analysis provided in Section F (Draft EIR Revisions), none of the proposed refinements results in a new significant environmental impact or a substantial increase in the severity of impacts. Further, there are no new feasible mitigation measures or feasible alternatives that the Project Applicant declines to adopt.

B.1 Project Refinements

Building Preservation

The Project analyzed in the Draft EIR proposed demolishing Buildings 208, 211, 224, 231, and 253 at the HPS Phase II site. These buildings are identified in the Draft EIR as historic resources. Building 208 would now be retained as an element of the cultural landscape, but would not be occupied. The retention of Building 208 would reduce the severity of the historic resources impact and slightly reduce the construction-related impacts of the Project as described in the EIR (i.e., traffic, air quality, and noise), as less building area would be demolished. In all other respects, because the land use plan would not be changed, this refinement would not result in new significant impacts or an increase in the severity of impacts, as described in Section F (Draft EIR Revisions) of this document.

Development Schedule

Recent economic forecasts, as well as updated entitlement, Navy transfer, and permitting schedules, have been used to refine the development schedule for CP-HPS Phase II. Site preparation activities, including demolition and infrastructure construction, would begin 1 to 2 years later than originally planned, and the completion of building construction has been extended from 2029 to 2031, with full occupancy by 2032.

The updated development schedule takes advantage of recent market analyses to refine the Project housing program and provide a steady, deliberate buildup of research and development space. As with the original development schedule, the updated development schedule jump-starts the housing program with the construction of over 3,000 homes in the first phase. However, rather than concentrating the construction of more than 6,000 homes in the following two phases as originally planned, the current schedule provides for the construction of 2,000, 2,500, and 2,800 homes over the following three phases, respectively.

Similarly, research and development space is now anticipated to steadily build over each of the first three development phases, whereas the original schedule front-loaded over 2,275,000 sf of research and development construction in the first phase of development.

Total development remains the same as identified in the Draft EIR. Project Documents provide for the horizontal land development of the Project to be built out in four Major Phases, with vertical development occurring during that period and beyond. Specifically, Major Phase 1 (2011–2019) includes demolition and abatement between 2011 and 2015, utilities and infrastructure improvements from 2013 to 2017, and structural shoreline improvements from 2013 to 2017. The rebuilding of Alice Griffith, together with the development of 3,160 residential units, 84,000 sf of neighborhood retail, 583,000 sf of R&D, and 38,000 sf of community facilities would occur in Major Phase 1. Also, if the 49ers satisfy the Stadium Conditions, the Developer must build significant infrastructure for the new 49ers stadium. Major Phase 2 (2016–2021) would include development of 2,005 residential units, 635,000 sf of regional retail, 76,000 sf of neighborhood retail, 150,000 sf of office, 150,000 sf hotel, 842,000 sf R&D, the 10,000-seat performance venue, and 50,000 sf of community facilities in CP North, CP Center, HPS North, HPS Village Center, and the R&D District on HPS Phase II. Major Phase 3 (2020–2027) would include development of 2,505 residential units, 90,000 sf of neighborhood retail, and 1,075,000 sf of R&D in CP North, CP Center, CP South, and completion of the R&D District on HPS Phase II. Major Phase 4 would include development

of 2,830 residential units and 12,000 sf of community facilities in the Jamestown District and CP South. Full build-out of HPS Phase II would occur by 2027 and full build-out of Candlestick Point would occur in 2031, with final occupancy in 2032.

An environmental analysis of this refinement, with associated illustrative graphics, is contained in Section F (Draft EIR Revisions) of this document. This refinement would not result in any new significant environmental impact or an increase in the severity of any impact identified in the Draft EIR (refer to Appendix A1 [PBS&J, Analysis of Project Development Schedule Modifications and Environmental Impact Report, April 10, 2010], Appendix A2 [PBS&J, Analysis of Revised Development Schedule Compared to the Noise Impacts Analyzed in the Draft EIR, March 25, 2010], Appendix A3 [LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Revised Project Phasing, March 23, 2010], Appendix A4 [Fehr & Peers, Roadway and Transit Phasing Plan, March 17, 2010], and Appendix A5 [ENVIRON, Updated Project Phasing Effect on Air Quality and Climate Change Analyses Candlestick Point–Hunters Point Shipyard Phase II Development Plan, April 26, 2010]).

B.2 Variant Refinements

Variant 2A: Housing/R&D Variant

A refinement of Variant 2 (Housing Variant)—Variant 2A (Housing/R&D Variant)—has been identified that would allow for additional R&D uses on the stadium site, along with housing, in the event the 49ers do not choose to develop a stadium in the HPS Phase II area. As compared to the Housing Variant (Variant 2, described on Draft EIR pages IV-72 through IV-81), the Housing/R&D Variant (Variant 2A) would relocate 275 residential units from Candlestick Point to HPS Phase II and redistribute 50 residential units within Candlestick Point. The Housing/R&D Variant (Variant 2A) would not develop the uses in the Jamestown District of Candlestick Point that would occur under the Housing Variant (Variant 2). If the parcels on the privately owned block in the Jamestown District and on the four additional privately owned blocks in Candlestick Point North District (currently developed with an RV park) are not acquired by the Project Applicant, the property owners could develop their property under the BVHP Redevelopment Plan via an Owner Participation Agreement or continue the current non-conforming use. The total amount of residential development in the Project would remain at 10,500 units, the same as for the Housing Variant (Variant 2).

An additional 500,000 square feet (sf) of R&D land use would be constructed on the stadium site as compared to the Housing Variant (Variant 2), for a total of 3,000,000 sf of R&D uses at the HPS Phase II site. The Draft EIR analyzed a total of 5,000,000 sf of R&D uses under the R&D Variant (Variant 1, described on pages IV-4 through IV-12 of the Draft EIR) and 2,500,000 sf under the Housing Variant (Variant 2); therefore, the increased amount of R&D square footage under the Housing/R&D Variant (Variant 2A) (e.g., 3,000,000 sf) would fall within the range of development programs analyzed by the R&D Variant (Variant 1) and the Housing Variant (Variant 2).

The total amount of park acreage with the Housing/R&D Variant (Variant 2A) would be 326.6 acres, which represents a decrease of approximately 10 acres as compared to the Project (which would provide 336.4 acres) and about 22.8 acres less than the Housing Variant (Variant 2) (which would provide 349.4 acres) because of increased development on the stadium site. However, the decrease in park acreage

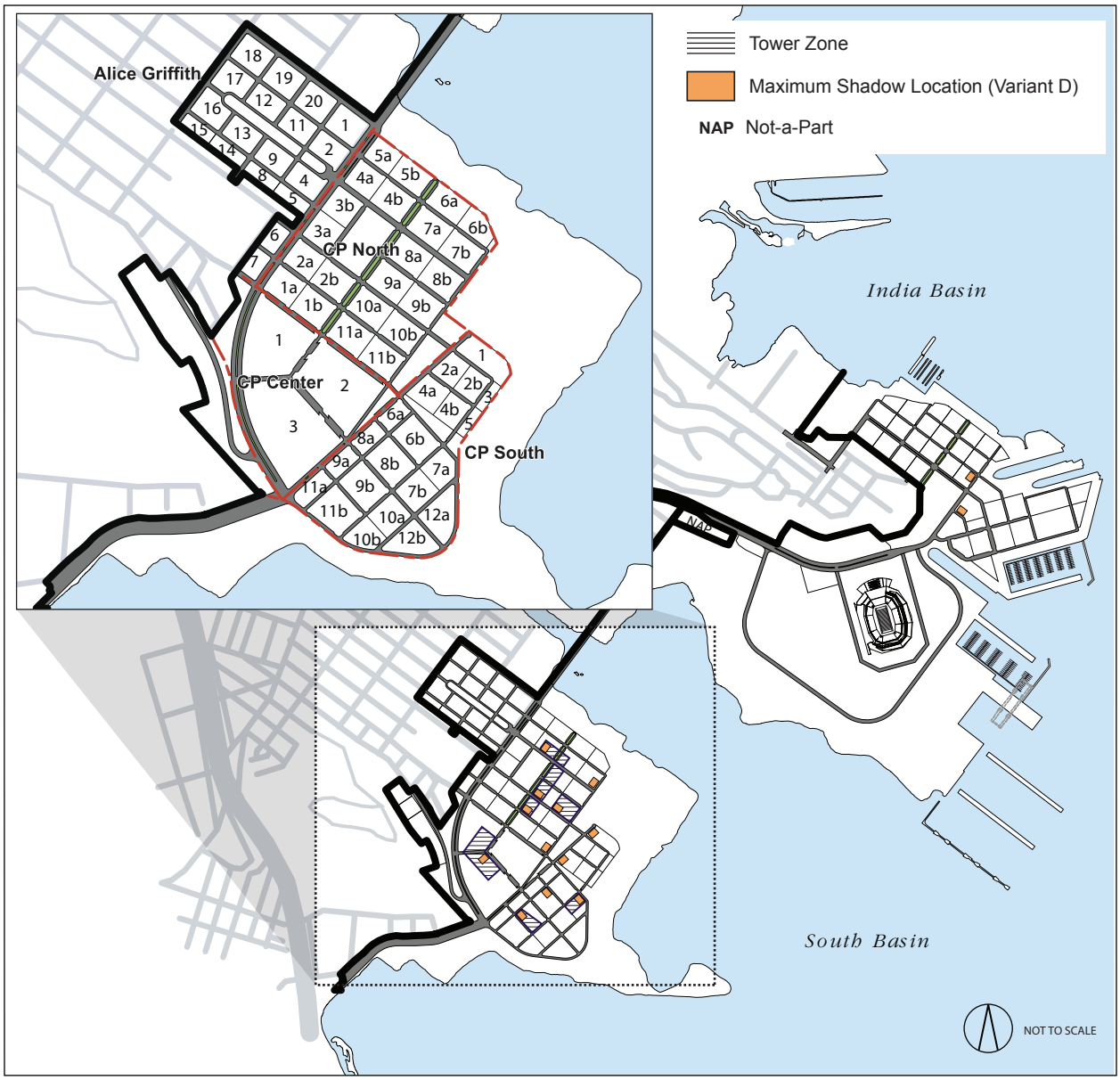
would not reduce park acreage below the identified threshold of 5.5 acres per 1,000 residents, as further described in Section F (Draft EIR Revisions) of this document.

The Housing/R&D Variant (Variant 2A) would not result in any new significant environmental impact or an increase in the severity of any impact identified in the Draft EIR. An environmental analysis of these refinements, with associated illustrative graphics, is contained in Section F (Draft EIR Revisions) of this document. Also refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010), Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010), Appendix T6 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Project Variant 2A, March 15, 2010), and Appendix T7 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Subalternative 4A, April 8, 2010).

Variant 3: Tower Variant D

The Draft EIR identified proposed maximum building heights and tower placements for the Project in Figure II-5 (Proposed Maximum Building Heights), Draft EIR page II-12. The Draft EIR also analyzed the effects of different tower placements and heights in the Tower Variant, which considered three alternative tower placements and heights, denoted Tower Variants A, B, and C. (Refer to Draft EIR Section IV.D [Variant 3: Candlestick Point Tower Variants], Draft EIR pages IV-140 through -178.) In implementing the Project, the Design For Development, described in Chapter II (Project Description), would guide building heights, tower placements, and other detailed Project design specifications. Since publication of the Draft EIR, the Design For Development documents have been refined to encourage certain locations for towers based on a variety of tower location principles, including but not limited to clustering towers near the center of the development, formation of skylines, adjacency to transit stops, reducing shadow impacts, maintaining view corridors, and limiting adverse wind effects. Vertical development of the Project would occur over 15 to 20 years, and flexibility in tower locations is needed to ensure that the Project would be able to respond to changing construction technologies, community priorities, site-specific urban design goals, and real estate market demands while meeting the Project objectives. The Design For Development documents would provide this basic flexibility while adhering to the tower location principles described above by creating allowable "tower zones" for high-rise buildings.

Like Variant 3 (Tower Variants A, B, and C), Variant 3 (Tower Variant D) is based on height, bulk, and massing requirements for vertical development within the Project site as described in the Design For Development. The Design For Development identifies specific locations for certain towers and allows towers in certain "tower zones." Where the Design For Development allows placement of towers within a "tower zone," the Tower Variant D analysis assumes a specific tower location within proposed tower zones. Tower Variant D also relocates one tower that is proposed for Candlestick Point South Block 2a under the Project and Tower Variants A, B, and C to a tower zone in Candlestick Point North Block 9b pursuant to refinements in the Design For Development. Figure C&R-1 (Tower Variant D Tower Zones Map) indicates where the Design For Development identifies tower zones and the assumed location of towers within those zones for purposes of the Tower Variant D analysis.



SOURCE: Lennar Urban, 2010.

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FIGURE C&R-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D TOWER ZONES MAP

Like Variant 3 (Tower Variants A, B, and C), Variant 3 (Tower Variant D) assumes a 24-story tower at Candlestick Point Center. However, for the purpose of this analysis, Tower Variant D shifts some towers within allowed tower zones to locations that could create more shadow impacts on San Francisco Recreation and Park Department (SFRPD) property. Specifically, towers are shifted within the tower zones at Candlestick Point North Blocks 8a and 9a, and the tower zone at Block 10a. Except for the tower on Block 2a, tower locations at Candlestick Point South remain unchanged relative to the Project (refer to Figure C&R-1). All other tower locations in Candlestick Point and HPS Phase II are unchanged from the Tower Variants analyzed in the Draft EIR. In addition, Tower Variant D would have 12 towers at Candlestick Point, compared to 11 towers with the Project and with Tower Variants A, B, and C.

Tower Variant D also analyzes a 12,500-square-foot maximum floor plate for high-rise towers. The Project described in Draft EIR Chapter II analyzed a 10,500-square-foot maximum floor plate for the towers, built on podiums. The larger floor plate analyzed in Tower Variant D would enable greater efficiency and flexibility in design of floor plans. The proposed size of the podiums analyzed in the Draft EIR would be sufficient to accommodate the larger floor plates and would not change. Therefore, the overall "footprint" of the towers would remain the same, and the amount of impermeable surface would not be increased. The total number of dwelling units proposed with the Project would not change. All other features of Tower Variant D would be the same as the Project, with the same land uses and the same total amount of development, e.g., the total number of residential units.

Any changes in the environmental analysis as a result of these refinements, including graphic illustrations, are reflected in Section F (Draft EIR Revisions) of this document. The impacts of refinements to the Tower Variant would be limited to aesthetics and shadows. No other resource areas would be affected. Overall, these refinements would not result in any new significant environmental impacts or increase the severity of previously identified environmental impacts. Also refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010) and Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010).

B.3 Modifications to Mitigation Measures

Since the publication of the Draft EIR, some mitigation measures have been edited to correct typographical errors, add minor information or provisions, or clarify how, by whom, and/or when the measure would be implemented, but do not represent substantive changes in the mitigation measure.

A few mitigation measures were modified as a result of further study and analysis or in response to comments received on the Draft EIR. Those mitigation measures that include more substantive changes, but do not alter any of the significance conclusions in the EIR are identified as revised in Section F (Draft EIR Revisions) of this document and include:

- **MM TR-51**—The revision adds language that clarifies that implementation of the Transportation Management Plan applies to Variants 1, 2, and 2A and conforms the EIR text to the text in Appendix D of the EIR (Transportation Study)

- **MM HY-12a.2**—The Draft EIR describes an Adaptive Management Plan (Section III.M, pages III.M-101 and -102) for ensuring the continuing protection of shoreline, public facilities, and public access improvements should sea level rise occur. Additions to MM HY-12a.2 further amplify specific actions, the timing for these actions, and the parties responsible for establishing the mechanism to fund and implement the Adaptive Management Plan.
- **MM BI-4a.1**—This mitigation measure has been modified to provide greater assurance of wetland restoration success by requiring a greater percentage of native vascular species in the restored wetlands.
- **MM BI-a.2**—This mitigation measure has been modified to clarify how temporarily impacted wetlands would be restored.
- **MM BI-5b.1 and MM BI-5b.2**—The revision removes the qualifier for implementation of mitigation measure MM BI-5b.2 and acknowledges that future locations of eelgrass beds may be different from baseline conditions, thereby necessitating eelgrass surveys prior to all in-water activities at HPS and the Yosemite Slough. This revision ensures that both MM BI-5b.1 and MM BI-5b.2 would be implemented in all identified circumstances.
- **MM BI-9b**—The modification specifies that no unsheathed creosote-soaked wood piling shall be used to ensure additional protections to aquatic organisms and restricts all pile-driving activities during the Pacific herring spawning season to provide additional protection of the Pacific herring.
- **MM HY-13b**—As originally drafted, mitigation measure MM HY-13b required that the Project Applicant obtain a Floodplain Development Permit from the City. However, the City has not established a process for the issuance of such permits. The purpose of mitigation measure MM HY-13b was to reduce the potential of placing structures in a 100-year flood hazard area. This goal is adequately accomplished through mitigation measure MM HY-12a.1 (Finished Grade Elevations above Base Flood Elevations). Hence, mitigation measure MM HY-13b has been deleted, and the analysis instead relies on MM HY-12a.1.

B.4 Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation

Some commenters have asked that the Draft EIR include a historic preservation alternative keeping all other Project components the same. Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) was included in the Draft EIR to analyze an alternative with preservation of all five historically eligible structures (Buildings 208, 211, 224, 231, and 253).[2] Although the text of Alternative 4 in the Draft EIR inadvertently omitted reference to Buildings 208 and 231, this was a typographical error and the text has been revised in the Draft EIR (Section F [Draft EIR Revisions]) to clarify that four buildings would be retained and/or rehabilitated according to the Secretary of the Interior's Standards. (Building 208 is included in the Project, so Alternative 4 has been clarified to indicate that it includes Buildings 211, 224, 231, and 253.) That Alternative 4 includes a reduced development plan compared to the Project does not affect the analysis of the historic preservation component in Alternative 4.

When considering Project approval, the Lead Agencies have the flexibility to approve all or any portion of the Project. This flexibility extends to approving all or any portion of an alternative as well. Therefore, the

[2] It should be noted that, since publication of the Draft EIR, the decision has been made to retain Building 208 under all development scenarios

Lead Agencies could adopt the Project *and* the historic preservation component of Alternative 4 without the EIR providing a separate analysis of such an option. Both the Project's land use plan and the historic preservation option were thoroughly analyzed in the Draft EIR. The Project ultimately approved by the Lead Agencies could include a combination of components of the Project, any of the variants, and/or any of the alternatives.

The analysis of the historic preservation component of Alternative 4 would not change regardless of whether that element is combined with a variant, another alternative, or the Project. While not required, a subalternative to Alternative 4—Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation)—has been included in the Final EIR to fully respond to comments. This is not a substantially different alternative, 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.

This alternative would preserve the structures and contributing features of the California Register of Historical Resources (CRHR)-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. This alternative, like the Project, would retain Drydocks 2 and 3 and four buildings (Buildings 140, 204, 205, and 207) previously identified as historic resources in National Register of Historic Places (NRHP)-eligible Hunters Point Commercial Drydock Historic District. This alternative and the Project would also retain Drydock 4, considered individually eligible for the NRHP, and Building 208, part of the CRHR-eligible historic district. Unlike the Project, Subalternative 4A would retain Buildings 211, 224, 231, and 253. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Secretary's Standards) to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. Total floor area for R&D would remain the same as the Project, i.e., 2,500,000 gsf. Building 231 would be reused for parking. Buildings 211 and 253 would accommodate R&D uses. Building 208 would be retained as an element of the cultural landscape, the same as with the Project, and Building 224, the air raid shelter, would be retained as museum space.

As discussed on Draft EIR page III.J-33, the Project proposes to retain the buildings and structures in the potential Hunters Point Commercial Drydock District, identified in 1998 as eligible for listing in the NRHP, including Drydocks 2 and 3 and Buildings 140, 204, 205, and 207 that would be rehabilitated using the Secretary's Standards. As shown in Figure III.J-2, Draft EIR page III.J-23, the Hunters Point Commercial Drydock and Naval Shipyard Historic District encompasses the smaller Hunters Point Commercial Drydock District. Thus, Subalternative 4A would retain all significant historic resources identified in the Draft EIR.

The other uses at HPS Phase II (artists' studios, community services, marina, and football stadium) would be the same as with the Project. Subalternative 4A would include the Yosemite Slough bridge, shoreline improvements, and the State Park land agreement, as with the Project and Alternative 4.

The Project's land use plan would be implemented with Subalternative 4A in terms of total square footage of land uses and district locations. The displaced R&D uses that, as described in the Draft EIR, would have been built at the location of Buildings 211, 224, 231, and 253 would be distributed throughout the remainder of the HPS Phase II. However, the building heights in the R&D District on HPS Phase II immediately west of the site of Buildings 211, 224, 231, and 253 would increase from 85 to 120 feet to accommodate the displaced square footage.

Subalternative 4A would also retain existing grades, allowing railroad spurs and other historic elements to remain. A wave-protection berm is proposed seaward of the eligible historic district to accommodate a 36-inch sea level rise. The San Francisco Bay Trail (Bay Trail) would run on top of the levee. All other components of Subalternative 4A would remain the same as under the Project. An environmental analysis of this subalternative, including appropriate illustrative graphics, is included in Section F (Draft EIR Revisions) of this document. Also refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010), Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010), and Appendix T7 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Subalternative 4A, April 8, 2010).

C. PROJECT APPROVALS

The Project that is being proposed for approval by the San Francisco Planning Commission and the San Francisco Redevelopment Agency is the Project identified in Chapter II of the Final EIR, as modified by the Candlestick Point Tower Variants (Variant 3, Tower Variant D, concerning tower locations) and the 49ers/Raiders Shared Stadium Variant (Variant 5, concerning use of the stadium by both the Raiders and the 49ers).

In addition, the Project proposed for approval would 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 Variant 5), two alternative uses would be allowed at the stadium site: either Variant 1, which provides for an R&D use at the stadium site, or Variant 2A, which provides for a mix of housing and R&D at the stadium site. If a stadium scenario is implemented, it would be modified by implementation of Variant 3 (Tower Variant D).

In sum, the Project as described in Chapter II of the Final EIR, together with Project Variants 1, 2A, 3 (Tower Variant D), and 5 as described in Chapter IV of the Final EIR, constitute the Project that is being proposed for approval.

D. LIST OF PERSONS COMMENTING

Two tables have been provided to identify the government agencies, boards or commissions, organizations, or persons commenting on the Draft EIR, either orally or in writing. Table C&R-1 (Commenters on the Draft EIR [Numerical by Letter Number]) presents them in the order they were received by the City or the Agency, and they are presented with consecutive numbering (e.g., Letter 1, Letter 2, Letter 3, etc.). Table C&R-2 (Commenters on the Draft EIR [Alphabetical by Commenter Type]) presents them first by federal, state, regional, or local agencies, and then by boards and commissions, organizations, and individuals. Within those categories, they are organized alphabetically first, then by date, and lastly by letter number. In this case, they are not presented with consecutive numbering.

Table C&R-1 Commenters on the Draft EIR (Numerical by Letter Number)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
1	Sierra Club	11/25/09	C&R-167	C&R-169
2	People Organized to Win Employment Rights	12/14/09	C&R-171	C&R-173
3	Hunters Point Shipyard Citizen's Advisory Committee	12/16/09	C&R-175	C&R-177
4	Neighborhood Parks Council	12/17/09	C&R-179	C&R-181
5	Loa, Sam	12/17/09	C&R-183	C&R-185
6	Jackson, Espanola	12/17/09	C&R-187	C&R-189
7	City of Brisbane	12/18/09	C&R-191	C&R-195
8	Indian Canyon Nation/Costanoan Indian Research Inc.	01/12/10	C&R-203	C&R-215
9	People Organized to Win Employment Rights	12/21/09	C&R-217	C&R-219
10	San Francisco Bay Trail	12/18/09	C&R-221	C&R-223
11	Alice Griffith Public Housing Tenant Association	11/03/09	C&R-225	C&R-227
12	Asian Pacific Democratic Club	12/17/09	C&R-229	C&R-231
13	Toxic Chem Handout - PC Hearing	12/17/09	C&R-233	C&R-243
14	Positive Directions Equals Change	12/17/09	C&R-245	C&R-247
15	Cavella, Barbara	12/12/09	C&R-249	C&R-251
16	Birkelund, James	12/19/09	C&R-253	C&R-255
17	Dale-LeWinter, Marcia	01/04/10	C&R-257	C&R-265
18	Bay Access	12/28/09	C&R-267	C&R-269
19	Whittle, Lola	12/14/09	C&R-271	C&R-273
20	Multiple Commenters	12/14/09	C&R-275	C&R-277
21	Enea, Kristine	12/11/09	C&R-279	C&R-281
22	Parkmerced Residents' Organization	12/09/09	C&R-283	C&R-285
23	Winter, Rhonda	12/08/09	C&R-289	C&R-291
24	City of Brisbane	11/18/09	C&R-293	C&R-295
25	Golden Gate Audubon Society	11/16/09	C&R-297	C&R-299

Table C&R-1 Commenters on the Draft EIR (Numerical by Letter Number)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
26	Dodt, Dan	11/13/09	C&R-301	C&R-303
27	Da Costa, Francisco	01/12/10	C&R-305	C&R-321
28	Hamman, Michael	01/04/10	C&R-323	C&R-325
29	Bay Area Council	01/04/10	C&R-327	C&R-329
30	San Francisco Planning + Urban Research Association	01/04/10	C&R-331	C&R-333
31	San Francisco Bay Trail	01/12/10	C&R-335	C&R-341
32	Docomomo/US, Northern California Chapter	01/11/10	C&R-349	C&R-351
33	Antonini, Michael	01/11/10	C&R-353	C&R-355
34	San Francisco Architectural Heritage	01/11/10	C&R-361	C&R-365
35	Hamman, Michael	01/12/10	C&R-369	C&R-375
36	San Francisco Green Party	01/12/10	C&R-381	C&R-389
37	San Francisco Bay Herring Fisherman's Association	01/12/10	C&R-393	C&R-395
38	Da Costa, Francisco	01/11/10	C&R-397	C&R-411
39	City and County of San Francisco, Historic Preservation Commission	01/12/10	C&R-413	C&R-415
40	Gould, Corrina	01/12/10	C&R-427	C&R-429
41	Hamman, Michael	01/12/10	C&R-431	C&R-433
42	Californians for Renewable Energy, Inc.	01/12/10	C&R-435	C&R-577
43	People Organized to Win Employment Rights	01/12/10	C&R-579	C&R-583
44	Neighborhood Parks Council	01/12/10	C&R-597	C&R-599
45	National Trust for Historic Preservation, Western Office, and California Preservation Foundation	01/12/10	C&R-603	C&R-611
46	Visitacion Valley Planning Alliance	01/11/10	C&R-615	C&R-621
47	California State Parks Foundation	01/12/10	C&R-625	C&R-723
48	McRee, Richard	01/12/10	C&R-795	C&R-799
49	Neighborhood Parks Council	01/12/10	C&R-803	C&R-805
50	People Organized to Win Employment Rights	01/12/10	C&R-807	C&R-813
51	Simms, Robert	01/12/10	C&R-833	C&R-835
52	People Organized to Win Employment Rights	01/12/10	C&R-837	C&R-845
53	Stokes, Ernest	01/12/10	C&R-851	C&R-853
54	Stancil, Esselene	01/12/10	C&R-855	C&R-857
55	Breast Cancer Action	01/12/10	C&R-859	C&R-861
56	Indian Canyon Nation	01/12/10	C&R-863	C&R-865
57	Franklin, Alice	01/12/10	C&R-867	C&R-869
58	Green Action Health and Environmental Justice	01/12/10	C&R-873	C&R-875
59	Jefferson, Simon	01/12/10	C&R-879	C&R-881

Table C&R-1 Commenters on the Draft EIR (Numerical by Letter Number)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
60	Donahue, Vivien	01/12/10	C&R-885	C&R-887
61	Lee, Mishwa	01/12/10	C&R-889	C&R-893
62	Confederation of the Ohlone People	01/11/10	C&R-897	C&R-899
63	Herrera, Catherine	01/11/10	C&R-901	C&R-903
64	San Francisco Tomorrow	01/12/10	C&R-905	C&R-919
65	Joshua, Nyese	01/12/10	C&R-925	C&R-931
66	Tello, Juana	01/12/10	C&R-943	C&R-951
67	Harvey, Carol	01/12/10	C&R-959	C&R-973
68	Technical Assistance Services for Communities	01/12/10	C&R-975	C&R-975
69	People Organized to Win Employment Rights	01/12/10	C&R-985	C&R-989
70	Tello, Jesse	01/12/10	C&R-991	C&R-993
71	California Department of Transportation—Transportation Planning	01/12/10	C&R-995	C&R-999
72	Muhammad, Colleen	01/12/10	C&R-1005	C&R-1007
73	Lee, Mishwa	01/12/10	C&R-1009	C&R-1013
74	Matlock, Perry	01/11/10	C&R-1019	C&R-1037
75	Sierra Club	01/12/10	C&R-1039	C&R-1057
76	Whittle, Lola	01/12/10	C&R-1061	C&R-1063
77	City and County of San Francisco, Historic Preservation Commission	01/12/10	C&R-1065	C&R-1067
78	City and County of San Francisco, Human Rights Commission	01/12/10	C&R-1069	C&R-1175
79	San Francisco Bicycle Coalition	01/12/10	C&R-1177	C&R-1179
80	People Organized to Win Employment Rights	12/11/09	C&R-1181	C&R-1183
81	Golden Gate Audubon Society	01/12/10	C&R-1185	C&R-1199
82	Arc Ecology	01/12/10	C&R-1211	C&R-1373
83	Arc Ecology	01/12/10	C&R-1393	C&R-1413
84	Arc Ecology	01/12/10	C&R-1421	C&R-1445
85	Arc Ecology	01/12/10	C&R-1461	C&R-1597
86	California State Parks	01/12/10	C&R-1605	C&R-1623
87	San Francisco Bay Trail	01/12/10	C&R-1645	C&R-1651
88	Porter Sumchai, Ahimsa	12/11/09	C&R-1653	C&R-1669
89	Da Costa, Francisco	01/12/10	C&R-1671	C&R-1675
90	Hunters Point Shipyard Citizen's Advisory Committee	01/12/10	C&R-1677	C&R-1683
91	California State Parks	12/23/09	N/A	C&R-1691
92	National Football League	01/12/10	C&R-1693	C&R-1695
93	California State Lands Commission	01/12/10	C&R-1697	C&R-1701
94	Harvey, Carol	01/12/10	C&R-1703	C&R-1705

Table C&R-1 Commenters on the Draft EIR (Numerical by Letter Number)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
95	Koepf, Ernie	01/12/10	C&R-1707	C&R-1709
96	Fox, Jill	01/12/10	C&R-1711	C&R-1715
97	Brightline Defense Project	01/12/10	C&R-1721	C&R-1723
98	US Department of the Navy	01/12/10	N/A	C&R-1725
99	City/County Association of Governments of San Mateo	01/12/10	C&R-1727	C&R-1729
100	Shaffer, Linda	01/12/10	C&R-1731	C&R-1735
101	US Department of the Navy	01/14/10	C&R-1737	C&R-1745
102	Literacy for Environmental Justice	01/12/10	C&R-1755	C&R-1761
103	San Francisco Bay Conservation and Development Commission	01/12/10	C&R-1763	C&R-1773
104	Da Costa, Francisco	01/13/10	C&R-1785	C&R-1787
105	Da Costa, Francisco	01/18/10	C&R-1789	C&R-1791
106	Da Costa, Francisco	01/18/10	C&R-1793	C&R-1795
107	Muwekma Ohlone Indian Tribe	01/12/10	C&R-1793	C&R-1795
108	Hunters Point Shipyard Citizen's Advisory Committee	12/18/09	C&R-1811	C&R-1819
109	San Francisco Building and Construction Trades Council	01/04/10	C&R-1821	C&R-1823
110	Singer, Sam	01/05/10	C&R-1825	C&R-1827
111	San Francisco Organizing Project	01/05/10	C&R-1829	C&R-1831
112	San Francisco Chamber of Commerce	01/05/10	C&R-1833	C&R-1835
113	San Francisco Housing Action Coalition	01/05/10	C&R-1837	C&R-1839
114	Hamman, Michael	01/05/10	C&R-1841	C&R-1843
115	Da Costa, Francisco	01/10/10	C&R-1845	C&R-1851
116	Bay Access	01/11/10	C&R-1853	C&R-1857
117	India Basin Neighborhood Association	01/12/10	C&R-1859	C&R-1865
SFRA1	Various commenters spoke at the San Francisco Redevelopment Agency Commission Hearing	12/15/09	C&R-1811	C&R-1989
SFPC	Various commenters spoke at the San Francisco Planning Commission Hearing	12/17/09	C&R-2005	C&R-2113
SFRA2	Various commenters spoke at the San Francisco Redevelopment Agency Commission Hearing	01/05/10	C&R-2139	C&R-2165

Table C&R-2 Commenters on the Draft EIR (Alphabetical by Commenter Type)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
	WRITTEN COMMENTS			
Federal Agencies				
98	US Department of the Navy	01/12/10	N/A	C&R-1725
101	US Department of the Navy	01/14/10	C&R-1737	C&R-1745
State Agencies				
71	California Department of Transportation—Transportation Planning	01/12/10	C&R-995	C&R-999
93	California State Lands Commission	01/12/10	C&R-1697	C&R-1701
86	California State Parks	01/12/10	C&R-1605	C&R-1623
91	California State Parks	12/23/09	N/A	C&R-1691
103	San Francisco Bay Conservation and Development Commission	01/12/10	C&R-1763	C&R-1773
Local Agencies, Boards, and Commissions				
39	City and County of San Francisco, Historic Preservation Commission	01/12/10	C&R-413	C&R-415
77	City and County of San Francisco, Historic Preservation Commission	01/12/10	C&R-1065	C&R-1067
78	City and County of San Francisco, Human Rights Commission	01/12/10	C&R-1069	C&R-1175
24	City of Brisbane	11/18/09	C&R-293	C&R-295
7	City of Brisbane	12/18/09	C&R-191	C&R-195
99	City/County Association of Governments of San Mateo	01/12/10	C&R-1727	C&R-1729
10	San Francisco Bay Trail	12/18/09	C&R-221	C&R-223
31	San Francisco Bay Trail	01/12/10	C&R-335	C&R-341
87	San Francisco Bay Trail	01/12/10	C&R-1645	C&R-1651
Organizations				
11	Alice Griffith Public Housing Tenant Association	11/03/09	C&R-225	C&R-227
82	Arc Ecology	01/12/10	C&R-1211	C&R-1373
83	Arc Ecology	01/12/10	C&R-1393	C&R-1413
84	Arc Ecology	01/12/10	C&R-1421	C&R-1445
85	Arc Ecology	01/12/10	C&R-1461	C&R-1597
12	Asian Pacific Democratic Club	12/17/09	C&R-229	C&R-231
18	Bay Access	12/28/09	C&R-267	C&R-269
116	Bay Access	01/11/10	C&R-1853	C&R-1857
29	Bay Area Council	01/04/10	C&R-327	C&R-329
55	Breast Cancer Action	01/12/10	C&R-859	C&R-861
97	Brightline Defense Project	01/12/10	C&R-1721	C&R-1723
47	California State Parks Foundation	01/12/10	C&R-625	C&R-723
42	Californians for Renewable Energy, Inc.	01/12/10	C&R-435	C&R-577
62	Confederation of the Ohlone People	01/11/10	C&R-897	C&R-899

Table C&R-2 Commenters on the Draft EIR (Alphabetical by Commenter Type)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
32	Docomomo/US, Northern California Chapter	01/11/10	C&R-349	C&R-351
25	Golden Gate Audubon Society	11/16/09	C&R-297	C&R-299
81	Golden Gate Audubon Society	01/12/10	C&R-1185	C&R-1199
58	Green Action Health and Environmental Justice	01/12/10	C&R-873	C&R-875
3	Hunters Point Shipyard Citizen's Advisory Committee	12/16/09	C&R-175	C&R-177
90	Hunters Point Shipyard Citizen's Advisory Committee	01/12/10	C&R-1677	C&R-1683
108	Hunters Point Shipyard Citizen's Advisory Committee	12/18/09	C&R-1811	C&R-1819
117	India Basin Neighborhood Association	01/12/10	C&R-1859	C&R-1865
56	Indian Canyon Nation	01/12/10	C&R-863	C&R-865
8	Indian Canyon Nation/Costanoan Indian Research Inc.	01/12/10	C&R-203	C&R-215
102	Literacy for Environmental Justice	01/12/10	C&R-1755	C&R-1761
20	Multiple Commenters	12/14/09	C&R-275	C&R-277
107	Muwekma Ohlone Indian Tribe	01/12/10	C&R-1793	C&R-1795
92	National Football League	01/12/10	C&R-1693	C&R-1695
45	National Trust for Historic Preservation, Western Office, and California Preservation Foundation	01/12/10	C&R-603	C&R-611
4	Neighborhood Parks Council	12/17/09	C&R-179	C&R-181
44	Neighborhood Parks Council	01/12/10	C&R-597	C&R-599
49	Neighborhood Parks Council	01/12/10	C&R-803	C&R-805
22	Parkmerced Residents' Organization	12/09/09	C&R-283	C&R-285
14	Positive Directions Equals Change	12/17/09	C&R-245	C&R-247
2	People Organized to Win Employment Rights	12/14/09	C&R-171	C&R-173
9	People Organized to Win Employment Rights	12/21/09	C&R-217	C&R-219
43	People Organized to Win Employment Rights	01/12/10	C&R-579	C&R-583
50	People Organized to Win Employment Rights	01/12/10	C&R-807	C&R-813
52	People Organized to Win Employment Rights	01/12/10	C&R-837	C&R-845
69	People Organized to Win Employment Rights	01/12/10	C&R-985	C&R-989
80	People Organized to Win Employment Rights	12/11/09	C&R-1181	C&R-1183
34	San Francisco Architectural Heritage	01/11/10	C&R-361	C&R-365
37	San Francisco Bay Herring Fisherman's Association	01/12/10	C&R-393	C&R-395
79	San Francisco Bicycle Coalition	01/12/10	C&R-1177	C&R-1179
109	San Francisco Building and Construction Trades Council	01/04/10	C&R-1821	C&R-1823
112	San Francisco Chamber of Commerce	01/05/10	C&R-1833	C&R-1835
36	San Francisco Green Party	01/12/10	C&R-381	C&R-389
113	San Francisco Housing Action Coalition	01/05/10	C&R-1837	C&R-1839

Table C&R-2 Commenters on the Draft EIR (Alphabetical by Commenter Type)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
111	San Francisco Organizing Project	01/05/10	C&R-1829	C&R-1831
30	San Francisco Planning + Urban Research Association	01/04/10	C&R-331	C&R-333
64	San Francisco Tomorrow	01/12/10	C&R-905	C&R-919
1	Sierra Club	11/25/09	C&R-167	C&R-169
75	Sierra Club	01/12/10	C&R-1039	C&R-1057
68	Technical Assistance Services for Communities	01/12/10	C&R-975	C&R-975
13	Toxic Chem Handout - PC Hearing	12/17/09	C&R-233	C&R-243
46	Visitacion Valley Planning Alliance	01/11/10	C&R-615	C&R-621
Individuals				
33	Antonini, Michael J.	01/11/10	C&R-353	C&R-355
16	Birkelund, James	12/19/09	C&R-253	C&R-255
15	Cavella, Barbara	12/12/09	C&R-249	C&R-251
27	Da Costa, Francisco	01/12/10	C&R-305	C&R-321
38	Da Costa, Francisco	01/11/10	C&R-397	C&R-411
89	Da Costa, Francisco	01/12/10	C&R-1671	C&R-1675
104	Da Costa, Francisco	01/13/10	C&R-1785	C&R-1787
105	Da Costa, Francisco	01/18/10	C&R-1789	C&R-1791
106	Da Costa, Francisco	01/18/10	C&R-1793	C&R-1795
115	Da Costa, Francisco	01/10/10	C&R-1845	C&R-1851
17	Dale-LeWinter, Marcia	01/04/10	C&R-257	C&R-265
26	Dodt, Dan	11/13/09	C&R-301	C&R-303
60	Donahue, Vivien	01/12/10	C&R-885	C&R-887
21	Enea, Kristine	12/11/09	C&R-279	C&R-281
96	Fox, Jill	01/12/10	C&R-1711	C&R-1715
57	Franklin, Alice	01/12/10	C&R-867	C&R-869
40	Gould, Corrina	01/12/10	C&R-427	C&R-429
28	Hamman, Michael	01/04/10	C&R-323	C&R-325
35	Hamman, Michael	01/12/10	C&R-369	C&R-375
41	Hamman, Michael	01/12/10	C&R-431	C&R-433
114	Hamman, Michael	01/05/10	C&R-1841	C&R-1843
67	Harvey, Carol	01/12/10	C&R-959	C&R-973
94	Harvey, Carol	01/12/10	C&R-1703	C&R-1705
63	Herrera, Catherine	01/11/10	C&R-901	C&R-903
6	Jackson, Espanola	12/17/09	C&R-187	C&R-189
59	Jefferson, Simon	01/12/10	C&R-879	C&R-881

Table C&R-2 Commenters on the Draft EIR (Alphabetical by Commenter Type)

Letter No.	*Commenter*	*Date of Comment*	*Page Number Where Comment Letter Begins*	*Page Number Where Responses Begin*
65	Joshua, Nyese	01/12/10	C&R-925	C&R-931
95	Koepf, Ernie	01/12/10	C&R-1707	C&R-1709
61	Lee, Mishwa	01/12/10	C&R-889	C&R-893
73	Lee, Mishwa	01/12/10	C&R-1009	C&R-1013
5	Loa, Sam	12/17/09	C&R-183	C&R-185
74	Matlock, Perry	01/11/10	C&R-1019	C&R-1037
48	McRee, Richard	01/12/10	C&R-795	C&R-799
72	Muhammad, Colleen	01/12/10	C&R-1005	C&R-1007
88	Porter Sumchai, Ahimsa	12/11/09	C&R-1653	C&R-1669
100	Shaffer, Linda	01/12/10	C&R-1731	C&R-1735
51	Simms, Robert	01/12/10	C&R-833	C&R-835
110	Singer, Sam	01/05/10	C&R-1825	C&R-1827
54	Stancil, Esselene	01/12/10	C&R-855	C&R-857
53	Stokes, Ernest	01/12/10	C&R-851	C&R-853
66	Tello, Juana	01/12/10	C&R-943	C&R-951
70	Tello, Jesse	01/12/10	C&R-991	C&R-993
19	Whittle, Lola	12/14/09	C&R-271	C&R-273
76	Whittle, Lola	01/12/10	C&R-1061	C&R-1063
23	Winter, Rhonda	12/08/09	C&R-289	C&R-291
	ORAL COMMENTS			
SFRA1	Various commenters spoke at the San Francisco Redevelopment Agency Commission Hearing	12/15/09	C&R-1811	C&R-1989
SFPC	Various commenters spoke at the San Francisco Planning Commission Hearing	12/17/09	C&R-2005	C&R-2113
SFRA2	Various commenters spoke at the San Francisco Redevelopment Agency Commission Hearing	01/05/10	C&R-2139	C&R-2165

E. COMMENTS AND RESPONSES

This section contains responses to comments on the Draft EIR that were received from government agencies, boards or commissions, organizations, and individuals, either orally or in writing. Consistent with Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside of the scope of CEQA review (i.e., where a comment does not raise an environmental issue, or where it expresses the subjective opinion of the commenter) will be forwarded for consideration to the decision-makers as part of the project approval process; these comments are answered with a general phrase, but no more detailed response is provided. All comments will be considered by the Lead Agencies when making a decision on the Project.

Responses are provided as individual responses that respond to specific comments raised and as master responses that respond to broad issues where there were several public comments on the same issue. Master responses are presented first, followed by individual responses. Each comment letter, in numerical order, is included in its entirety, followed by the responses to the individually numbered comments.

E.1 Master Responses

Master responses are used to address similar comments that were raised in more than one letter and to provide information in a comprehensive, easily located discussion that clarifies and elaborates upon the analyses in the Draft EIR. The master responses address the following topics:

- Master Response 1—SB 18
- Master Response 2—Potential Native American Burial Sites
- Master Response 3—Impacts of the Project on Yosemite Slough (Biological Resources)
- Master Response 4—Purpose and Benefits of the Yosemite Slough Bridge
- Master Response 5—Health of the Bayview Hunters Point Community
- Master Response 6—Seismic Hazards
- Master Response 7—Liquefaction
- Master Response 8—Sea Level Rise
- Master Response 9—Status of the CERCLA Process
- Master Response 10—Pile Driving through Contaminated Soils
- Master Response 11—Parcel E-2 Landfill
- Master Response 12—Naturally Occurring Asbestos
- Master Response 13—Post-Transfer Shipyard Cleanup
- Master Response 14—Unrestricted Use Alternative
- Master Response 15—Proposition P and the Precautionary Principle
- Master Response 16—Notification Regarding Environmental Restrictions and Other Cleanup Issues
- Master Response 17—Enforcement of Environmental Restrictions and Mitigation Measures
- Master Response 18—Traffic Mitigation Measures
- Master Response 19—Proposed BAAQMD Guidelines

Master Response 1: SB 18

Introduction

Overview

This master response addresses concerns raised by commenters about the Senate Bill 18 (SB 18) consultation process; in particular, the concern that the Native American tribes and representatives were not formally consulted on the Project prior to publication of the Draft EIR. This response provides a summary of the requirements of SB 18 and information on the consultation process that will be undertaken to ensure that the concerns of the Native American tribes in the region are addressed with respect to the Project.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - Planning Commissioner Borden (SFPC-117)
  - Redevelopment Agency Commissioner Bustos (SFRA2-39)
- Organizations
  - Arc Ecology (84-12)
  - Confederation of the Ohlone People (62-1, 62-2, 62-3)
  - Human Rights Commission (78-1)
  - Indian Canyon Nation/Costanoan Indian Research Inc. (8-1, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8)
  - POWER (People Organized to Win Employment Rights) (52-8)
- Individuals
  - Bernadette Sambrano (SFPC-77)
  - Catherine Herrera (63-1)
  - Corrina Gould (40-1)
  - Espanola Jackson (SFRA2-2)
  - Francisco Da Costa (27-1, 27-2, 38-1, 38-2, 89-1, 89-3, 104-1, SFPC-48, SFPC-50)
  - Mishwa Lee (73-10, 73-11, 73-15, SFPC-29)
  - Neil McLean (SFPC-104)
  - Perry Matlock (74-1, 74-4)

Comment Summary

This master response responds to all or part of the following comments: 8-1, 27-1, 27-2, 38-1, 38-2, 40-1, 52-8, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8, 62-1, 62-2, 62-3, 63-1, 73-10, 73-11, 73-15, 74-1, 74-4, 78-1, 84-12, 89-1, 89-3, 104-1, SFPC-29, SFPC-48, SFPC-50, SFPC-77, SFPC-104, SFPC-117, SFRA2-2, SFRA2-39.

Comments received on the Draft EIR related to SB 18 consultation were focused almost exclusively on issues addressed in Section III.J (Cultural Resources) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.J.

Summary of Issues Raised by Commenters

- The Native American community, including the Indian Canyon Nation, the Mutsun Band of Ohlone/Costanoan people, Confederation of Ohlone People, and the Muwekma Ohlone, desire to be included in the consultation process with regard to the Project

Response

Commenters, including representatives of Native American tribes, asserted that, under SB 18, the City was required to consult with Native American groups during preparation of the Draft EIR regarding potential Project effects on Native American cultural places, and that such consultation did not occur. SB 18, Local and Tribal Intergovernmental Consultation, adopted in 2004, requires California cities or counties to contact and consult with California Native American Tribes before adopting or amending a General Plan or when designating land as open space, for the purposes of protecting Native American Cultural Places. Under *Public Resources Code* (PRC) 5097.9 and 5097.993, Cultural Places are defined as a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine on private lands; or a Native American historic, cultural, or sacred site that is listed or may be eligible for listing in the California Register of Historical Resources (CRHR) pursuant to PRC Section 5024.1, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site on public lands. The California Native American Tribes are defined as those on the contact list maintained by the California Native American Heritage Commission (NAHC). SB 18 sets out a consultation process but does not mandate any specific steps with regard to protection of Native American Cultural Places. Those steps would be developed between the relevant cities or counties and the appropriate California Native American Tribes.

SB 18 is not part of CEQA, and consultation under SB 18 is not a requirement of the EIR process. Therefore, formal consultation with Native American tribes or organizations during preparation of the Draft EIR was not required as part of the CEQA process. In addition, as a charter city, San Francisco is not subject to many of the SB 18 requirements, because it is codified in a portion of the Government Code that concerns General Plan procedural requirements that do not apply to charter cities or counties.

Nonetheless, the City of San Francisco is currently undertaking outreach with Native American groups on the NAHC list related to the General Plan changes proposed as part of the Project.[3,4,5,6] The Project, as noted in Draft EIR Chapter II (Project Description), Section II.G (Approval Requirements), pages II-80 through II-84, would include amendments to the Bayview Hunters Point Area Plan of the General Plan. The Project would also include the introduction of Subarea Plans for the Candlestick Point and Hunters Point areas. The outreach that the City is undertaking is intended to elicit a full understanding of concerns that Native American tribes and organizations have about the Project, how the concerns may be addressed, and any other suggestions or recommendations the Native American tribes or organizations may have. As

[3] John Rahaim, Planning Director, San Francisco Planning Department, letter to Andrew Galvan, The Ohlone Indian Tribe, January 26, 2010.
[4] John Rahaim, Planning Director, San Francisco Planning Department, letter to Ann Marie Sayers, Chairperson, Indian Canyon Band Mutsun Band of Costanoan, January 26, 2010.
[5] John Rahaim, Planning Director, San Francisco Planning Department, letter to Rosemary Cambra, Chairperson, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, January 26, 2010.
[6] John Rahaim, Planning Director, San Francisco Planning Department, letter to Irene Zwierlein, Chairperson, Amah/ Mutsun Tribal Band, January 26, 2010.

part of that outreach, the Planning Department made available to the Native American groups the background documents prepared as part of Draft EIR Section III.J (Cultural Resources and Paleontological Resources), including *Historical Context for the Archaeology of the Bayview Waterfront Project, San Francisco, California* and *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*, cited on Draft EIR p. III.J-1.[7]

Further, Planning Department staff and Mayor's Office staff met on February 19, 2010, with Native American/Ohlone representatives who had responded to the Planning Department's January 26, 2010, letters and offer of consultation. At the meeting, a variety of concerns were expressed and various future actions were agreed to, including (1) allowing time for representatives from additional Native American groups to respond to the request for consultation; (2) providing more information regarding prehistoric archaeological sites to interested Ohlone representatives, to the extent permitted by law; and (3) agreeing that the parties would meet again to consult.

Draft EIR Section III.J (Cultural Resources and Paleontological Resources) describes the potential occurrence of Native American sites, including burial sites, sites eligible for listing on the CRHR, or sites on public land, within the Project boundaries. The Draft EIR identifies the Project effects, and mitigation measures that would avoid significant adverse effects on such sites. Refer to Master Response 2 (Potential Native American Burial Sites) for further discussion of consultation with Native American representatives regarding burial sites that would be part of the mitigation measures.

The comments on the Draft EIR on SB 18 consultation do not address the adequacy or completeness of the Draft EIR regarding Project effects on cultural resources, including Native American sites.

Master Response 2: Potential Native American Burial Sites

Introduction

Overview

This master response addresses concerns raised by commenters that the Project site contains Native American burial sites of symbolic and cultural importance that would be disturbed by Project development. This response explains that the Draft EIR acknowledges that the Project site includes prehistoric burial sites of patrimonial importance to the Native American community. The response also explains that Native American burial remains and funerary objects discovered at the Project site would be treated as required by applicable laws, and with efforts to reach an agreement to treat with appropriate dignity such human remains and funerary objects.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > Planning Commissioner Borden (SFPC-117)

[7] The prior name of the Project was the Bayview Waterfront Project. Some of the technical studies completed for the Project use the former name if they were prepared prior to August 2009; however, regardless of name, the reports address conditions at the Project site.

  - Redevelopment Agency Commissioner Bustos (SFRA2-39)
- Organizations
  - Human Rights Commission (78-1)
  - Indian Canyon Nation/Costanoan Indian Research Inc. (8-1, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8)
- Individuals
  - Francisco Da Costa (89-3)
  - Juana Tello (SFPC-94)

Comments received on the Draft EIR related to Native American burial sites were focused almost exclusively on issues addressed in Section III.J (Cultural Resources) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.J.

Comment Summary

This master response responds to all or part of the following comments: 8-1, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8, 78-1, 89-3, SFPC-94, SFPC-117, SFRA2-39.

Summary of Issues Raised by Commenters

- The Project site contains Native American burial sites of patrimonial, symbolic, and cultural importance that would be disturbed by Project development.
- The Native American community must be involved in the review of effects on such sites or how burial remains are treated after discovery.

Response

Draft EIR Section III.J (Cultural Resources and Paleontological Resources), pages III.J-2 through III.J-5, provides context on the prehistoric record and historic record of indigenous peoples and describes the settlement pattern of Ohlone/Costanoan tribes in San Francisco. The Draft EIR acknowledges that prehistoric sites in San Francisco may include burial sites of patrimonial importance to Native American groups. Draft EIR page III.J-2 notes that the current understanding of San Francisco prehistory recognizes this importance to Native American culture:

- Prehistoric sites sometimes occur in clusters with a primarily symbolic association with a focal shellmound of greater size and age
- The importance of the primary shellmound may have been in the form of religious/funerary observances and burials even after its abandonment
- Bay Area prehistoric shellmounds may have been planned, intentionally re-created structures (not merely inadvertent dietary refuse accumulations)
- Prehistoric shellmounds were sometimes constructed over pre-existing cemeteries
- Many Bay Area shellmounds were abandoned over the course of a relatively brief period

The Draft EIR page III.J-17 further notes, in relation to past excavations of several shellmounds in the Project vicinity, that there is potential for Native American burials to occur at archaeological sites that

could be affected by the Project. Draft EIR pages III.J-18 to -19 describe five indigenous sites that, based on archival research, are known or believed to be located within the boundaries of the Project site (CA-SFR 9, 11, 12, 13, and 14); the sites may currently be under fill or have been destroyed. Undocumented prehistoric sites may also exist within the Project site. Therefore, development of the Project could result in disturbance of previously unrecorded Native American burials and funerary materials.

Impact CP-2a (Change in Significance of Archaeological Resources), Impact of Candlestick Point, Draft EIR page III.J-36, concludes that construction at Candlestick Point would not result in a substantial adverse change in the significance of archaeological resources, including prehistoric Native American, Chinese fishing camp, and maritime-related archaeological remains, because mitigation measure MM CP-2a would reduce potential adverse effects of construction-related activities to archaeological resources at Candlestick Point to less-than-significant levels through implementation of the Project Archaeological Research Design and Treatment Plan (ARDTP).[8] Impact CP-2b (Impact of Hunters Point Shipyard Phase II), Draft EIR III.J-40, and Impact CP-2 (Combined Impact of Candlestick Point and Hunters Point Shipyard Phase II), Draft EIR pages III.J-40 to -41, similarly conclude that impacts on prehistoric Native American resources would be less than significant through implementation of the ARDTP.

To clarify that the Project could affect Native American burial sites of symbolic or cultural importance to present-day Native American tribes and representatives, the following underlined text is added on Section III.J, Draft EIR page III.J-36, Impact CP-2a discussion, as a new sentence three:

> The Project archaeological research has found that archaeological resources expected to be found on the Project site could have important research value and would, therefore, be legally significant under CEQA. Examples of research themes that have been proposed to which expected archaeological resources could contribute significant data include *(i)* the spatial organization and historical development of Chinese fishing camps; *(ii)* effects, adaptations, and resistance of the fishing camps to anti-Chinese fishing legislation (1885-1930s); *(iii)* spatial organization of shipyards and development of local traditions of boat building technology, including that of the scow schooner and Chinese junks; *(iv)* the development, changing function, and inter-settlement relationships of prehistoric shell mounds; *(v)* comparative spatial organization of shell mound sites; *(vi)* changes in prehistoric faunal and biotic exploitation practices; *(vii)* prehistoric changes in social stratification; and *(viii)* the relationship between Hunters Point-Bayview and South of Market area prehistoric settlements. <u>The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives.</u> Any potential archaeological resources, e.g., CA-SFR-9, fishing camps, that are covered by existing development will remain covered and unavailable unless the site is redeveloped.

The following underlined text is added on Section III.J, Draft EIR page III.J-40, Impact CP-2b discussion, paragraph three, as a new sentence three:

> Moreover, previous archaeological investigations have shown that prehistoric archaeological sites in the HPS Phase II site tend to be located along the original shoreline. Therefore, it is possible that Project-related construction activities may encounter previously unknown archaeological resources. <u>The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives.</u>

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[8] Archeo-Tec, Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California, <u>November</u> 2009, as cited on Draft EIR page III.J-1. The prior name of the Project was the Bayview Waterfront Project. Some of the technical studies completed for the Project use the former name if they were prepared prior to August 2009; however, regardless of name, the reports address conditions at the Project site.

The following underlined text is added on Section III.J, Draft EIR page III.J-40, Impact CP-2 discussion, last paragraph, as a new sentence four:

> As discussed above, the Project site is expected to contain subsurface archaeological resources from the Native American, Chinese fishing village, prehistoric, and maritime development periods, including, but not limited to, CA-SFR-9, CA-SFR-11, CA-SFR-12, CA-SFR-13, and CA-SFR-14. Any potential archeological resources, e.g., fishing camps, that are covered by existing development will remain covered and unavailable unless the site is redeveloped. Construction activities associated with the Project could disturb those archaeological resources, and result in potentially significant impacts. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives. Refer to Impact CP-2a and Impact CP-2b and associated discussions, above. Mitigation measure MM CP-2a would reduce the Project potentially significant effects on archaeological resources to a less-than-significant level through implementation of the *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*.

Mitigation measure MM CP-2a would apply to Impacts CP-2a, CP-2b, and CP-2. The measure includes a range of steps, as called for in the ARDTP, for archeological testing, monitoring, and data recovery. Those steps would ensure that archaeological resources, including potential Native American burials, would be identified and significant adverse effects avoided. Mitigation measure MM CP-2a also includes specific steps should human remains or associated or unassociated funerary objects be encountered during Project development, as set forth on page III.J-39 of the Draft EIR:

> Human Remains and Associated or Unassociated Funerary Objects: 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.

As stated above, Native American burial remains and funerary objects discovered at the Project site would be treated as required by applicable laws, with notification of the NAHC and the Most Likely Descendant, and with reasonable efforts to reach an agreement to treat with appropriate dignity such human remains and associated or unassociated funerary objects. Master Response 1 (SB 18) discusses the consultation process required with Native American groups, separate from the CEQA process. That consultation process could result in agreements for participation by Native American representatives in monitoring of sites during investigation for potential prehistoric materials or remains. Such monitoring activities would be in addition to requirements for NAHC and Most Likely Descendant notification steps addressed in mitigation measure MM CP-2a.

The ARDTP addresses appropriate consultation with Native American community regarding burials (ARDTP, page 411):

> **Native American Consultation**
>
> The MEA [San Francisco Planning Department Major Environmental Analysis section] may consult with appropriate member(s) members of the Native American community regarding this project prior to the discovery of burials. This consultation would not designate a Most Likely Descendant (MLD), nor replace the legal process whereby the Native American Heritage would appoint the MLD in the event human remains are found.
>
> Stewart ["An Overview of Research Issues for Indigenous Archaeology", as cited in the ARDTP] notes that "archaeology, contrary to how it was practiced in the past, is currently practiced with a sensibility that insists that indigenous peoples have a stake in the management of their ancestral remains, and that the values bound up in those remains, sites, landscapes, etc., are not exclusively scientific." Although this document's [ARDTP] scope is limited to the data potential of prehistoric sites, this does not preclude the value that the site has beyond its informational value.
>
> Topics of consultation might include, but not be restricted to, the opinions and wishes concerning the Bayview Waterfront Project as an Ohlone ancestral site, the cultural value or concerns regarding the site, opinions on publicity, etc. Of particular concern to archaeological consultants are issues regarding the handling, study, and special studies of burials and human remains—issues usually discussed with or otherwise addressed by an MLD.
>
> Especially sensitive issues are whether the MLD and/or the community would permit analysis of human remains of any sort, or even the archaeological excavation of any burials found. There are MLDs in California who categorically refuse permission to conduct osteological description and non-destructive analysis of human burials. Another is the question of the desirability of obtaining radiocarbon dates from shell beads associated with a burial, or the wish to use a small bone fragment from a Native American burial for radiocarbon dating purposes. Another potentially useful analysis which involves destruction of human remains is removal of a tooth from a mandible or maxilla for purposes of mtDNA extraction and characterization.

Refer also to Master Response 1 (SB 18) explaining that the Planning Department has begun a consultation process with Native American tribal representatives. That consultation process will be an avenue for addressing the types of concerns identified in the ARDTP.

Master Response 3: Impacts of the Project on Yosemite Slough (Biological Resources)

Introduction

Overview

In 2006, the California Department of Parks and Recreation (CDPR) approved the Yosemite Slough Restoration Project (Restoration Project). The Restoration Project, sponsored by the California State Parks Foundation would restore tidal wetlands in a 34-acre parcel of Candlestick Point SRA in Yosemite Slough immediately adjacent to the Project site. The Plan would increase the existing tidally influenced area from 9 acres to over 20 acres, create two islands intended for use by nesting birds, and provide nursery areas for fish and benthic organisms, transitional and upland areas to buffer sensitive habitats, more than 5,000 feet of new interpretive trails with five vista points, approximately 2.5 acres of passive use public areas, an approximately 1,200-square-foot multi-use interpretative center with restroom facilities, new access to the restored area, and additional amenities including parking, fencing, lighting, benches, and drinking water fountains. The restoration design of the slough would also address soil contaminant issues arising from previous fill activities that could affect human and wildlife health. The Restoration Project has not been

implemented. It is proposed for construction in an area adjacent to but outside of the Project area, with the exception of a small area that overlaps the proposed location of the Yosemite Slough bridge.

The biological impacts associated with the construction and operation of the Yosemite Slough bridge have been analyzed in Section III-N of the Draft EIR. However, specific concerns have been raised that the development of the Project would negatively impact the proposed/ongoing Restoration Project if it proceeds. Specifically, commenters have stated that development of the Yosemite Slough bridge would release contaminated sediment into the environment, provide an additional source of contaminated runoff into the slough, divide an existing state park, and disrupt existing or future wildlife migration. Some commenters suggested that the effects of the bridge, particularly on the Restoration Project, were not analyzed in the Draft EIR and indicated that maps in the Draft EIR did not clearly indicate whether the Restoration Project was part of the Project area. Specific concerns also included the potential effects of construction-related disturbance while the bridge is being constructed, operational effects of noise, vibration, and exhaust from vehicles using the bridge on wildlife using the area around the bridge, including the restoration site, and effects of shading from the bridge on habitats below. Comments suggested that the Draft EIR did not address these potential impacts in sufficient detail.

This response provides detail regarding how the Draft EIR took the Restoration Project into account in its analysis and why the Project would not significantly impact the Restoration Project or impair or interfere with the goals and objectives of the Restoration Project. This master response addresses these comments with respect to the Restoration Project and biological resources. Traffic issues associated with the proposed bridge are addressed in Master Response 4 (Purpose and Benefits of the Yosemite Slough bridge), and hazardous materials and contamination issues are addressed in Master Response 9 (Status of the CERCLA Process).

This master response has been prepared using the analysis of Project impacts to biological resources in the Draft EIR; references to technical literature; plans for the Restoration Project provided by WRA, Inc., the firm that designed the wetland restoration plan; reference to other relevant sites in the San Francisco Bay area (Bay area); and analysis and inferences drawn from these sources by Stephen C. Rottenborn, Ph.D. Dr. Rottenborn, a principal and senior wildlife ecologist with the ecological consulting firm H. T. Harvey & Associates, is an expert on the wildlife, particularly birds, of the Bay area. Dr. Rottenborn's expert analysis addresses issues raised in the various comments on biological impacts and in particular the Restoration Project. His curriculum vitae is provided in Appendix C&R-1 (Biological Consultant Curriculum Vitae).

This response is organized by the following topics:

- Consideration of Yosemite Slough and the Yosemite Slough Restoration Project in the Draft EIR
- Summary of the Restoration Project
- Discussion of Biological Resource Impacts on Yosemite Slough in the Draft EIR
- Potential Effects of Noise on Wildlife Use of the Yosemite Slough
- Potential Effects of Vehicle Exhaust on Plants and Animals of Yosemite Slough
- Potential Effects of Lighting on Animals of Yosemite Slough
- Wildlife Use and Habitat Conditions at Reference Sites
- Expected Effects of the Bridge on Wildlife Use of Yosemite Slough
- Conclusion

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > California State Parks (86-1, 86-6, 86-12)
  - > Planning Commissioner Lee (SFPC-125)
- Organizations
  - > Arc Ecology (85-25, 85-29)
  - > California State Parks Foundation (47-3, 47-4, 47-5, 47-7, 47-17, 47-18, 47-19, 47-21, 47-22, 47-23, 47-24, 47-35, 47-37, 47-38, 47-40, 47-47, 47-49, 47-50, 47-51, 47-54, 47-56, 47-59, 47-68, 47-70, 47-71, 47-72, 47-73, 47-74, 47-75, 47-77, 47-81, 47-82, 47-86, 47-87, 47-89, 47-93, 47-97)
  - > Golden Gate Audubon Society (81-1, 81-2, 81-4, 81-7, 81-9, 81-10, 81-11, 81-13, 81-14)
  - > Green Action Health and Environmental Justice (SFPC-81, SFPC-826)
  - > San Francisco Bay Conservation and Development Commission (103-9, 103-19)
  - > San Francisco Bay Trail (31-6)
  - > San Francisco Tomorrow (64-2, 64-4)
  - > Sierra Club (75-5, 75-7)
  - > Yosemite Slough Project at Candlestick Recreation Area (SFRA1-78, SFRA1-79)
- Individuals
  - > Linda Richardson (SFPC-4)
  - > Mishwa Lee (61-3, 61-7, 73-6)
  - > Saul Bloom (SFPC-136)

Comments received on the Draft EIR related to the Restoration Project and biological resource impacts were focused almost exclusively on issues addressed in Section III.N (Biological Resources) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.N.

Comment Summary

This master response responds to all or part of the following comments: 31-6, 47-3, 47-4, 47-5, 47-7, 47-17, 47-18, 47-19, 47-21, 47-22, 47-23, 47-24, 47-35, 47-37, 47-38, 47-40, 47-47, 47-49, 47-50, 47-51, 47-54, 47-56, 47-59, 47-68, 47-70, 47-71, 47-72, 47-73, 47-74, 47-75, 47-77, 47-81, 47-82, 47-86, 47-87, 47-89, 47-93, 47-97, 61-3, 61-7, 64-2, 64-4, 73-6, 75-5, 75-7, 81-1, 81-2, 81-4, 81-7, 81-9, 81-10, 81-11, 81-13, 81-14, 85-25, 85-29, 86-1, 86-6, 86-12, 103-9, 103-19, SFRA1-78, SFRA1-79, SFPC-4, SFPC-81, SFPC-82, SFPC-125, SFPC-136.

Summary of Issues Raised by Commenters

- No mention of the Restoration Project in Draft EIR
- The potential effects of construction-related disturbance to the slough
- Operational effects of noise, vibration, and exhaust from vehicles using the bridge on wildlife using the area around the bridge, including the Restoration Project site
- Effects of shading from the bridge on habitats below
- Project would interfere with goals of the Restoration Project

Response

It is important to recognize that CEQA requires that except for special-status species, determinations of significant adverse impacts depend on the regional habitat value of resources and species viability rather than the amount of impact in a specifically defined but very limited habitat.

Impacts to special-status species would be significant (in the absence of mitigation) if the Project would adversely affect any of the following: (1) a species listed as threatened or endangered by the state or federal government at the time the Draft EIR is published; (2) a major population or subpopulation of a species that would result in the regional declines of this species; (3) a relatively large number of individuals within a population that is considered rare or declining; (4) a species' metapopulation (i.e., if one of only a few known populations occurs in the impact zone, or if the species has extremely narrow habitat requirements); or (5) a habitat type or vegetation community in regional decline or that is regionally endemic and recognized as such by the local, state, or federal agencies identified in the Setting section.

Impacts to sensitive or rare species would be less than significant, even without mitigation, if they are not expected to substantially affect species or populations because (1) a relatively small number of non-listed individuals would be impacted; (2) the number of individuals of a non-listed species to be impacted represent a very small fraction of regional populations due to the species' regional abundance; (3) recovery and conservation effects are documented to adequately conserve the species or habitat, and impacts would not affect the recovery or conservation of this species or habitat; or (4) the species or habitat is locally common and fairly abundant in the region. Because such species exist in a broad area, in regionally abundant habitat, such species would not be expected to experience substantial impacts from a project.

Consideration of Yosemite Slough and the Yosemite Slough Restoration Project in the Draft EIR

Confusion regarding whether or not Yosemite Slough was considered part of the Project and whether impacts to portions of Yosemite Slough outside the Project site were analyzed in the Draft EIR stemmed in part from reviewers' interpretations of various figures in the Draft EIR, particularly Figure III.N-1 (Biological Resources Study Area). This figure correctly depicted only the mouth of Yosemite Slough as being within the "Project Boundary," while showing that a slightly greater portion of the slough was within the "Study Area" and the entire slough was within the "Yosemite Slough Watershed Wildlife Study Area." Commenters questioned why these study areas differed.

The purpose of Figure III.N-1 was to indicate the relationships of three different geographic areas: the boundary of the Project site (Project Boundary); the boundary of the area that was covered by the wetland delineation performed for the Project (Study Area); and the boundary of the area in which data on wildlife use had been collected during a study performed by LSA Associates, Inc. and volunteers in 2004 (Yosemite Slough Watershed Wildlife Study Area). The Study Area boundary extended beyond the Project boundary because impacts to wetlands and aquatic habitats, both existing and those that would be present after implementation of the Restoration Project, were anticipated to occur slightly upstream from the Project boundary during construction of the Yosemite Slough bridge. That the Study Area boundary did not include the entire slough does not indicate that the remainder of the slough was not considered in the impact analysis. Rather, as discussed in the following section, the impact analysis considered direct and

indirect effects on all biological resources both within and adjacent to the Project boundary, including all of Yosemite Slough and relevant adjacent areas.

Commenters suggested that the Draft EIR did not adequately recognize the Restoration Project as an integral component of the Candlestick Point State Recreation Area (CPSRA) or adequately analyze effects of the bridge on the Restoration Project, and suggested that the bridge would conflict with the goals of the restoration. CEQA initially requires an analysis of the Project's effects against existing baseline conditions. The Restoration Project, although planned and approved, has not been implemented. After analyzing the impacts of a Project against existing conditions, CEQA requires consideration of Project effects in combination with other past, present, and future projects, i.e., a cumulative impact analysis. The Restoration Project was discussed in the cumulative context and was considered one of the "planned and in-process wetland restoration projects within the Bay area" in the cumulative impact analysis on page III.N-118 of the Draft EIR.

In addition, the Draft EIR considered the effects of the Project on the habitats and species that would be expected to use the restoration site in the context of the Draft EIR's assessment of direct and indirect impacts to sensitive habitats and special-status/sensitive species both on- and off-site (Impact BI-3a through Impact BI-12c). Direct, explicit reference to the effects of the CP-HPS Project, including the Yosemite Slough bridge, on the Restoration Project itself was limited in the Draft EIR because the Draft EIR followed the CEQA requirement to assess impacts with respect to the change that the Project would cause to existing, baseline conditions (under which the Restoration Project has not been implemented). The descriptions of Project impacts focused on existing conditions rather than explicitly discussing the future Restoration Project. However, the Draft EIR fully assessed the impacts on the resources that are the focus of the Restoration Project. As explained in more detail below, habitats in the existing slough and along the Candlestick Point and HPS Phase II shorelines contain the same or similar characteristics as the restored slough in terms of the types of habitats and species that could be impacted by the Project. To enable the public to see how the analysis covered the impact areas, this master response more directly correlates the biological analysis with the details of the Restoration Project.

Summary of the Restoration Project

As stated in the Initial Study/Mitigated Negative Declaration (IS/MND) issued by the California State Parks Foundation[9] for the Restoration Project, the goals and objectives of the restoration plan include the following:

- Increase the area subject to tidal influence.
- Restore habitat diversity by re-establishing tidal flats and marsh in areas of present upland fill.
- Improve local foraging and roosting habitat for migratory and resident birds.
- Improve quality of life for the surrounding community.
- Remediate, sequester, or remove contaminated soils to reduce potential for human and wildlife contact.
- Create a clean, beautiful, and local park that the public can visit and view wildlife habitat.

[9] California State Parks Foundation. 2006. Initial Study/Mitigated Negative Declaration. Candlestick Point State Recreation Area Yosemite Slough Restoration Project.

- Create an environmental area that local schools can use for educational field trips.
- Benefit local businesses by increasing the number of visitors coming to the area.
- Connect the Bay Trail through CPSRA with the Bay Trail that is proposed for Hunters Point.

The 12 acres of wetlands would occur through the excavation of three embayments. This would occur with inland excavation only, without dredging and minimal grading. The new wetlands would be vegetated with cordgrasses along the slough, pickleweed within most of the wetland, and gumplant, salt gratt, fat hen, and alkali heath within the traditional areas separating the grasslands from the wetlands.

Excavation on the north and south sides of the slough would create embayments and two isolated nesting islands. A sandy nesting island would be created on the northern side of the slough to provide habitat for birds, which according to the IS/MND for the Restoration Project would include species such as plovers, curlews, and sandpipers. This island would be approximately 0.71 acres in size and would be located in stable areas that would be minimally subject to erosion from tidal action. A second island, approximately 1.34 acres in size, would be created on the southern side of the slough. This island would primarily be constructed to shells with vegetation composed of coyote brush to provide loafing and foraging habitat for birds, which according to the IS/MND would include species such as ducks, western grebes, and greater and lesser scaup. Principal features of the proposed plan are the isolated bird nesting islands. The IS/MND states that the sand, shell, and rocky beaches would provide nesting habitat for a variety of summer nesting shorebirds such as the American avocet, black-necked stilt, and several species of terns. Isolation of the islands from the mainland by tidal channels is intended to protect nesters from feral animal and human disturbance.

The increased areas of cordgrass created in the restored wetland areas would provide refuge and a high quality of foraging area for juvenile fish thus creating a nursery habitat for local and migratory fish. The restored areas of cordgrass and pickleweed with the appropriate imported and amended soils would provide habitat for benthic invertebrates, including various worm and bivalve species. Benthic invertebrates are known to be important sources of food for shorebirds and bottom feeding fish.

Salt marsh vegetation occurs along the shoreline which is alternately exposed by low tides and inundated by high tides on a daily basis, between Mean Low Water and Mean Higher High Water. Low salt marsh typically occurs above Mean Low Water. This zone would be planted with Pacific cordgrass, a native species typically found in this zone. Middle salt marsh occurs around Mean Tide Level and planting in this zone would be primarily pickleweed. Within the zone of irregular flooding by the higher high tides, Mean High Water to Mean Higher High Water, planting would include alkali heath, fleshy jaumea, and salt grass. In areas where the California clapper rail and salt marsh harvest mouse occur, areas of cordgrass and low inter-tidal to mid-tidal ranges are the preferred habitat of California clapper rail, and pickleweed and high marsh areas are the preferred habitat of the salt marsh harvest mouse, both listed species.

The studies and surveys done to prepare the Restoration Plan determined that the potential for presence of any special-status wildlife species within the Yosemite Slough project area is presently low. Occupation by these species is greatly limited by existing site conditions, which either are not suitable or are not of sufficient stature to support most species. The IS/MND states that it is likely that restoration of the site could create native transitional and wetland habitats, which could substantially increase nesting and

foraging habitats for wildlife species, particularly for sensitive species such as the western snowy plover, San Francisco common yellowthroat, double-crested cormorant, and the California clapper rail.

The Restoration includes preparation of the Monitoring and Adaptive Management Plan that would set the framework for long-term (5 year) biological monitoring of the project's restored habitats. There is a contingency measure provision that states that if annual or final success criteria are not met, the applicant would prepare an analysis of the cause(s) of failure and, if determined necessary by the Corps, propose remedial action for approval.

As discussed in the following sections, the Draft EIR analyzed impacts of the Project, including the proposed bridge, upon areas subject to tidal influence such as tidal flats and marsh (i.e., impacts to tidal wetlands, mud flats, and aquatic habitats were assessed). The Restoration Project would increase the extent of these habitats, in particular increasing the extent of tidal marsh habitat in Yosemite Slough and restoring more extensive contiguous marshes. The new, restored tidal marsh would increase the extent of vegetated wetlands by approximately 12 acres, which comprises approximately 0.003% of similar baylands and shallow aquatic habitats available within the Bay.[10] The pockets of marsh such as those that could be present on the restoration site after wetland construction are not expected to attract species other than those which currently use the CP-HPS Project site, in Dr. Rottenborn's opinion. Therefore, although the impact assessment in the Draft EIR did not expressly differentiate between impacts to existing wetland, mud flat, and aquatic habitats and those that could be present after implementation of the Restoration Project, the Draft EIR described the types of impacts to those habitats (and associated species) that could occur, considered the significance of those impacts, and prescribed mitigation measures. The intent was to identify impacts and the associated mitigation measures to address impacts to any sensitive habitats or species within the Project's impact areas, whether those habitats and species were on site or off site, and whether the habitats and species currently exist or could exist after implementation of the Restoration Project.

The potential impacts of the bridge on migratory and resident birds, and other taxa, that could use the restoration site were analyzed in the context of existing conditions, as the species expected to use the restoration site after restoration implementation are species that are currently present at least occasionally on the site. The Restoration Project would expand marsh and mud flat habitat, potentially providing more extensive habitat for species associated with vegetated tidal marsh such as marsh wrens, Alameda song sparrows, and possibly Bryant's savannah sparrows. Although implementation of the Restoration Project would increase the potential for these species to breed in Yosemite Slough in small numbers, relative to existing conditions, these species already could potentially occur in low numbers in the marsh remnants on the Project site. Other marsh-associated species, such as the California clapper rail, salt marsh harvest mouse, and salt marsh wandering shrew, are not expected to occur in the restored tidal marsh. The harvest mouse and wandering shrew are not known to occur as far north on the San Francisco Peninsula as the

[10] Goals Report. 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. First Reprint. U.S. Environmental Protection Agency, San Francisco, CA/San Francisco Bay Regional Water Quality Control Board, Oakland, CA.

Project site,[11,12,13] and the site is isolated from potential source populations of these low-mobility species by miles of unsuitable habitat. As a result, there is no significant potential for natural colonization of restored tidal marsh in Yosemite Slough by these small mammals. Although the California clapper rail is mobile enough to be able to disperse to the site vicinity from source populations elsewhere, marsh size and proximity to other marshes are important determinants of habitat quality for this species, which typically nests in larger marshes, with more well-developed networks of small tidal channels, than would be restored by the Restoration Project.[14] Based on the small size of the marsh to be restored, Dr. Rottenborn concludes that California clapper rails would not be expected to use the restored marsh to any significant degree. Therefore, these "new" habitat areas are not expected to attract species other than those which currently use Yosemite Slough and South Basin at least occasionally.

The effects of the bridge on the species that might use the "nesting islands," if and when they are proposed as part of the Restoration Project, are not expected to be substantial. In Dr. Rottenborn's assessment of literature and characteristics of these species, suggests it is unlikely that additional species (i.e., those that are not currently present on the site) would actually use those islands for nesting to any significant degree. As noted, the Restoration Project description describes these islands as being created for special-status species such as the double-crested cormorant and snowy plover. In fact, neither species is likely to nest on these islands as described. Neither the cormorant nor the plover nests on such small, low, shell/sandy islands surrounded by tidal water anywhere in the Bay area. Rather, double-crested cormorants breeding in the Bay area nest primarily on electrical transmission towers or larger rocky islands (Ainley 2000).[15] A ground-nesting colony in the San Jose area is located on extensive berms separating (and surrounded by) vast, non-tidal ponds, where the birds are much farther from mainland areas supporting potential mammalian nest predators such as raccoons than would be the case at Yosemite Slough.[16] Consequently, Dr. Rottenborn does not expect that cormorants would nest on small, low islands surrounded by tidal water in Yosemite Slough. Likewise, snowy plovers breeding in the Bay area nest on extensive sandy beaches along the coast or, inside the Bay, in areas providing extensive salt pannes (depressions embedded within salt and brackish marshes), in salt pond bottoms, or on islands of bay sediment within large, non-tidal salt ponds.[17] Based on the known habitat use of this species in the Bay area, Dr. Rottenborn does not expect this species to nest on the shell

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[11] Shellhammer, H. S. 2000. Salt marsh harvest mouse. Pages 219-228 *in* Olofson, P.R. (ed.), Goals Project. Baylands ecosystem species and community profiles: life histories and environmental requirements of key plants, fish and wildlife.
[12] Shellhammer, H. S. 2000. Salt marsh wandering shrew. Pages 231-233 *in* Olofson, P.R. (ed.), Goals Project. Baylands ecosystem species and community profiles: life histories and environmental requirements of key plants, fish and wildlife.
[13] U.S. Fish and Wildlife Service. 2010. Draft recovery plan for the tidal marsh ecosystems of northern and central California. February 10, 2010 draft. California/Nevada Operations Office, Sacramento, CA.
[14] U.S. Fish and Wildlife Service. 2010. Draft recovery plan for the tidal marsh ecosystems of northern and central California. February 10, 2010.
[15] Ainley, D. G. 2000. Double-crested cormorant. Pages 323-325 *in* Olofson, P.R. (ed.), Goals Project. Baylands ecosystem species and community profiles: life histories and environmental requirements of key plants, fish and wildlife. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. San Francisco Bay Regional Water Quality Control Board, Oakland, California.
[16] Bousman, W. G. 2007. Double-crested cormorant. Pages 148-149 *in* Bousman, W. G. (ed.), Breeding Bird Atlas of Santa Clara County. Santa Clara Valley Audubon Society.
[17] Page, G. W., C. M. Hickey, and L. E. Stenzel. 2000. Western snowy plover. Pages 281-284 *in* Olofson, P.R. (ed.), Goals Project. Baylands ecosystem species and community profiles: life histories and environmental requirements of key San Francisco Bay Regional Water Quality Control Board. Plants, Fish and Wildlife. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. Oakland, California.

island that the Restoration Project expected would be vegetated with shrubs such as coyote brush; snowy plovers breed in open/barren to only sparsely vegetated areas.[18,19] Snowy plovers are also not expected to nest on the island that is proposed to be "sandy" due to its small size, exposure to tidal action, and proximity to the proposed marsh and to the human-use areas of the Restoration Project itself. In Dr. Rottenborn's experience with this species and review of the literature on Bay area-breeding snowy plovers, this species is not known to nest in such circumstances anywhere in the Bay area.

There is a low probability that most other island-nesting bird species in the Bay area, such as American avocets, black-necked stilts, Forster's terns, and Caspian terns, would nest on these islands. Unless (or more likely, until) these islands become dominated by vegetation, their substrate might be suitable for nesting by such species. However, small islands subjected to fully tidal conditions are not, in Dr. Rottenborn's experience, used for nesting by these species in south San Francisco Bay. Maintaining these islands free from vegetation is not proposed by the Restoration Project. As a result, these islands may become too densely vegetated to provide suitable breeding habitat for these species. Alternatively, they may be subject to so much tidal wash that colonization by vegetation or nesting by birds is precluded. Regionally abundant ducks (such as mallards), and perhaps western gulls (which nest on Double Rock), may nest on these islands, though again, western gulls are unlikely to nest on islands that are either densely vegetated or are unvegetated due to tidal action. However, Dr. Rottenborn expects the sandy island to be used primarily by foraging and roosting waterbirds. The shell/vegetated island would likely be used primarily by species that currently use the coyote brush-dominated portions of the non-native annual grassland currently present in some areas along the edges of Yosemite Slough and South Basin, and by roosting and foraging waterbirds along the perimeter of the island if open, unvegetated foraging and loafing areas persist.

More importantly, limited nesting by special-status species new to the restoration area is not likely to be significantly impacted by the bridge. As noted, most of these species would not be breeding during the winter season. Temporary impacts from light, vibration, and exhaust may be attenuated by the physical separation of the islands from the bridge, since many of the birds using those islands are expected to learn that game-day impacts are not only confined to a few hours but that the people and vehicles using the bridge also cannot physically intrude on the island habitat.

Since the Restoration Project has not been implemented, there is some uncertainty as to how the bridge might affect this future project. It is not known, for example, whether all or just part of the Restoration Project would be constructed prior to construction of the Yosemite Slough bridge, and thus the extent of restored habitats that would be subject to impact by the bridge is unknown. Also, there is an Environmental Protection Agency (USEPA) inquiry into contamination of materials within Yosemite Slough, and it is possible that some remediation of these materials would be required prior to, or simultaneously with, the restoration. Because the USEPA has not yet reached a decision as to whether it would require any such remediation,[20] the timing of such remediation and hence a delay in restoration, if required, is unknown.

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[18] Page, G. W., J. S. and J. C. Warriner, and P. W. C. Paton. 1995. Snowy plover (*Charadrius alexandrinus*). *In* A. Poole and F. Gill (eds.), The Birds of North America, No. 154. The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

[19] U.S. Fish and Wildlife Service. 2007. Recovery plan for the Pacific Coast population of the western snowy plover (*Charadrius alexandrinus nivosus*). California/Nevada Operations Office, Sacramento, CA.

[20] Brett Moxley (U.S. EPA), pers. comm. to Stephen C. Rottenborn (H. T. Harvey & Associates), phone conversation on January 28, 2010.

Even so, as described in the following sections, Dr. Rottenborn expects the impacts of the proposed CP-HPS Project, including the Yosemite Slough bridge, on the habitats and species either existing in the Project area or expected to occur in the Project area upon completion of the Restoration Project to be comparable to those described in the Draft EIR for existing habitats and species using the slough and the CP-HPS shoreline. Although the Restoration Project would increase the extent of tidal aquatic, mudflat, and (especially) tidal marsh habitat in Yosemite Slough, the type of the potentially affected habitats and species present after implementation of the Restoration Project would be largely similar to the existing conditions. Restoration of marsh habitat in Yosemite Slough would increase the potential for species associated with vegetated tidal marsh such as marsh wrens, Alameda song sparrows, and Bryant's savannah sparrows to nest in the slough (and/or increase the number of pairs that might breed in the slough to some extent), but these species could already be present in the Project area (albeit in low numbers). As described in detail in the following sections, the quantity of impacts to the new/restored habitats, including habitats that might be used by nesting birds associated with tidal marsh habitats, would not be substantially greater than the Project's effects on existing Yosemite Slough conditions. The following sections expand on some of the concerns raised in comments regarding effects on biological resources in the slough. These sections discuss that, while the bridge would have a limited adverse effect on habitat conditions in and wildlife use of the Restoration Project, impacts are either less than significant, or mitigable to less-than-significant levels, and the bridge would not preclude the achievement of the biological goals of the Restoration Project.

Discussion of Biological Resource Impacts on Yosemite Slough in the Draft EIR

The Draft EIR discussed potential impacts of the Yosemite Slough bridge on common species and habitats (Impact BI-2), special-status plants (Impact BI-3b), wetlands and aquatic habitats (Impact BI-4c), fish and marine mammals (Impact BI-9b), native oysters (BI-10c), designated critical habitat for green sturgeon and Central California Coast steelhead (Impact BI-11c), essential fish habitat (Impact BI-12c), wildlife movement and wildlife nursery sites (Impact BI-13b), and local policies or ordinances protecting biological resources (Impact BI-14b). These discussions did not separately distinguish impacts to existing biological resources from impacts to biological resources that may be expected to occur in the future following implementation of the Restoration Project by State Parks, because although some habitats, such as intertidal mud flat and tidal salt marsh, would be more extensive once restoration occurs, the species and habitat types that would be present following restoration are comparable to the types of species and habitats currently present at Yosemite Slough. Therefore, the Project-specific and cumulative impact analysis performed in the Draft EIR considered direct and indirect effects of the bridge, including its construction and use, on biological resources that are currently present, and that would be present after restoration has been completed, both on- and off-site. To better understand these issues, the full effect on the Restoration Project will be outlined.

As discussed in the Draft EIR, construction of the Yosemite Slough bridge is expected to affect common species and habitats, sensitive habitats such as wetlands, mud flats, and aquatic habitats, and potentially some special-status wildlife species. The Draft EIR prescribed measures (MM BI-4a.1, MM BI-4a.2, MM BI-4c, MM BI-5b.1 through MM BI-5b.4, MM BI-9b, MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, MM BI-12b.2, and MM BI-14a) to mitigate potentially significant impacts to less than significant levels. As identified in mitigation measure MM BI-4a.1 on pages III.N-59-62 of the Draft EIR, the permanent loss of aquatic, mud flat, and essential fish habitats as a result of the placement of bridge piers within the slough

would be mitigated by replacement of such habitat through creation or restoration at a minimum 1:1 ratio. In addition, the following text has been added to mitigation measure MM BI-4a.2 (on page III.N-63 of the Draft EIR, before the last square bullet beginning with "For impacts to tidal habitats") to ensure temporarily impacted sensitive habitats would be restored to their pre-construction condition following the completion of construction activities:

> …
>
> - *Testing and disposal of any dredged sediment shall be conducted as required by the USACE and the Long-Term Management Strategy (LTMS)*[790]
> - *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 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 Water Mitigation and Monitoring Plan as described above.*
> - *For impacts to tidal habitats: …*

Several commenters questioned why the Draft EIR explicitly analyzed impacts to future wetlands that may be constructed as part of the US Department of the Navy (Navy) wetland mitigation on HPS but did not explicitly analyze the potential impacts to wetlands that would be created by the Restoration Project. Neither the Navy's wetland mitigation nor the Restoration Project is currently in place, and thus neither project comprises part of the existing CEQA baseline. They are future potential impacts which are likely or foreseeable impacts, and are assessed based on the likelihood and timing of occurrence. To more explicitly explain the extent of possible impacts to wetland and aquatic/mud flat habitats that would be present after the Restoration Project is implemented, the proposed bridge footprint and temporary construction/access areas were overlaid electronically on final plans for Phase I of the restoration plan (on the north side of Yosemite Slough) provided by WRA, Inc., the firm that designed the wetland restoration plan, on 19 January 2010 and 50 percent plans for Phase II (on the south side) provided by WRA on 4 February 2010. The text of the cumulative impact analysis has been revised in the Final EIR to include an assessment of the resulting changes in acreages of impacts to jurisdictional habitats that would be affected, as described in further detail below and depicted in Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration). This more detailed explanation and calculation of acreages clarifies the extent of the potential impact if the Restoration Project is constructed in accordance with the designs provided by WRA prior to construction of the bridge. The assessment does not result in a new significant impact or a substantial increase in the magnitude of an impact because the Draft EIR had already identified impacts to wetlands and other waters resulting from construction of the Yosemite Slough bridge as a significant impact, and the impacts to "new" wetlands that would be restored by the Restoration Project do not substantially increase the magnitude of these impacts over those assessed in the Draft EIR. Although approximately 12 acres of new tidally influenced habitats, predominantly tidal marsh, are proposed to be constructed by the Restoration Project, bridge construction access would result in temporary impacts to only 0.21 acre of new vegetated tidal marsh that is proposed as part of the Restoration Project, and less than 0.01 acre of wetlands that would be restored by the Restoration Project would be permanently impacted by shading as a result of being located directly under the bridge. The bridge would result in no permanent fill of new/restored wetland, aquatic, or mud flat habitat other than

Figure III.N-7 Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration [New]

in existing conditions as created by the Restoration Project. Rather, while temporary impacts to wetlands and other waters would increase slightly, permanent impacts to these sensitive habitats would be reduced if the Restoration Project is implemented prior to bridge construction because shoreline improvements that would otherwise be constructed as part of the Project would then not be necessary on the south side of Yosemite Slough west of the bridge. A total of 0.03 acre of permanent impacts to existing wetlands and 0.19 acre of permanent impacts to existing Section 404 waters along the Yosemite Slough shoreline (off site) that were originally identified for the Project would not occur if Phase II of the restoration plan is implemented prior to bridge construction (though these existing jurisdictional areas would be temporarily impacted during bridge construction).

The mitigation measures that were previously described in the Draft EIR would, as originally intended, apply to any impacts to wetland and aquatic habitats, whether such habitats currently exist or are restored by the Restoration Project prior to bridge construction. Therefore, the mitigation measures for impacts to new wetland, aquatic, and mud flat habitats on the Restoration Project site were identified in the Draft EIR.

To more directly respond to public concerns, the following text has been added to the cumulative impacts discussion (before the first partial paragraph on page III.N-122 of the Draft EIR) to provide a more detailed discussion of impacts to future wetland and aquatic habitat in consideration of the Restoration Project:

> In response to public concerns, impacts to future wetland and aquatic habitat in consideration of the Yosemite Slough Restoration Project have been quantified. If the Restoration Project is implemented before the Yosemite Slough bridge is constructed, then the bridge would impact not only existing wetlands, aquatic habitats, and mud flats, but also sensitive habitats that have been restored by the Yosemite Slough Restoration Project. Based on the final Phase I Restoration Plan (on the north side of Yosemite Slough) provided by WRA, Inc. (the firm that designed the restoration plans) on 19 January 2010 and 50 percent plans for Phase II of the Restoration Plan (on the south side of Yosemite Slough) provided by WRA on 4 February 2010, additional impacts to sensitive habitats were calculated and are illustrated by Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration). Bridge construction access would result in temporary impacts to 0.21 acre of new vegetated tidal marsh that is proposed as part of the Yosemite Slough Restoration Project, but the CP-HPS Project would result in no permanent fill of new/restored wetland, aquatic, or mud flat habitat. Further, if the Restoration Project is implemented prior to bridge construction, shoreline improvements that would otherwise have been constructed to extend along the southern Yosemite Slough shoreline will not be necessary. Therefore, 0.03 acre of permanent impacts to wetlands and 0.19 acre of permanent impacts to Section 404 waters along the southern Yosemite Slough shoreline (off site) that were originally identified for the Project would not occur if Phase II of the Restoration Plan is implemented prior to bridge construction (though these existing jurisdictional areas would be temporarily impacted during bridge construction). Temporary impacts would be mitigated through implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2, as required by the Project. Based on the plans for the restoration site provided by WRA as described above, less than 0.01 acre of wetlands that would be restored by the Restoration Project would be impacted by shading as a result of being located directly under the shadow of the bridge. If additional vegetated wetlands are proposed within the bridge footprint as design for Phase II of the Restoration Plan proceeds, such that additional shading impacts to vegetated wetlands would occur, and if such wetlands are constructed prior to construction of the bridge, mitigation for such impacts will be provided by the CP-HPS Project at a 1:1 ratio as described above.

In addition to new wetlands and other waters that are restored (i.e., from existing nonjurisdictional areas) by the Restoration Project, it is also possible that wetland vegetation would colonize some areas near the proposed bridge site that are currently unvegetated "other waters" as a result of planting or changes in hydrology or sediment accretion that occur as a result of the Restoration Project. As a result, some bridge

impact areas that are currently aquatic or mud flat habitat could be vegetated at the time of bridge construction, resulting in a slight increase in impacts to vegetated wetlands due to construction access or, possibly, shading and a concomitant decrease in impacts to other waters. However, such areas were already considered impacted "other waters" in the Draft EIR, and they would be very limited in extent. Impacts to vegetated wetlands, whether currently existing or existing at the time of construction, would be mitigated via implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2, as described in the Draft EIR.

The construction of the Yosemite Slough bridge and approach roads would also impact limited areas of upland habitat, including upland transitional habitat located immediately upslope from restored wetlands and a proposed buffer zone located immediately upslope from the transitional habitat within the proposed restoration site. Impacts to upland transitional and buffer habitat would be predominantly temporary, occurring during bridge construction, with approximately 600 square feet of potential, temporary impacts to upland transitional and buffer habitats on the Restoration Project site (based on an overlay of the bridge plans over the Restoration Project plans provided by WRA). Such temporarily impacted areas would be restored to their pre-construction conditions following bridge construction. Approximately 170 square feet of upland transitional and buffer habitat would be permanently impacted by the bridge abutment on the northern side of the slough. Approximately 1.5 acres of additional upland areas within the Restoration Project site would be permanently impacted by the bridge approach roads, including areas on both the north and south sides of the slough. These upland areas would be planted with native shrubs, grasses, and forbs.[21] The upland transitional, buffer zone, and upland habitats on the Restoration Project site that would be impacted by the CP-HPS Project are similar to non-native annual grassland and landscaped areas at Candlestick Point and on portions of HPS Phase II, as described in Section III.N of the Draft EIR. Impacts to such upland habitat types and the plant and animal species associated with them were evaluated in Impact BI-2 (Common Species and Habitats) on pages III.N-50 to -55 of the Draft EIR. The additional impact to 1.5 acres within the Restoration Project site would not substantially increase Project effects on upland grassland or landscaped habitat or the species using these habitats due to the limited extent of such additional impacts. Furthermore, as discussed in Impact BI-2 (Common Species and Habitats) in the Draft EIR, any plant or wildlife species occurring in regionally abundant upland habitats on the Restoration Project site is itself regionally abundant, and any adverse effects of the CP-HPS Project on the abundance of such species on the restoration site would not substantially affect regional populations of these species. Upland transitional habitat occurring on the upland side of tidal marsh is a less abundant habitat regionally; however, its importance is tied closely to the value of the adjacent wetlands to species that may require upland transitional areas during high tides. Because the Yosemite Slough is not expected to support rare species such as the California clapper rail or salt marsh harvest mouse, for which upland transitional zones might be particularly valuable, the loss of 170 square feet of upland transitional and buffer habitat due to construction of the bridge would not result in a substantial impact to either the quality of the Restoration Project or the species that use it. Given the very limited nature of the upland and upland transitional habitats on the restoration site that would be impacted, such impacts are not expected to result in substantial reductions in the populations of any particular species, either on the site itself or regionally. Therefore, impacts to upland and upland transitional habitats in the Restoration Project area would not introduce a new significant impact.

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[21] California State Parks Foundation. 2006. Initial Study/Mitigated Negative Declaration. Candlestick Point State Recreation Area Yosemite Slough Restoration Project.

Commenters also noted that a portion of the funding for the Restoration Project consisted of in-lieu fees paid as mitigation for wetland impacts by other projects and questioned whether the regulatory permits for those other projects would require revision if wetlands on the restoration site were impacted by the Project. It is not expected that the regulatory agencies would re-open the permitting for those other projects or require any additional mitigation or coordination on the part of the applicants for those projects. Rather, the regulatory agencies are expected to require the CP-HPS Project Applicant to obtain permits prior to engaging in any activity that could impact any such mitigation wetlands and to compensate for any such impacts through the implementation of the mitigation measures identified in the Draft EIR and/or other permit conditions.

Commenters suggested that potential effects of shading from the bridge on wetlands and other habitats below the bridge were not adequately discussed in the Draft EIR. This impact was discussed in Impact BI-4c. Although the bridge would be high enough to continue to let some light under the bridge, the potential for permanent loss of vegetated wetlands as a result of shading from the bridge was considered a potentially significant impact in the Draft EIR. The Draft EIR discussed the possibility that shading from the bridge would be great enough to result in the loss of vegetated wetlands (which would include both existing wetlands and any wetlands that have been restored as part of the Restoration Project) and prescribed mitigation via restoration at a 1:1 ratio (the same as for wetlands that are lost due to outright filling). To determine the extent of potentially vegetated wetlands that would be restored by the Restoration Project and yet be located under the shadow of the bridge, the proposed bridge footprint has been overlaid electronically on final plans for Phase I of the Restoration Project (on the north side of Yosemite Slough) and 50 percent plans for Phase II (on the south side) provided by WRA, Inc. This overlay indicates that less than 0.01 acre (313 square feet) of new/restored vegetated tidal wetlands would be located under the shadow of the bridge. Further, although shading during early morning hours (when the sun is east of the bridge) would extend outside the bridge footprint into the restored tidal marsh to some extent, indirect sunlight during these morning hours and direct insolation during the afternoon would allow substantial sunlight to reach vegetated habitats, allowing for the development and maintenance of marsh vegetation in the restoration site in areas that are outside the immediate bridge footprint. If additional vegetated wetlands are proposed within the bridge footprint as design for Phase II of the restoration plan proceeds, such that additional shading impacts to vegetated wetlands would occur, and if such wetlands are constructed prior to construction of the bridge, mitigation for such impacts would be provided by the CP-HPS Project at a 1:1 ratio as described in the cumulative impact analysis.

The effects of shading on mud flat and aquatic habitat would be less substantial than on vegetated wetlands. Tidal marshes around the bay export nutrients and organic material to other estuarine habitats, including mud flats and aquatic habitats.[22,23] As a result, mud flats and aquatic habitats gain some of their productivity from organic matter exported from marshes in addition to photosynthesis within the mud flats and water column, and thus shading would not eliminate the base for mud flat and aquatic food webs within the shaded area. Also, shading would not affect habitat structure (e.g., height and density of vegetation) in

[22] Kneib, R. T., C. A. Simenstad, M. L. Nobriga, and D. M. Talley. 2008. Tidal marsh conceptual model. Sacramento (CA): Delta Regional Ecosystem Restoration Implementation Plan.
[23] Atwater, B. F., S. G. Conard, J. N. Dowden, C. W. Hedel, R. L. MacDonald, W. Savage. 1979. History, landforms, and vegetation of the estuary's tidal marshes. Pages 347-385 in San Francisco Bay: the urbanized estuary. Pacific Division of the American Association for the Advancement of Science.

these unvegetated habitats as it would in vegetated wetlands. As a result, shading is not expected to have substantial impacts to the aquatic and intertidal organisms using these habitats under the bridge, and these habitats would retain much of their existing ecological functions and values after the bridge has been constructed. Nevertheless, the Draft EIR (MM BI-4c on page III.N-68) specified that shading impacts to mud flat and aquatic habitats that are not permanently impacted by bridge piers but that are within the bridge footprint must be compensated via creation or restoration at a 0.5:1 ratio to acknowledge that some reduction in functions and values of these habitats would occur as a result of shading.

Some commenters suggested that shading from new high-rise buildings on Candlestick Point or Hunters Point Shipyard would also shade wetlands to the point that adverse effects would occur. The potential locations of shadows cast by all buildings proposed by the Project were predicted and were mapped in the Draft EIR on Figure III.F-2 for Candlestick Point and on Figure III.F-15 for HPS Phase II. As indicated by those figures, shadows cast by new buildings constructed by the Project on HPS Phase II would not reach any portion of the Restoration Project site, and only a very limited area on the southernmost portion of the Restoration Project site would be subject to any shading from buildings to be constructed on Candlestick Point. Comparing Figure III.F-2 and the 50 percent wetland restoration plans for Phase II of the Restoration Project provided by WRA, less than ½-acre of new, restored wetlands on the Restoration Project site would be subject to any shading from new buildings. The analysis of shade distribution during different times of year and times of day presented in Section III.F of the Draft EIR indicates that shading of any portion of the Restoration Project's new wetlands would be very infrequent, and most of the time there would be no shading of these areas. Therefore, it is expected that ample sunlight would reach these wetlands to allow for the development and maintenance of vegetated tidal marsh.

Potential Effects of Noise on Wildlife Use of Yosemite Slough

The effects of noise on wildlife have received quite a bit of research attention,[24] but the results of most studies cannot be directly applied to the Yosemite Slough site. Many such studies focused on the effects of very loud noise, such as that produced by low overflights of military aircraft,[25] rather than on the much less acute noise that would be associated with the proposed bus rapid transit (BRT) buses, vehicles, and human use of the Yosemite Slough bridge. The effects of noise and vibrations on invertebrates, reptiles, and amphibians have not been well studied, and studies of noise effects on fish suggest that "normal traffic noise would not be sufficiently great to disturb those species that have been looked at so far" [26] and in the case of the Project, the principal traffic noises would only occur for a few hours 10 to 12 days a year.

[24] Kaseloo, P.A. and K.O. Tyson. 2004. Synthesis of noise effects on wildlife populations. Report No. FHWA-HEP-06016.
[25] Baker, M. and G. Belliveau (eds.) Effects of noise on wildlife conference, Proceedings. Happy Valley - Goose Bay, Labrador. Aug. 22-23, 2000. Institute for Environmental Monitoring and Research.
[26] Kaseloo, P.A. and K.O. Tyson. 2004. Synthesis of noise effects on wildlife populations. Report No. FHWA-HEP-06016.

Most studies of noise effects have focused on birds. Some studies of grassland and woodland birds have found reduced abundance of birds in closer proximity to roadways.[27,28,29] However, the results of many studies documenting similar results do not conclusively identify noise or vehicular movements as the mechanism for the observed results; for example habitat changes were not controlled well enough to identify noise as the reason for reduced abundance near roads. Furthermore, several studies cited by Kaseloo and Tyson (2004) have demonstrated that habitat quality may be of much greater importance than proximity to roads in determining wildlife distribution, with birds occurring more abundantly in roadside areas providing higher-quality habitat than in lower-quality habitat farther from roads. Therefore, while a number of studies have documented adverse effects of roads on abundance and behavior of birds, other studies indicate a tolerance of proximity to roads in roadside areas providing high-quality habitat.

Most studies have investigated the effects of occasional, very loud noises such as low aircraft overflights or the distribution of wildlife in relation to proximity to very busy roads with thousands of vehicle trips/day. In contrast, the Yosemite Slough bridge would be used only by BRT buses except during the 10 to 12 days/year, and half dozen or so hours on those days, in which vehicles entering or exiting the new stadium would be using the bridge. During those few game days, both traffic noise and the number of vehicles are expected to result in greater disturbance than on days when only buses would use the bridge. While the amount of such game-day noise, vibration, and human activity on the bridge, and the degree to which such factors would disturb wildlife using Yosemite Slough, are unknown, it is reasonable to expect that these factors would disturb wildlife to a greater extent than everyday BRT use on non-game days. Due to the timing of the NFL football season, these effects would primarily occur during the avian nonbreeding season (i.e., in fall and early winter). During that season, the slough is currently used primarily by foraging and loafing waterfowl, shorebirds, gulls, and large waders. After implementation of the Restoration Project, those species may be complemented by somewhat larger numbers of marsh-associated birds, such as marsh wrens and sparrows, than currently use the slough. Disturbance by game-day traffic is expected to cause waterbirds foraging and loafing in open areas to either move farther from the bridge than would be the case on non-game days, or to leave the slough entirely. Small passerines (i.e., perching birds) using tidal salt marsh and upland habitats may also move farther from the bridge or may spend more time in vegetated cover than usual on game days, if they are not tolerant of (or if they do not habituate to) such disturbance. As discussed in "Expected Effects of the bridge on Wildlife Use of Yosemite Slough" below, birds that are permanent residents are expected to return to their normal activities and territories after game-day disturbance subsides, and nonbreeding birds may either return to their use of areas closer to the bridge or would find foraging and loafing habitat elsewhere around the Bay. Other wildlife taxa, such as mammals and reptiles, may show greater avoidance of areas close to the bridge on game days than during non-game days. On game days, they may thus move to areas either within the Restoration Project site or on the east side of the bridge that are farther from the bridge, or they may spend more time in the cover of vegetation

[27] Foppen, R. and R. Reijnen. 1994. The effects of car traffic on breeding bird populations in woodland. II. Breeding dispersal of male willow warblers (*Phylloscopus trochilus*) in relation to the proximity of a highway. Journal of Applied Ecology 31(1):95-101.
[28] Reijnen, R. and R. Foppen. 1994. The effects of car traffic on breeding bird populations in woodland. I. Evidence of reduced habitat quality for willow warblers *(Phylloscopus trochilus*) breeding close to a highway. Journal of Applied Ecology 31(1):85-94.
[29] Reijnen, R., R. Foppen, C. ter Braak, and J. Thissen. 1995. The effects of car traffic on breeding bird populations in woodland: III. Reduction of density in relation to the proximity of main roads. Journal of Applied Ecology 32(1):187-202.

during game days. However, due to the limited mobility of these species, they are not expected to move long distances, and it is likely that they also would return to areas closer to the bridge (or increase their activity in areas closer to the bridge) after game-day activity subsides.

On all other days, one bus would cross the bridge every 2.5 minutes, on average, during peak commute periods and every 5 minutes the remainder of the day. The hybrid buses that would be used on this BRT route would have a maximum noise level (from pull-away after a stop to 35 miles per hour [mph]) of 70 to 75 A-weighted decibel scale (dBA) at the source, roughly equivalent to the sound of freeway traffic at a distance of 50 feet. Some studies have documented that such noise levels have effects on some birds, while others have found no long-term effects on birds of much higher noise levels (as reviewed by Kaseloo and Tyson 2004). For example, a US Department of the Interior report on the Environmental Impact of the Big Cypress Swamp Jetport, addressing B-720 jet flyovers at altitudes of 500 to 5,000 ft, indicated that birds were not observed to be flushed or disturbed at noise levels ranging from 75 to 96.5 dBA.[30] Another study reviewed by Kaseloo and Tyson reported no significant effect of jet overflights on wading birds at levels of 55 to 100 dBA. Further, while there are no established criteria relating traffic noise and animal behavior, the analyses of noise effects on wildlife often employ higher impact thresholds than the 70 to 75 dBA noise levels that would result from BRT bus use, or even game-day traffic use, of the Yosemite Slough bridge. For example, the Bay area to Central Valley High-Speed Train Program Environmental Impact Report/Environmental Impact Statement used a sound exposure level of 100 dBA as its impact threshold.[31]

The ambient noise to which animals are currently exposed at Yosemite Slough, and to which animals would be exposed after implementation of the Restoration Project, is already relatively high, at least intermittently. The closest noise measurement to Yosemite Slough (recorded during the preparation of the Draft EIR) was taken in a vacant lot within the Project site along Carroll Avenue, across from Alice Griffith Neighborhood Park residences. The ambient noise level at this location was measured at 64.8 decibels, and the primary source of noise at this location was generated from traffic (Table III.I-6 [Existing Peak-Hour Traffic Noise Measurements (L_{eq})] of Section III.I [Noise and Vibration]). In addition, the industrial and storage uses of the properties on the south side of Yosemite Slough that are outside both the Yosemite Slough restoration area and the CP-HPS Project site, and that would thus not be subject to change as a result of either project, are the source of considerable ambient noise. Back-up signals on equipment, truck noise from the adjacent truck storage yard, and machinery from adjacent industrial areas contribute to noise levels in the area,[32] and any wildlife using Yosemite Slough, both currently and following restoration, would have to be habituated to such noise levels. Thus, the noise levels at Yosemite Slough on non-game-days following bridge construction can be characterized as having moderately high ambient noise levels, as expected of this urban location, punctuated every 2.5 minutes (during commute periods) to 5 minutes (during non-commute periods) by somewhat increased noise levels as a BRT bus passes over the bridge. Based on the available information on noise effects on wildlife and observations of wildlife use of other urban wetland areas in the Bay area, Dr. Rottenborn has inferred that such BRT traffic may result in a small reduction in use of areas near the bridge by wildlife, or temporary effects on wildlife behavior when

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[30] US Environmental Protection Agency (USEPA). 1971. Effects of noise on wildlife and other animals. NTID300.5.
[31] California High-Speed Rail Authority and Federal Railroad Administration. 2008. *Bay Area to Central Valley High-Speed Train (HST) Program Environmental Impact Report/Environmental Impact Statement (EIR/EIS)*. Final. Volume 1: Chapters. May. Sacramento, CA and Washington, D.C.
[32] S. Rottenborn, H. T. Harvey & Associates, pers. obs. during January 6, 2010 site visit.

a bus passes by, but such noise is expected to affect a relatively small proportion of the Yosemite Slough area and is not expected to substantially reduce wildlife use of the restoration site (as discussed in greater detail in "Expected Effects of the bridge on Wildlife Use of Yosemite Slough" below).

Potential Effects of Vehicle Exhaust on Plants and Animals of Yosemite Slough

There is some evidence that urban air pollution, including exhaust from vehicles, may adversely affect vegetation.[33] However, the effects of vehicle exhaust on plants and animals have not been well-studied, especially in natural situations (as opposed to lab conditions), and there is no evidence to suggest that exhaust from vehicles using the Yosemite Slough bridge would result in substantial adverse effects on wildlife or plant communities. The hybrid buses that the BRT system would operate are low-emission vehicles. The infrequency with which such buses would be crossing the bridge, the low-emission nature of these buses, and the absence of other traffic on the bridge during non-game days limits the potential for exhaust from vehicles using the bridge to affect plants and animals in the slough. Furthermore, wind levels that are characteristic of the San Francisco Bay shoreline are expected to disperse exhaust, and there is no evidence that exhaust emissions could concentrate in any particular area near the bridge in concentrations or for durations great enough to result in adverse ecological effects.

Effects of deposition of certain emissions, such as nitrogen compounds, on plant communities in Yosemite Slough are not expected to be substantial. Adverse effects of nitrogen deposition have been documented in very nitrogen-poor plant communities, such as serpentine grasslands, where nitrogen deposition has the potential to alter plant and animal community composition by allowing plants that cannot tolerate low-nitrogen conditions to persist.[34] However, wetlands such as those along Yosemite Slough are comparatively nitrogen-rich, and thus addition of nitrogen in exhaust would not be expected to affect plant or animal communities. Also, flushing of intertidal wetlands by tides prevents the accumulation of any compounds that may be present in exhaust in tidal wetlands.

Exhaust emissions would be higher on the 10 to 12 days/year in which stadium traffic is using the bridge. However, there is no evidence that such emissions would result in such acute effects, before exhaust can be dispersed by wind, on those few days that substantial adverse effects on any plant or animal species would occur particularly given the temporary nature of such impacts (i.e., for a few hours before and after football games during those 10 to 12 days/year). In fact, since most games occur on Sundays, they would be during periods in which normal, weekday freeway emissions would not occur. Also, as discussed under "Expected Effects of the bridge on Wildlife Use of Yosemite Slough" below, most birds (and possibly mammals and reptiles) are expected to maintain a slight buffer between most of their activities and the bridge, a buffer that would likely be somewhat greater on game days than during other times of the year as discussed in "Potential Effects of Noise on Wildlife Use of Yosemite Slough" above. Thus exposure to exhaust from vehicles using the bridge is not expected to result in any adverse effects on the health of wildlife using Yosemite Slough, even on game days.

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[33] Honour, S. L., J. N. B. Bell, T. W. Ashenden, J. N. Cape, and S. A. Power. 2009. Responses of herbaceous plants to urban air pollution: Effects on growth, phenology and leaf surface characteristics. Environmental Pollution 157:1279-1286.

[34] Weiss, S. B. 1999. Cars, cows, and checkerspot butterflies: nitrogen deposition and management of nutrient-poor grasslands for a threatened species. Conservation Biology 13:1476-1486.

Potential Effects of Lighting on Animals of Yosemite Slough

Some commenters suggested that lighting associated with the Project, including lights on the Yosemite Slough bridge and headlights from vehicles traveling around the project site, could adversely affect wildlife use of Yosemite Slough. Lighting in and adjacent to more natural areas on the Project site, including Yosemite Slough, is expected to increase as a result of the Project. Some night lighting would be required on the bridge but the effect of lighting is unclear. Artificial lighting has been demonstrated to cause changes in the physiology and behavior of a number of animal taxa; while some animals take advantage of artificial lighting to more easily detect prey at night, or take advantage of prey concentrations attracted to artificial lights, other animals are adversely affected by artificial lighting.[35] In more remote areas that are not already subjected to urban lighting, an increase in night lighting could disrupt behavior of animals, potentially increase predation on some nocturnal animals, and result in displacement of the most sensitive species from areas with increased lighting. However, Yosemite Slough is already subjected to some night lighting, including considerable night lighting from the stadium and parking lots during evening games at Monster Park. As a result, wildlife currently using the site are habituated to the lighting present within this urban area.

As discussed in Impact AE-7a of the Draft EIR, the final lighting design has not been completed, but the Project has developed standards for lighting in certain areas. Lighting in open space areas would be very limited and low-intensity. Area lighting would be subject to restrictions on fixture height, would be oriented toward the ground, or would be screened to minimize illumination in off-site areas such as Yosemite Slough. Headlights of vehicles using nearby roads and of buses using the bridge would be elevated above the slough, especially when on and near the bridge, and thus would not directly illuminate the aquatic and wetland habitats that are either currently present in the slough or that would be present following restoration. The increase in vehicular traffic on game days would result in a potential increase in indirect lighting of the slough by headlights due simply to the number of vehicles using their headlights that might be present, but again, these vehicles would be elevated above the slough, so that they would not directly illuminate the restored aquatic and wetland habitats. Therefore, the increase in lighting of Yosemite Slough as a result of the CP-HPS Project is not expected to be substantial.

In addition, the Draft EIR includes mitigation measures that reduce spill light and require shielding of light fixtures to reduce light pollution (refer to mitigation measures MM AE-7a.1 through MM AE-7a.3). Mitigation measure MM AE-7a.1 restricts light fixture direction and prescribes state-of-the-art light fixtures and shielding; mitigation measure MM AE-71.a requires the use of low-level and unobtrusive light fixtures for landscape illumination and exterior sign lighting; and mitigation measure MM AE-7a.3 requires the Applicant to prepare a Lighting Plan for each phase of the Project to be approved by the Agency prior to issuance of building permits to minimize glare and prevent spill light.

Given the urban context in which Yosemite Slough occurs, species using the area are already habituated to some lighting. Further, wildlife use of other urban sites, including many of the reference sites discussed in the following section, indicates the ability of the species that currently use the Yosemite Slough site, and that would use it following implementation of the Restoration Project, to habituate to both fixed and vehicular lighting. As a result, Dr. Rottenborn has inferred that increased lighting is not expected to result in a significant impact to wildlife use of Yosemite Slough.

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[35] Rich, C. and T. Longcore (eds.). 2006. Ecological consequences of artificial night lighting. Island Press, Washington, D.C.

Wildlife Use and Habitat Conditions at Reference Sites

One of the major reasons why studies of the effects of noise or lighting on wildlife conducted in other areas and situations may be difficult to apply to the Yosemite Slough bridge project is that many wildlife species are known to habituate to stimuli that do not result in obvious harm to them. Many species are known to habituate to loud noises, movement of large equipment, artificial lighting, and other human activities. Providing an extreme but relevant example, some wildlife species even tolerate airport noise to the point that wildlife control is often required at airports to minimize the risk of airplane strikes. For example, as recently as December 2009, the abundance of waterbirds foraging near runways at Oakland International Airport was so great that lethal control of some birds by United States Department of Agriculture (USDA) wildlife services officials was necessary.[36] These birds were habituated to the extremely loud noise of airplane landings and take-offs, focusing instead on the resources present in the waters surrounding the runways.

There are a number of locations around the San Francisco Bay area where mud flat, aquatic, and marsh habitats occur in close proximity to areas of high-volume traffic, noise, and human use, and where wildlife (particularly birds) use areas in spite of this high human activity due to the high habitat quality those areas provide. Dr. Rottenborn concludes such areas serve as potential reference sites for the Yosemite Slough bridge in terms of allowing for at least some prediction of the effects of the bridge structure, traffic, and human use on wildlife use and habitat conditions at Yosemite Slough, and on the potential for wildlife using Yosemite Slough (either in its current or restored condition) to habituate to the bridge and vehicular use of the bridge. These reference areas, which Dr. Rottenborn has visited on a number of occasions to observe birds, include:

- Coyote Creek Reach 1A waterbird pond and South Coyote Slough (San Jose): heavily used by waterfowl, shorebirds, and gulls even though it is 500 feet from the Newby Island Sanitary Landfill entrance (heavily used by garbage trucks 6 days/week), 750 feet from Interstate 880, 150 feet from a two-lane interstate frontage road, and 100-200 feet from a recycling facility and associated storage loud that is subject to loud noise from heavy equipment, recycling operations, and even noisemakers intentionally employed to attempt to deter nuisance birds
- San Jose-Santa Clara Water Pollution Control Plant (San Jose): the settling ponds, which are bisected by numerous levee roads, support large numbers of waterfowl, shorebirds, and other birds despite frequent movement of noisy, heavy equipment throughout the plant (within 10 feet or less of the edges of the settling ponds)
- Pond A16, New Chicago Marsh, and Triangle Marsh (Alviso): Pond A16 and New Chicago Marsh support large numbers of waterfowl, gulls, and shorebirds, including nesting terns on islands and nesting snowy plovers in salt pannes, and Triangle Marsh supports high densities of marsh-nesting species, despite the proximity of these areas to active railroad tracks and recreational use of surrounding levees
- Shoreline Park (Mountain View): Shoreline Lake, the Coast Casey Forebay, Charleston Slough, and the Palo Alto Flood Control Basin support large numbers of waterbirds and marsh birds despite very heavy use by pedestrians, cyclists, golfers, and (on Shoreline Lake) boaters and despite the fact that this complex of habitats is bisected by a number of trails that are heavily used by pedestrians and cyclists

[36] http://www.ktvu.com/news/22091151/detail.html.

- Palo Alto Baylands (Palo Alto): supports high densities of a variety of waterbirds and marsh species despite heavy recreational use and its proximity to an adjacent landfill (with an entrance less than 150 feet from tidal marsh), water treatment plant (120 feet from tidal marsh), and airport taxiways and runways 75-100 feet from tidal marsh and lagoons
- South Bayside System Authority Plant (Redwood City): ponds adjacent to this water treatment plant, and encircled by a road used by trucks and other vehicles less than 10 feet from pond edges, with an adjacent dog park 65 feet from pond edges, support very high densities of waterfowl and shorebirds, as well as nesting terns on islands and nesting herons and egrets in ornamental trees around the plant, despite plant noise and frequent movement by trucks
- Crissy Field (San Francisco): supports at least locally high numbers and diversity of waterbirds despite intensive recreational use
- East San Francisco Bay shoreline along I-580 north of the Bay Bridge: heavily used by foraging shorebirds on lower tides, even though I-580 traffic lanes are within 50 feet of the bay shoreline

At all of these locations, heavy wildlife use (particularly by birds) occurs in close proximity to loud noise, high human activity, and/or heavy vehicular traffic because these birds are habituated to such activities and because the natural resources provided by the habitats on these reference sites are important to birds. These reference locations provide important, high-quality habitat for these species despite a level of human activity and noise similar to or even exceeding that expected at Yosemite Slough. Based on the habituation to such human activity by birds that he has observed at these reference locations, Dr. Rottenborn has inferred that bird use of Yosemite Slough, either in its current or restored condition, is not expected to be substantially reduced as a result of everyday, operational effects of noise, movement of buses, or human activity on the Yosemite Slough bridge. Birds at these reference locations do respond to sudden or excessive stimuli, such as sudden and unusually loud noises or very close approach by humans or dogs, by flushing or otherwise altering their behavior. Similarly, sporadic, temporary increases in disturbance levels at Yosemite Slough (e.g., unusually heavy traffic or noise occurring during the 10-12 game days/year) would likewise be expected to have a greater effect than everyday noise and vehicular movements occurring on non-game days.

There are also locations within the Bay area where birds regularly fly across roads that are wider and/or more heavily used by traffic than the Yosemite Slough bridge would be, even on game days. Such locations include the following:

- Highway 92 in Hayward, where waterbirds move between the Eden Landing Ecological Reserve on the south side of the highway and Hayward Regional Shoreline on the north (and between the Bay mudflats adjacent to each of these two areas) by flying over the highway
- Highway 84 in Menlo Park and Fremont, where birds move between ponds and along the bayshore on both ends of the Dumbarton Bridge by flying over the highway
- Highway 37 west of Vallejo, where birds move between San Pablo Bay to the south and the Napa River and associated marshes to the north by flying over the highway
- Highway 101 southeast of Mill Valley, where birds move between the portions of upper Richardson Bay on either side of the highway by flying over the highway

In each of these cases, birds fly across highways that are much more heavily traveled than the Yosemite Slough bridge would be as they move between important foraging areas on both sides of these roads. Based on these examples, Dr. Rottenborn has inferred that waterbirds using Yosemite Slough, either in its present

condition or after implementation of the Restoration Project, would move between Yosemite Slough and South Basin/San Francisco Bay areas to the east if they perceive the habitat value of Yosemite Slough to be high enough.

Further, there are a number of locations in the Bay area where marsh habitat exists immediately adjacent to freeways supporting much higher traffic volumes, and thus much higher exhaust emissions, than would be supported by the Yosemite Slough bridge. Such examples include:

- Palo Alto Flood Control Basin along Highway 101 and its frontage road in Palo Alto
- Marshes near Inner Bair Island along Highway 101 in Redwood City
- Tidal salt marsh at the Bay edge at the I-80/I-880 junction at the east end of the Bay Bridge in Oakland
- Tidal marsh along Highway 37 at the San Pablo Bay National Wildlife Refuge

Traffic volume is consistently heavier on these highways than would be the case on the Yosemite Slough bridge even on game days, yet marsh vegetation persists in these reference areas. Based on these examples, Dr. Rottenborn has inferred that the much lower overall exhaust emissions that would result from traffic use of the Yosemite Slough bridge, even on game days, would not result in substantial adverse effects on habitats of the slough, including tidal salt marsh that would be restored by the Restoration Project.

Expected Effects of the bridge on Wildlife Use of Yosemite Slough

Prior to construction of the bridge, pre-construction surveys for nesting birds would be conducted in accordance with MM BI-6a.1 if construction commences between February 1 and August 31, and buffers around active nests would be maintained to avoid impacts to such nests. Thus, bridge construction would not result in the loss of active nests of birds in surrounding areas such as the Yosemite Slough restoration site. To clarify that MM BI-6a.1 pertains to construction in Yosemite Slough, the text for Impact BI-6b, on page III.N-75 of the Draft EIR, has been revised as follows:

> Similar to development at Candlestick Point, … Implementation of mitigation measures MM BI-6a.1 and MM BI-6a.2 (as detailed in Impact BI-6a), both at HPS Phase II and Yosemite Slough, would reduce the effects of Project construction and implementation on nesting special-status and legally protected avian species to less-than-significant levels.

During construction of the bridge, construction equipment and personnel would be operating not only within the bridge footprint, but in adjacent areas on either side of the bridge. Potential construction-related impacts of the Project, including the bridge, are discussed in Impact BI-2 through Impact BI-15b of the Draft EIR. The number of pieces of heavy equipment and construction personnel and the magnitude of construction-related noise (e.g., pile driving) and vibrations associated with these construction activities are expected to disturb wildlife in Yosemite Slough and adjacent portions of South Basin while construction is ongoing. Wildlife use of the slough, at least in areas relatively close to the construction area, are expected to be low during the construction period, as few species would tolerate such high levels of disturbance. However, such activities are temporary in nature, and construction-related disturbance of wildlife would not have long-term effects on wildlife use of Yosemite Slough and South Basin. Small mammals, reptiles, and slender salamanders that are displaced or disturbed by construction activities are expected to retreat to areas farther from the bridge, where habitat would be present to support these species while construction is ongoing. After construction has been completed and habitat within temporary impact areas restored,

these small animals are expected to eventually move back into areas disturbed during bridge construction and occupy habitat closer to the bridge. Being more mobile, birds are expected to respond more readily to construction, both by moving away from areas of high disturbance during construction and quickly moving back in to occupy suitable habitat after construction has been completed.

Previous studies reported in the literature provide no clear evidence as to the longer-term effects of the bridge on wildlife use of Yosemite Slough. While studies conducted under circumstances different from those present on the Project site document adverse effects of noise and artificial lighting on wildlife under those specific circumstances, the phenomenon of habituation by wildlife to stimuli such as noise, lighting, and movement of people and vehicles is well documented. As an expert on birds of the Bay area, Dr. Rottenborn has observed the results of such habituation in the form of heavy wildlife use of high-quality habitat areas, such as the reference sites listed in the previous section, despite noise and human activity that in some areas exceeds what would occur on the Yosemite Slough bridge. Based on relevant literature coupled with extrapolations from observations of wildlife throughout the Bay area, the expected effects of the bridge on wildlife use of the slough, as described in the following paragraphs (which pertain to the effects of the bridge either under existing conditions or after implementation of the Restoration Project) can be assumed.

There would likely be some adverse impacts from the bridge on wildlife species, especially birds, during game days. However, these game-day impacts are very limited in area and temporary, being of much shorter duration than the ongoing human activities to which birds have habituated on the reference sites listed above. While the local impact on waterbird use of the slough would be expected, no substantial effect on the regional abundance of such species would occur, for two reasons:

1. There are numerous other locations throughout the Bay area that can be used by nonbreeding waterbirds as foraging and loafing sites. Many waterbirds using the Bay during migration and winter make regular movements between foraging and loafing or roosting sites, or between high-tide and low-tide foraging areas, and they are thus capable of making regular, fairly long-distance movements. If waterbirds are displaced from Yosemite Slough, they would be able to move to other locations providing suitable habitat.
2. Waterbirds using Yosemite Slough represent a very small fraction of the regional abundance of these species, because waterbirds expected to use the slough regularly are regionally common species, and because Yosemite Slough represents such a small proportion of the regional availability of waterbird habitats. For example, Yosemite Slough currently provides approximately 10 acres of tidally influenced habitats (primarily aquatic and mud flat habitat, with some vegetated tidal marsh), and the Restoration Project would restore 12 acres more of tidally influenced habitat (primarily vegetated wetlands).[37] In comparison, the San Francisco Bay estuary provides approximately 262,000 acres of baylands (which include 30,000 acres of tidal mud flats and 40,000 acres of tidal marsh) and 180,000 acres of shallow bay/channel habitat.[38] Combined with the limited and very temporary effect of game-day impacts, the impact on the Yosemite Slough would not be a substantial adverse effect.

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[37] California State Parks Foundation. 2006. Initial Study/Mitigated Negative Declaration. Candlestick Point State Recreation Area Yosemite Slough Restoration Project.
[38] Goals Report. 1999. Baylands Ecosystem Habitat Goals. A report of habitat recommendations prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. First Reprint. U.S. Environmental Protection Agency, San Francisco, CA/San Francisco Bay Regional Water Quality Control Board, Oakland, CA.

Such habitat is valuable wherever it occurs, for a variety of reasons, which is why the Draft EIR required mitigation for impacts resulting from direct fill and shading of wetland, aquatic, and mud flat habitat.

Other wildlife taxa, such as mammals and reptiles, may show greater avoidance of areas close to the bridge on game days than during non-game days. On game days, they may thus move to areas either within the Restoration Project site or on the east side of the bridge that are farther from the bridge, or they may spend more time in the cover of vegetation during game days. Movement by such species under the bridge may be inhibited, or in the worst case, may cease altogether on game days. However, due to the limited mobility of these species, they are not expected to move long distances, and they are expected to return to areas closer to the bridge, increase their activity in areas closer to the bridge, and continue movement under the bridge after game-day activity subsides. If noise and vibrations are great enough, fish may also avoid areas immediately adjacent to the bridge during game days, but such effects would be short-lived, and on non-game days, fish are expected to continue to move in and out of the slough by swimming under the bridge.

On non-game days, wildlife species are expected to make greater use of the areas under and immediately surrounding the bridge. During high-water conditions, fish would continue to swim under the bridge and use adjacent aquatic habitats as they currently do, and it is expected that swimming and diving birds would do the same to some extent given the height of the bridge above the water. During low tides, shorebirds, gulls, and other waterbirds are expected to use mud flats adjacent to the bridge. Terrestrial animals can continue to move along the shoreline, beneath the bridge, and marsh animals, which are expected to dominate the largely vegetated marsh that is planned for the portions of the restoration area closest to the bridge, would use tidal salt marsh areas there. Thus, as has been observed at a number of other sites around the Bay area, wildlife is expected to largely habituate to the bridge and its use, and the bridge would not conflict with the Restoration Project's objective of improving local foraging and roosting habitat for migratory and resident birds (or any of its other objectives).

However, some reduction in wildlife use of the bridge footprint and immediately adjacent areas, relative to the existing condition or the condition anticipated following Yosemite Slough restoration, is expected to occur. The movement of and noise associated with people and vehicles would likely have some effect on wildlife use of the immediate vicinity of the bridge. In many areas around the Bay, Dr. Rottenborn has observed waterbirds maintaining a buffer between themselves and shoreline edges supporting roads, tall vegetation, or structures. It is possible that this buffer is maintained due to the perceived threat from humans or vehicles moving along the shoreline, the perceived threat from predators that may be hiding along the shoreline, or a defense against the perceived threat from predators that may be blocked from view by structure along the shoreline. The presence of the Yosemite Slough bridge may impede the line of sight between wildlife on the ground or in the water and more distant areas; some animals may maintain some distance between the bridge and their activities out of concern that they would not be able to detect approaching predators when they are too close to the bridge. Collectively, these factors are expected to result in a localized reduction in the number of individuals of some species in areas immediately adjacent to the bridge.

Bird use of the nesting islands proposed to be created as part of the Restoration Project may be affected by the presence of the bridge to some degree as well, although the physical separation of these islands from the bridge limits adverse effects. However, as discussed previously, it is unlikely that these proposed nesting islands would provide high-quality nesting habitat for many bird species, particularly waterbirds. As a result,

the presence of the bridge is not expected to result in substantial effects to any waterbirds, and particularly any nesting waterbirds, using these islands.

Any reduction in use of the immediate bridge footprint, the roads between the proposed stadium and Candlestick Point, and their vicinity, compared to existing conditions and to potential conditions following Yosemite Slough restoration, is not expected to rise to the level of a significant impact, for reasons discussed in Impact BI-2 (page III.N-50) of the Draft EIR and for the reasons described for game-day circumstances above. The area in which the abundance of species such as waterfowl, shorebirds, or marsh bird species could potentially be reduced represents an extremely small impact on habitat for such species that is available in the region (which, on the scale of habitat use by these species, would be considered the entire San Francisco Bay area). Most of the waterbird species that use Yosemite Slough do not breed there, and most of the individual waterfowl, gulls, terns, shorebirds, cormorants, and grebes that might forage in Yosemite Slough originate from breeding sites outside the Bay Area. While non-breeding habitat is important to these species, the abundance of these species in the region (i.e., the Bay Area) is not necessarily a strict function of habitat availability in the Bay Area; conditions and factors associated with breeding grounds and migratory routes affect these species' populations in general, so that the number of individuals that use the Bay Area may not be limited by the availability of habitat in the region. In that case, the loss of a small proportion of habitat available to these species in the Bay Area would not be expected to result in any measurable reduction in the regional abundance of these species. Even assuming that regional availability of foraging or roosting habitat is limiting regional populations of these waterbird species, the proportion of the regional populations of these species that would be adversely affected by the bridge would be extremely small, and this impact does not rise to the threshold of a significant impact. Similarly, all the mammals and reptiles (and the single amphibian species) occurring in the terrestrial portions of the site are regionally abundant and widespread species. As a result, any reduction in abundance of these species that may occur as a result of the bridge would have a negligible effect on the regional abundance of these species, and thus the impact to these species would be less than significant.

Conclusion

There is no substantial evidence that special-status species are significantly impacted by the Project. As indicated in the Draft EIR and in this master response, impacts to wildlife in Yosemite Slough are less than significant because the species involved (1) are a small number of non-listed individuals, (2) represent a very small fraction of large regional abundance, (3) would not substantially affect the recovery or conservation of the species, and (4) are mostly locally common and abundant in the region. In addition, the localized impacts on the Yosemite Slough are minimally invasive, and the effects are temporary, mitigated, or insignificant to a real extent. For these reasons the biological impacts of the Project on Yosemite Slough are determined to be less than significant with implementation of mitigation measures proposed in the Draft EIR.

Master Response 4: Purpose and Benefits of the Yosemite Slough Bridge

Introduction

Overview

This master response addresses comments made questioning the need for the Yosemite Slough bridge.

This response is organized by the following topics:

- Introduction
- Transportation Plan Objectives and Regulatory Context
- Discussion of the Yosemite Slough Bridge and Alternative Routes

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > California State Parks (86-12)
  - > Planning Commissioner Antonini (SFPC-120)
  - > San Francisco Bay Conservation and Development Commission (BCDC) (103-15)
- Organizations
  - > Arc Ecology (82-28, 82-29, 82-32, 82-33, 82-34, 82-45, 82-46, 82-48, 82-50, 82-53, 82-55, 82-56, 82-57, 82-62, 82-63, 82-64, 82-65, 82-66, 82-67, 83-37, 83-38, 83-42, 83-45, 83-48, 83-54, 83-55, 83-56, 83-57, 83-58, 83-59, 84-20, SFPC-127)
  - > California State Parks Foundation (47-4, 47-7, 47-14, 47-31, 47-53, 47-58, 47-73, 47-104, 47-110, 47-111)
  - > Golden Gate Audubon Society (81-4, 81-5)
  - > San Francisco Tomorrow (64-3)
- Individuals
  - > Jaron Browne (SFPC-24)
  - > Linda Richardson (SFPC-4)
  - > Mishwa Lee (61-2)
  - > Robert Simms (51-2)
  - > Saul Bloom (SFPC-127, SFPC-136)

Comments received on the Draft EIR related to the Yosemite Slough bridge with respect to transportation issues were focused almost exclusively on issues addressed in Section III.D (Transportation and Circulation) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.D.

Comment Summary

This master response responds to all or part of the following comments: 47-4, 47-7, 47-14, 47-31, 47-53, 47-58, 47-73, 47-104, 47-110, 47-111, 51-2, 61-2, 64-3, 81-4, 81-5, 82-28, 82-29, 82-32, 82-33, 82-34, 82-45,

82-46, 82-48, 82-49, 82-50, 82-53, 82-55, 82-56, 82-57, 82-62, 82-63, 82-64, 82-65, 82-66, 82-67, 83-37, 83-38, 83-42, 83-45, 83-48, 83-54, 83-55, 83-56, 83-57, 83-58, 83-59, 84-20, 86-12, 103-15, SFPC-4, SFPC-24, SFPC-127, SFPC-120, SFPC-127, SFPC-136.

Summary of Issues Raised by Commenters

- Pedestrian and bicycle circulation between Candlestick Point and Hunters Point Shipyard can be accommodated by other routes that do not involve a new bridge
- Alternate alignments are available for the BRT that do not involve a new bridge
- The same Stadium ingress and egress capacity is available by other means than the bridge

Response

Introduction

Due to geography, topography and the current extent and 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 less accessible for pedestrians and bicyclists. These deficiencies have been identified as top community concerns in the extensive local and citywide planning efforts for the Project - and across southeastern San Francisco more generally.[39]

As part of the City's transportation goals and plans, and to serve the increased travel demands from the project, a new Bus Rapid Transit (BRT) network has been proposed. BRT service generally provides faster and more reliable service compared to traditional local bus routes through the use of transit-exclusive lanes, signal priority treatments, pre-paid ticketing, and generally reduced conflicts with other vehicles. In the case of the Project, BRT service would link the area with the Bayview, Executive Park, Brisbane Baylands, and Visitacion Valley neighborhoods, and connect to Caltrain, BART and the T-Third light-rail and numerous Muni bus lines. In developing the Project's overall Transportation Plan, a key element of the overall system would be to provide the most direct route of travel for the BRT system, as well as bicycles and pedestrians, between the Hunters Point Shipyard, Candlestick Point, and destinations to the west.

A key goal of the Transportation Plan is also to provide effective ingress and egress for a possible new stadium site for the San Francisco 49ers. The NFL has stressed that an essential feature of any stadium access plan is the ability to clear the stadium parking lots within an hour or less. The City is also concerned that residential areas are not unduly impacted by stadium traffic.

The Draft EIR concluded that both these of these goals could best be realized by the construction of the Yosemite Slough bridge. The Yosemite Slough bridge would be 902 feet long, linking Candlestick Point and the Hunters Point Shipyard. To accommodate transportation needs for the stadium development alternative, as noted throughout the Draft EIR, the Bridge would be 81 feet wide. It includes an east-side bicycle/pedestrian path, two exclusive BRT lanes, and a west-side bicycle/pedestrian path that would be converted to four lanes of stadium automobile traffic on game days only. Without a stadium, the west-side path would be eliminated for a narrower 41-foot-wide bridge with one east-side bicycle/pedestrian path and two BRT lanes.

[39] Results of community outreach associated with the *Bayview Hunters Point Neighborhood Transportation Plan*, San Francisco County Transportation Authority, February 2010.

This master response includes a detailed description of the bridge and a discussion of alternatives to a bridge considered, in terms of meeting the BRT, pedestrian, cyclist, and game-day traffic goals.

Transportation Plan Objectives and Regulatory Context

Consistent with the policies endorsed by San Francisco voters with the passing of Proposition G in June 2008,[40] the Project's Transportation Plan was developed to improve integration of the Candlestick Point and Hunters Point Shipyard sites with each other, with the rest of the Bayview neighborhood, and with other regional transportation facilities. Further, the Transportation Plan was developed to provide the necessary infrastructure for conditions with a new NFL stadium in the Hunters Point Shipyard site.

The Transportation Plan was also developed within the context of other policies already adopted by the City of San Francisco, including the City's "Transit-First" policy, which consists of ten principles that generally promote the importance of transit use, bicycling, and walking as alternatives to travel by private automobile.

These guiding principles were used to formulate the Transportation Plan, which generally prioritizes transit, walking, and bicycling between the Candlestick Point and Hunters Point sites, and between the Project and the rest of the Bayview, and provides adequate automobile access for a new NFL stadium.

Discussion of the Yosemite Slough Bridge and Alternative Routes

The Draft EIR concluded that the Yosemite Slough Bridge would best achieve three primary transportation functions, consistent with the overall City goals. First, the Bridge's BRT lanes allow a more direct route (approximately ⅔ 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. Secondly, the Bridge provides pedestrians and cyclists a more direct connection between Hunters Point Shipyard and Candlestick Point, avoiding a diversion through or near the industrial area around Yosemite Slough not well suited for other types of traffic. Finally, the bridge provides automobile access between the NFL 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.

For each of these three transportation functions, the analysis determined that the Yosemite Slough bridge would provide a superior and necessary function compared to alternatives without the bridge. A detailed discussion of each of these transportation functions, and why alternatives, such as routing transit, bicycles, pedestrians, and game day automobile traffic around Yosemite Slough, are not as effective in meeting City transportation goals, is provided below.

1. Bus Rapid Transit (BRT) Service

As described in the Draft EIR, the proposed bridge would serve a new bus rapid transit (BRT) route traveling between the Hunters Point Shipyard and the Balboa Park BART Station, through Candlestick Point, serving the Project and all existing neighborhoods along the Geneva Avenue corridor. This corridor was identified

[40] Proposition G, passed by San Francisco voters in June 2008 includes Policies 4(2) and 4(5), which generally state that the Project should provide transportation and associated infrastructure that integrates the Project with the Bayview neighborhood as well as integrates the Candlestick Point and Hunters Point Shipyard sites with each other.

in the City's recent Transit Effectiveness Project (TEP) as part of the City's Rapid Network, which is comprised of high-volume transit corridors that serve as the backbone to the City's transit network.

The Project would extend transit service from the Geneva Avenue corridor into the Project site, providing crucial linkages between the Project and regional transit services, including Caltrain and BART, as well as other local routes that connect to the Geneva Avenue corridor. As shown on Figure III.D-9 (Proposed Transit Improvements), Draft EIR page III.D-49, the Project would extend or increase service on seven total transit routes that would serve the Project site. The transit routes that are planned to serve the Project site were selected because they would generally radiate out in different directions from the Project site, providing comprehensive service throughout the City. As part of this strategy, the BRT route would provide the only direct connections between the Project and Caltrain.[41,42]

A fundamental component of BRT service is direct, fast, and reliable travel in dedicated right-of-way, typically with signal priority given to the BRT vehicles. When these elements are combined, the BRT service takes on a higher-quality character than typical local bus service. In order to provide such a service in the Project study area, transit travel along the BRT corridor has been prioritized, including providing dedicated right-of-way, transit signal priority, implementing proof-of-payment systems to minimize boarding times, and providing the most direct route of travel between key destinations.

To provide a rapid connection between the Hunters Point Shipyard and points to the west, including Candlestick Point, the Bayshore Caltrain station, the T-Third light-rail line, and the Balboa Park BART station, in a manner consistent with the City of San Francisco's Transit First Policy, two primary options were considered: a new bridge over Yosemite Slough and a route around Yosemite Slough using an abandoned railroad right-of-way owned by the Navy. One variation of the potential route around Yosemite Slough is illustrated in Figure VI-1 (Alternative 2 Circulation Plan Right-of-Way for Bus Rapid Transit), which is further discussed and presented in Response to Comment 82-27. Other routes have similar or greater impacts.

The potential BRT routes (either across a new bridge or on a route around Yosemite Slough) were compared to determine whether the route around Yosemite Slough, avoiding a new bridge, would meet

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[41] Regional planning studies have proposed an extension of Caltrain from its current northern terminus at the 4th Street / King Street station to Downtown San Francisco. If this extension is constructed, both the CPX and HPX express bus lines would provide direct service from the Project site to Downtown San Francisco, where riders could technically transfer to Caltrain. However, this would require many passengers to travel north from the Project into Downtown San Francisco, and then travel south on Caltrain to their destination. Because this would require a substantial amount of redundant travel, this is not considered a practical option, and the connection to Caltrain via the BRT route would remain the only viable connection from the Project.

[42] Since the closure of the Paul Avenue Caltrain Station in 2005, the San Francisco County Transportation Authority (SFCTA) has initiated a study of a potential new station at Oakdale Avenue. If constructed, this new station would also be served by two transit lines that also serve the Project site: the 24-Divisadero and the 44-O'Shaughnessy. There has been no environmental analysis of this new station, nor has there been a commitment of funding to construct or provide service to this station. However, even if a new station at Oakdale Avenue were constructed, the Bayshore Station is likely to be a more desirable connection to Caltrain from the Project. Due to the extensive amount of relatively high-density, transit-oriented development planned around the Bayshore Station and the anticipated extension of the T-Third light-rail line to the station, the Bayshore Station is likely to have more robust and higher-frequency service than what would likely be provided at a new Oakdale Station. Therefore, the BRT connection to the Bayshore Station is considered a high-priority feature of the Project's Transportation Plan.

the functional requirements of BRT service. The comparisons of the two routes with respect to the Project's transit objectives are summarized below.

- **Efficient BRT travel times.** The proposed bridge would minimize BRT travel times, particularly between major development and regional transit connections (e.g., Caltrain, T-Third light-rail service, and BART). As indicated in the Draft EIR, the bridge would reduce BRT travel times by at least 5 minutes compared to a route around Yosemite Slough. The estimate of travel time around Yosemite Slough was developed based on data regarding average vehicle travel speeds provided by SFMTA. That data notes that local bus service travels an average speed of 7 miles per hour (mph), while BRT service typically travels at 10 mph or greater. Although, without the bridge, the BRT would travel in exclusive right-of-way along part of the route around the slough, due to the large number of right-angle turns through signalized intersections, the analysis assumes that the BRT would operate at speeds more similar to local bus service through this portion (i.e., 7 mph). The route across the bridge would operate more similar to typical BRT speeds (i.e., 10 mph). Because it would have no intersections, no turns, and no conflicting bicycle, pedestrian, or traffic streams, travel across the bridge, which is a straight path with no stops, may actually permit higher speeds, potentially closer to 25 mph depending on other BRT criteria.

  The distance across the Yosemite Slough Bridge (from Carroll Avenue to Shafter Avenue) is approximately 0.4 mile. The distance on the route around the slough is approximately 1 mile, a difference of 0.6 mile. The travel time for the BRT route across the bridge (assuming an average 10 to 20 mph travel speed) would be approximately 1.25 to 2.5 minutes. The travel time for the BRT route around the slough (assuming an average 7 mph travel speed) would be 8.7 minutes, an increase of over 6 to 7.5 minutes.

  To predict transit mode choice for this analysis, a linear regression model was developed based on travel behavior surveys of San Francisco residents.[43] Development of the model involved identifying independent variables that can be used to predict transit ridership based on a number of factors. The analysis found five factors that have a statistically valid relationship to a traveler's likelihood to choose transit for a particular trip in San Francisco. Those factors include drive time, parking cost, transit wait time, the number of transfers involved in the transit trip, and the transit travel time. A more detailed discussion of the methods used in the transportation analysis to forecast transit mode choice are described in Appendix K of the Transportation Study.

  Based on this model, a 5-minute difference in travel time associated with the route around Yosemite Slough would result in a ridership decrease of approximately 15 percent for users of the BRT traveling to or from the Hunters Point Shipyard. As a point of reference, the US Census found that the average commute trip in San Francisco was approximately 30 minutes in 2002.[44] A 5-minute increase in travel time would result in an increase of between 15 and 20 percent to the typical commute. As noted, the proposed BRT route could be 6 to 7.5 minutes faster, enhancing these benefits.

  Although the effect of adopting the route around Yosemite Slough would be substantial for those affected, they represent only a portion of the Project's total transit riders. As noted throughout the Transportation Study and the Draft EIR, the only travelers affected by the Yosemite Slough Bridge or lack thereof are those travelers who would use the BRT service to and from the Hunters Point Shipyard. Transit riders from the rest of the Project who use other transit routes would not be affected. Similarly, passengers from Candlestick Point who use the BRT to travel to points west would also be unaffected.

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[43] *Bay Area Travel Survey*, Public Data Release #3 (Metropolitan Transportation Commission (MTC), March 2005.
[44] American Community Survey 2002, US Census Bureau.

- **BRT reliability.** Surveys conducted of transit users in San Francisco as part of SFMTA's Transit Effectiveness Project have shown that many users view transit reliability, that is, the regularity and predictability of service, as more important than travel times. Reliability problems tend to grow over the course of a transit route. A small deviation from planned schedules at the beginning of a transit route can easily lead to a much larger deviation further along in the route. It is this phenomenon which leads to "vehicle bunching" in which a long period of time will pass with no transit vehicle arrivals at a stop, and then multiple vehicles arrive almost simultaneously.

  Because of its importance in the mind of riders, reliability on the BRT route should be ensured within the Project site, particularly in the westbound direction, which would be at the start of the BRT route. Reliability problems at this location could cascade into much larger problems outside of the study area.

  The proposed bridge would maximize the reliability of the BRT route by providing the most direct, conflict-free right-of-way. Even under scenarios involving use of the former Navy railroad right-of-way, travel around the slough would require travel through a primarily industrial business area and through several additional intersections, most of which would require traffic signals that, even with transit signal priority treatments, would add delays and decrease transit service reliability when compared to the exclusive right-of-way provided by the proposed bridge.[45] Further, the route would require between four and seven 90-degree turns, depending on the ultimate alignment, which require substantial slowing and are uncomfortable to passengers. Each of these elements introduces some uncertainty into the overall travel time, which affects route reliability.

  Features that would degrade the BRT route with respect to service reliability and travel times would be inconsistent with the goals of implementing such service. For example, according to the *Countywide Transportation Plan* (San Francisco County Transportation Authority, 2004):

  > The centerpiece of the [New Expenditure Plan (NEP)] is the development of a Network of Rapid Bus and Rail Transit corridors. Together, rapid transit corridors, both at street level and underground, will create an integrated citywide network of high speed transit, resulting in increased service reliability, shorter travel times and better, seamless connectivity between transit services provided by multiple transit operators throughout the city.

  Whether the Hunters Point Shipyard would be home to a football stadium, additional research & development, or additional housing, BRT must offer fast, direct, and reliable transit connections to Muni light rail, BART and Caltrain if transit is to be viable and competitive in serving these destinations. A comparison of the two routes shows that the Yosemite Slough Bridge would provide the most reliable travel times (i.e., the least variation from bus to bus) between the Hunters Point Shipyard and points west because it would introduce the least number of variables (e.g., traffic signals, street crossings, speed changes at turns, etc.).

- **BRT safety.** The safest environment for the BRT is to minimize the number of intersections the route must traverse and maximize the visibility of the system. An alternate route around the slough would require travel through a number of closely spaced intersections, increasing conflicts and the potential for collisions between the BRT and autos, pedestrians, and cyclists. A non-stop bridge with no conflicting traffic concerns would be superior.

- **BRT operating costs.** It is well known that transit agencies across the country face a constant struggle to reduce operating costs, and the SFMTA is no exception. The proposed bridge would help the SFMTA to provide this new service more cost-effectively by reducing travel times compared to

[45] Other routes around Yosemite Slough that did not traverse as many intersections were considered. However, those routes would involve construction of new roadways immediately adjacent to Yosemite Slough, which would create many of the effects to Yosemite Slough that the proposed bridge may cause. Therefore, these routes were not considered further as alternatives to the bridge.

conditions without the bridge. Due to the anticipated high frequency of service, a route around Yosemite Slough that was 5 minutes longer in travel time than a route on the proposed bridge would require additional vehicles to maintain proposed vehicle spacing. For the BRT route, which is proposed to operate at frequencies of 5 minutes between buses, an additional 5 minutes of travel time in each direction would require an additional bus in each direction for a total of two additional vehicles (capital cost of $2.4 million) and additional operating and maintenance cost for SFMTA (approximately $850,000 annually).[46]

- **Adaptability to possible future light rail.** According to *A Vision for Rapid Transit in San Francisco* (San Francisco Municipal Railway, 2002):

  > Bus Rapid Transit is appropriate in corridors with high ridership where there is sufficient right-of-way to provide dedicated lanes. Bus Rapid Transit does not require as much capital infrastructure as [light-rail transit (LRT)], and may serve as the first phase of implementing light-rail transit.

  One key feature of the proposed BRT route and other BRT routes currently under study in San Francisco is that they not preclude future conversion to light rail. While light rail is not currently proposed for this route, it is important to recognize this as a key transit route within the City and long-term growth and transit plans may make converting this route to light rail desirable in the future.

  Should SFMTA decide to pursue that course in the future, the proposed bridge would be the most compatible with light rail, by minimizing sharp turns and angles that would be required by taking alternate routes around Yosemite Slough.[47] Although the proposed route around Yosemite Slough may physically accommodate light rail, it would provide a much less desirable operating environment for light rail due to the number of turns and crossings involved, and increased construction costs.

- **Effects on local industrial businesses.** Provision of an alternate route around Yosemite Slough would likely involve using Carroll Avenue, Hawes Street, Armstrong Avenue, the former Navy railroad right-of-way, and Shafter Avenue. On most of these facilities, despite the slower travel speeds, additional turns, and additional signalized intersections, the BRT route could be provided within exclusive right-of-way without substantial changes to the subject facilities. However, to provide exclusive transit lanes and maintain mixed flow travel lanes on Shafter Avenue would require prohibition of on-street parking, which would affect existing industrial businesses that rely on the on-street parking for loading/unloading. This would be inconsistent with City policies to retain Production, Distribution, and Repair (PDR) uses. In particular, the *San Francisco General Plan* Policy 8.1 (Maintain industrial zones for production, distribution, and repair activities in the Northern Gateway, South Basin, Oakinba, and India Basin Industrial Park subdistricts) supports retention of PDR uses in the Bayview.

  Alternatively, this route could involve narrowing of existing sidewalks on Shafter Avenue from 15-feet to 11-feet, which would be inconsistent with the City's Draft Better Streets Plan. Although the Project proposes exceptions to the Draft Better Streets Plan minimum recommended sidewalk widths on Ingalls Street and Innes Avenue, such exceptions are generally discouraged when other options are available. Other potential routes around Yosemite Slough using existing roadways would have similar negative effects to the adjacent industrial area.

  In this case, the Yosemite Slough Bridge would help maintain existing sidewalk widths along Shafter Avenue and ensure that on-street parking/loading spaces along Shafter Avenue are maintained.

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[46] Based on Transit Cost Estimation Model developed by San Francisco MTA in 2008 for use with the Transit Effectiveness Project (TEP).

[47] The current bridge designs are not proposed to be constructed to structurally support light rail since no rail is currently planned for this route; instead, the bridge could be retrofitted in the future if light rail were to be initiated.

Based on the analysis described above, the Yosemite Slough bridge was determined to be substantially superior to alternative routes around the slough and would provide the quality of service associated with bus rapid transit. 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 Yosemite Slough would likely impact Muni's ability to operate the service to the Hunters Point Shipyard.[48]

2. Gameday Traffic Associated with New NFL Stadium

The second transportation function of the Yosemite Slough Bridge is to accommodate vehicular traffic demands associated with the proposed new NFL stadium. Despite the Project's goals of increasing transit, walking, and bicycling as primary access modes to the stadium, a substantial number of patrons will continue to arrive via automobile. Based on recent stadium projects across the country and conversations with the NFL, a parking lot clearance time of approximately one hour or less for a typical game is required. Failure to provide adequate clearance time immediately following games is unlikely to be acceptable to the NFL or to the San Francisco 49ers, and could substantially impede or eliminate the stadium alternative, a major goal of the City.

Based on the proposed parking supply and typical gameday attendance and game departure patterns (as described in the Draft EIR) the egress capacity requirement for a new stadium is 11,000 vehicles per hour immediately following a game. Individual travel lanes near the stadium could accommodate approximately 1,000 vehicles per hour provided that certain targeted traffic measures are employed. These measures include the provision of a traffic management center in the stadium and the presence of traffic control officers at key intersections. The effect would be such that traffic exiting the stadium is prioritized and intersections are manually controlled (at both stop sign controlled and signal controlled intersections), stops are minimized, and exiting traffic is generally given priority over cross traffic, i.e., traffic is waved through stop signs and signals and opposing streams of traffic are held for longer periods than normal. Under these conditions, individual travel lanes near the stadium could accommodate approximately 1,000 vehicles per hour.

Project Constraints

The section of Crisp Road between Fitch Street and Griffith Street has been designed to its maximum width of 77 feet, and could accommodate five lanes of traffic: three peak direction auto travel lanes, one off-peak auto/bus travel lane, and one peak direction transit-only lane. Transit traveling in the off-peak direction would travel in mixed-flow auto lane between Griffith Street and Fitch Street.

Widening Crisp Road to the south to accommodate additional travel lanes would involve acquisition of property, demolition of existing buildings, and disruption to existing businesses, and is not considered feasible. Crisp Road cannot be widened to the north without major earthwork due to a large hill, which is not considered feasible. Converting the westbound transit-only lane on this section of Crisp Road to mixed-flow to accommodate additional vehicular traffic would violate the City's Transit First policy, which generally calls for prioritizing transit circulation over private autos.[49] Therefore, no additional auto travel

[48] Personal communication with Peter Albert, Manager, SFMTA Urban Planning Initiatives Program and Peter Strauss, Manager, SFMTA Muni Service Planning (since retired)

[49] A transit-only lane is more important in the westbound direction in the post-game scenario because that is the direction that most transit, including private shuttles, regular Muni service, and gameday express service would be traveling. There would only be minimal transit service traveling to the stadium in the eastbound direction immediately following games, and therefore, providing a dedicated travel lane for transit in this direction for a short distance is less vital.

lanes can be provided on Crisp Road, between Fitch Street and Griffith Street, and no additional traffic could use this route under any alternate plan.

The Draft EIR Transportation Plan

To meet the NFL's requirements, the Transportation Plan has been designed to accommodate 11 exiting travel lanes. Draft EIR Figure III.D-13 (Stadium Game Day Traffic Control Plan) illustrates the exiting plan for post-game conditions at the stadium. To the north, Innes Avenue provides egress for 4,000 vehicles per hour via four outbound (away from the stadium) lanes and one inbound (toward the stadium) lane. The inbound lane is necessary to provide vehicular access to non-stadium development at the Hunters Point Shipyard and does not affect the egress calculations. To the south, Crisp Road could accommodate seven exiting lanes, each also serving approximately 1,000 vehicles per hour, for a total of 7,000 vehicles in the hour immediately following games.

Under the Transportation Plan, three of the seven lanes on Crisp Road travel past Fitch Street, turning south on Griffith Street, west on Thomas Avenue, and south again on Ingalls Street. One of these three lanes then turns west on Carroll Avenue and exits onto Third Street; the other two lanes continue down Ingalls Street, turn west on Gilman Avenue, then exit to Third Street. Both the Carroll Avenue and Gilman Avenue exits onto Third Street will likely have capacities of less than 1,000 vehicles per hour per lane due to conflicts with the T-Third light-rail service and relatively higher cross-traffic volumes along Third Street that must be served.

The remaining four lanes coming from Crisp Road travel south on Fitch Street, cross the slough on the bridge, and intersect with Arelious Walker Drive south of the slough. These four lanes continue on Arelious Walker Drive until exiting onto US-101. The Transportation Plan closely approximates the NFL's egress requirements.

The comments to the Draft EIR, in addition to independent analysis, identify two alternative routes to provide vehicular egress from the stadium. Neither of the alternatives includes the use of a bridge. The alternatives all maintain the use of the Innes Avenue route included in the Transportation Plan. As noted, Innes Avenue will accommodate four lanes of traffic allowing 4,000 vehicles per hour to exit to the north. Thus, in order to the meet the NFL standards, a viable alternate plan must provide for 7,000 vehicles to exit the stadium to the south and west within approximately an hour. The alternatives are discussed below.

Alternate Route 1: South on Fitch Street and West on Other East/West Streets between Palou Avenue and Shafter Avenue

The Yosemite Slough Bridge would not be constructed under this option. Innes Avenue would still provide an egress capacity of 4,000 vehicles per hour. Likewise, the Crisp Road-to-Griffith Street-to-Thomas Avenue route would remain unchanged from the Transportation Plan and would provide egress for 3,000 vehicles per hour. Mitigation measure MM TR-23 would be implemented, and Palou would be widened accordingly to accommodate two westbound lanes of post-game traffic in addition to a transit-only lane in each direction. The remaining four (of seven) lanes on Crisp Road would turn south on Fitch Street, which would connect to four east-west streets: Palou Avenue, Quesada Avenue, Revere Avenue, and Shafter Avenue.

Palou Avenue

Under this alternative route, on non-game days, Palou Avenue would have one auto travel lane in each direction, in addition to transit-only lanes. On game days, both auto travel lanes could be converted to peak direction lanes, and Palou Avenue could handle two lanes of stadium egress traffic. This traffic on Palou Avenue would ultimately be destined for the Harney Way interchange to the south, or other US-101 interchanges to the west. If the traffic were bound for Harney Way, it would likely turn south onto Third Street from Palou Avenue. As noted in the Transportation Plan, travel lanes crossing or turning onto Third Street would have a capacity of less than 1,000 vehicles per hour due to the signal priority given to light-rail vehicles and substantial vehicular traffic on Third Street.

This route relies on the implementation of MM TR-23, which requires the widening of Palou Avenue. MM TR-23 was identified as feasible to mitigate the impacts to transit travel times due to overall congestion, although it holds certain drawbacks. Specifically, it would increase pedestrian crossing distances, narrow sidewalks, and create a less desirable environment for pedestrians and residents of Palou Avenue. While these trade-offs were considered acceptable for purposes of improving transit travel times (and consistent with the City's Transit First policy), they would not be considered acceptable or consistent with the City's Transit First policy for purposes of accommodating additional vehicular traffic to or from the new stadium. If implemented as a project element to serve stadium traffic, this measure might be required sooner than if it were simply being used to mitigate the significant transit impacts identified in the Draft EIR. While mitigation measure MM TR-23 could provide a modest improvement to auto exit capacity, it would come at the expense of the pedestrian realm along Palou Avenue.

Quesada Avenue, Revere Avenue, and Shafter Avenue

Sending traffic down Quesada Avenue, Revere Avenue, or Shafter Avenue would require traffic to cross Griffith Avenue, conflicting with that street's ability to carry traffic from the stadium. These lanes would need to queue while traffic from Griffith passed, and then traffic on Griffith would need to queue while these three lanes cleared. Although this bottleneck might allow traffic ahead of this section to clear, it would still decrease the pace of egress traffic and the capacity of each of the affected routes.

This problem might potentially be resolved if another route were identified beyond Crisp Road and Fitch Street, such as Hawes Avenue, to provide additional vehicle capacity to the east-west streets traveling through the Bayview toward Third Street. Such a scenario, however, would require six lanes of traffic to continue on Palou past Griffith Street: the four lanes that would run on Palou and the additional two lanes that would exit on Hawes or some other identified street. Creating six lanes of traffic in this area would likely require condemnation and is not considered feasible.

Alternate Route 1 would, therefore, accommodate 4,000 vehicles per hour to the north along Innes Avenue and 3,000 vehicles per hour to the south along the Crisp Road-to-Griffith Street-to -Thomas Avenue route segment. It is not clear how many more vehicles would be accommodated under Alternate Route 1 associated with vehicles using Quesada Avenue, Revere Avenue, or Shafter Avenue, because of the cross traffic conflict at Griffith Avenue. It is reasonable to assume that there would be an overall increase in traffic flow, but the increase would not approach 1,000 vehicles per hour per lane. An optimistic calculation might peg the combined additional vehicle flow from these routes at 2,000 cars per hour. At a total of 9,000 vehicles per hour, Alternate Route 1 would be 18 percent lower than the required 11,000 vehicles per hour (based on the NFL's criteria).

Alternate Route 2: Use Rail Right-of-Way around Yosemite Slough for Auto Traffic

The Yosemite Slough Bridge would not be constructed under this option. Innes Avenue would still provide an egress capacity of 4,000 vehicles per hour. Likewise, the Crisp Avenue-to-Griffith Street-to-Thomas Avenue route would remain unchanged from the Transportation Plan and would provide egress for 3,000 vehicles per hour. Mitigation measure MM TR-23 would be implemented, and Palou would be widened accordingly to accommodate two westbound lanes of post-game traffic in addition to a transit-only lane in each direction.

Under this route, two additional lanes of traffic (2,000 vehicles per hour) are routed south along Fitch Street, generally following the abandoned rail right of way, formerly used by the US Navy. The two lanes of traffic follow the abandoned rail line around the western edge of the slough while heading south. After passing the slough, these two lanes of traffic would turn east down either Yosemite Avenue or Armstrong Avenue. In either case, the two lanes would continue east and eventually turn south to intersect with Arelious Walker Drive.

The three lanes of traffic coming from Thomas Avenue, turn south at Ingalls Street just like the route described in the Transportation Plan. The lanes then split at the intersection of Ingalls Street and Carroll Avenue. Two of the lanes head east on Carroll Avenue; these lanes eventually join the two lanes of traffic that followed the abandoned rail line around the slough. Thereafter, the combined four lanes of traffic exit south on Arelious Walker Drive, the same as the Transportation Plan. Routing traffic west down Carroll Avenue carries the benefit of not exiting traffic onto Third Street which, as described in the Transportation Plan, conflicts with the operation of the T-Third Rail Service. The third lane of traffic travelling on Ingalls Street continues southbound before turning west on Gilman Avenue, and then exiting onto Third Street. This lane of traffic would experience capacity of less than 1,000 vehicles per hour at Third Street because of conflicts with the T-Third light-rail service and substantial cross-traffic on Third Street.

These five lanes of traffic—the three lanes on Ingalls Street and the two lanes on the abandoned rail line—could accommodate 5,000 vehicles per hour. As previously mentioned, the Innes Avenue route to the north provides egress exiting capacity of 4,000 vehicles per hour. Thus, together these two routes accommodate an egress capacity of up to 9,000 vehicles per hour. The final egress needs of 2,000 vehicles could not be fully met through the use of mitigation measure MM TR-23, under which Palou would be widened to accommodate two westbound lanes of post-game traffic in addition to a transit-only lane in each direction This is because the vehicular capacity would be considerably less than 1,000 vehicles per lane at Third Street, due to the conflicts associated with signal priority granted to T-Third light-rail service and substantial cross-traffic volumes on Third Street. While it is possible that the T-Third Rail Service schedule could be modified for game days, those changes might reasonably cause hardship for regular riders that rely on the T-Third Rail Service for transportation. As described, Alternate Route 2 would be closer to, but would still not meet the NFL's standards for egress traffic leaving the stadium.

Alternate Route 2 is not, however, consistent with the City's transit goals or the goal of efficient BRT service. Under this route, BRT service cannot operate directly from the Balboa Park BART Station and the Bayshore Caltrain Station to the stadium as the only available route around the slough is occupied by auto traffic. The lack of BRT service to the stadium would decrease connectivity from the stadium site to regional transit connections and proposed residential developments near Geneva Avenue.

Conclusion

Alternate Routes 1 and 2 are subject to a high number of subtle variations, although they broadly represent the circulation options for conditions without a Yosemite Slough bridge. Alternate Route 2 closely approximates the required egress clearance capacity but it comes with negative drawbacks, including elimination of BRT service from the Balboa Park BART Station and the Bayshore Caltrain Station and more serious conflicts with the operation of the T-Third light-rail service. In Alternate Route 1, the overall stadium exit capacity would be substantially below what is necessary to accommodate a new NFL stadium in Hunters Point Shipyard. The amount of time it would take to empty the stadium parking lot would increase substantially, increasing idling time, vehicle queues, and driver frustration.

The Transportation Plan, relying on the Yosemite Slough bridge, closely approximates the required exit capacity. The bridge would carry four lanes of auto traffic into/out of the stadium site prior to a game and after the game is over. These four lanes represent approximately 35 percent of all game day traffic. Without the bridge, this traffic would be forced to use other local roadways that are not capable of handling this amount of traffic, as described above.

The bridge also provides transit, bicycle, and pedestrian access to the stadium. During game days, similar to non-game days, the bridge would feature two dedicated lanes that would be used for BRT service and additional shuttle service to carry patrons between regional transit hubs and the stadium. Under scenarios without the bridge, transit travel times would be longer, reducing the appeal of transit by adding further delays and unreliability to transit service. The bridge would provide an important bicycle and pedestrian linkage to the stadium. Based on information from the team, 49ers patrons have consistently expressed a desire for additional transit service on game days. The Yosemite Slough bridge is a necessary component of delivering this service as it provides direct connections to the Bayshore Caltrain Station, Balboa Park BART Station, the T-Third light-rail line, and to other destinations served along the Geneva Avenue Rapid Network.

3. Bicycle and Pedestrian Circulation

One of the fundamental goals of the Project's Transportation Plan is to enable walking and bicycling, thereby reducing demand for parking and discouraging automobile use. Walking and bicycling distances between Candlestick Point and Hunters Point Shipyard would be shorter with the Yosemite Slough Bridge.

Currently, approximately two percent of all trips made during the PM peak hour in the Bayview neighborhood are by bicycle (2000 Bay Area Travel Survey [BATS 2000], Metropolitan Transportation Commission, 2000). On a typical day, just over two percent of all trips within San Francisco are made by bicycle, which is more than double the national average of one percent of all trips made by bicycle. Although no distinction is made in the data of existing peak hour trips in the Bayview between recreational and non-recreational trips, the majority of trips taking place during evening commute periods are typically work or shopping-related, and not recreational.

The travel demand forecasts for the Project conservatively assume that a similar portion of new Project-generated trips will be made by bicycle. This translates to over 250 bicycle trips in the AM peak hour, nearly 450 bicycle trips in the PM peak hour, and over 4,000 bicycle trips per day. This conservative assumption was made in the analysis to ensure that the vehicular and transit demand was not underestimated, but in reality, based on the substantial improvement to bicycle facilities proposed by the Project, it is likely that

the bicycle mode share will be higher than the existing two percent, and the number of cyclists during the PM peak hour could be greater than 250.

Without the bridge, the walking and cycling distance from the center of the Candlestick Point development area to the center of the Hunters Point Shipyard development area would increase by nearly ⅔ mile, or 50 percent compared to conditions with the bridge. Pedestrians and cyclists would travel through an industrial area along Ingalls Street with a relatively large portion of heavy trucks and few pedestrian or bicycle amenities. This route would also involve crossing several additional intersections.

Some of these differences may be resolved or reduced with construction of the proposed Bay Trail route around Yosemite Slough. Under these conditions, the additional distance to travel between the two sites would be ⅓ mile, compared to conditions with the bridge. The current design of the Bay Trail calls for an ADA-compliant, 12-foot-wide path made of decomposed granite. There would be lighting provided only at select locations along the trail (parking lots, overlook decks, etc.), and the facility would operate during park hours from 8:00 A.M. to sunset.

In general, an additional ⅓ to ⅔ mile is not a substantial increase for cyclists, particularly if the Bay Trail is constructed and a smooth route free of conflicting trucks and other industrial vehicle traffic is provided. However, the bridge does provide a better environment for pedestrians, who are more sensitive to increases in walking distance. Additionally, because the bridge would be lit, it would provide a better sense of personal security during evening hours, which are generally when the recreational fields at the Hunters Point Shipyard would be in use.

Master Response 5: Health of Bayview Hunters Point Community

Introduction

Overview

A number of comments on the Draft EIR have reflected concerns that the disproportionately adverse health outcomes observed among Bayview Hunters Point (BVHP) neighborhood residents and specifically among children within the community are related to effects of exposures to physical hazards (e.g., toxic chemicals) associated with the Shipyard. These comments have concerned a number of adverse health outcomes, including shorter life spans, excessive cancer incidence, higher asthma and bronchitis prevalence and morbidity. Comments also suggest that dust generated from construction on Parcel A has led to an increase in asthma and other illnesses. This response provides information on health outcomes among residents in the Bayview community, explores potential relationships to the Shipyard and redevelopment activities, describes environmental and health investigations that have been conducted in response to community concerns about environmental hazards, explores other environmental and social causes of adverse community health outcomes, and describes City actions to protect environmental health in the community. Overall, data do not support the contention that poorer health outcomes in BVHP are resulting from current conditions at the Shipyard.

This response is organized by the following topics:

- Health Outcomes in BVHP
- Potential Pathways for Environmental Exposure from Shipyard Conditions

- Shipyard-Specific Environmental Health Investigations
- Non-Shipyard Environmental Hazards
  - Industrial Use Conflicts
  - Housing Conditions
- Social and Economic Conditions Impacting Community Health
  - Food Resources
  - Park and Recreational Resources
  - Violence/Crime
  - Income and Poverty
- City Actions to Reduce Environmental Risk to Bayview Hunters Point Residents

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - None
- Organizations
  - Arc Ecology (83-3, 84-47, 84-48)
- Individuals
  - Alonzo Walker (SFPC-83)
  - Dan Solberg (SFRA1-37)
  - Daniel Landry (SFPC-26)
  - Esselene Stancil (SFPC-20)
  - Francisco Da Costa (105-3)
  - Jaron Browne (SFPC-23)
  - Jesse Tello (70-2, SFPC-21)
  - Juana Tello (66-1)
  - Leborea Peach Smoore (SFPC-25)
  - Willie Ratcliff (SFPC-107)

Comments on the Draft EIR related to the health of the BVHP community were primarily focused on existing conditions related to environmental remediation at the Shipyard, which are addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR, but also to some degree in the Setting section of Section III.H (Air Quality). This master response provides further discussion to update the analysis in Section III.H and Section III.K of the Draft EIR.

Comment Summary

This master response responds to all or part of the following comments: 66-1, 70-2, 83-3, 84-47, 84-48, 105-3, SFRA1-37, SFPC-20, SFPC-21, SFPC-23, SFPC-25, SFPC-26, SFPC-83, SFPC-107.

Summary of Issues Raised by Commenters

- Comments raised issues regarding community health issues, higher risks and occurrences of cancer, asthma, and respiratory illness, existing hazardous materials, children's' health, soil contamination, site remediation, release of hazardous materials due to geologic activity or construction and operation activities, additional concern regarding Superfund sites, lack of adequate medical care, lack of dust mitigation to control the potential for releasing asbestos, and higher mortality rates

Response

Health Outcomes in BVHP

In general, it is well established that residents of BVHP have poorer health outcomes than San Francisco as a whole. BVHP has the highest rates of low birth weight babies (13 percent of all 2008 BVHP babies were less than 2,500 grams, or less than 5.5 pounds) and highest rates of teen pregnancy in the City (42 of every 1,000 females aged 15 to 19 years old gave birth in BVHP, compared to 20 of every 1,000 citywide). BVHP and the Tenderloin have the lowest percentage of mothers receiving pre-natal care in their first trimester (66 percent).

Although hospitalization rates for asthma and pneumonia in BVHP decreased between 2004 and 2007, BVHP residents have substantially higher rates of hospitalizations and emergency room visits for preventable conditions such as asthma, congestive heart failure, diabetes, and urinary tract infections. Table C&R-3 (Hospitalization and Emergency Room Rates per 1,000 persons for Preventable Conditions [2005-2007 pooled discharge data]) provides the hospital rate and emergency room rate for the BVHP community as compared to the average for the City of San Francisco.

Table C&R-3 Hospitalization and Emergency Room Rates per 1,000 persons for Preventable Conditions (2005–2007 pooled discharge data)

	Bayview		*SF Average*	
Health Condition	*Hosp. Rate*	*ER rate*	*Hosp. rate*	*ER rate*
Asthma	27	105.8	6.3	25.4
Diabetes	30.3	27.9	8.3	7.9
Chronic obstructive pulmonary disease (COPD)	11.4	27.8	4.9	5.3
Adult congestive heart failure	39.0	12.1	14.4	3.7
Pneumonia	48.9	33	23.1	14.5
Kidney/Urinary tract infections	18.2	n/a	7.6	n/a

SOURCE: Data compiled by Health Matters in SF, from the California Office of Statewide Health Planning and Development (OSHPD). For more info, visit: http://www.healthmattersinsf.org/index.php

Life expectancy is a key metric of population health and a recent study of the region found that residents of BVHP live fewer years than residents in most other neighborhoods, as evidenced by Table C&R-4 (2004 Leading Causes of Years of Life Lost [YLL] for BVHP [Zip Code 94124]).[50] According to the 2004 San Francisco Community Health Needs Assessment, the top ten leading causes of premature years of life lost in BVHP (ZIP code 94124) are violence, ischemic heart disease, tracheal/bronchial/lung cancer, HIV/AIDS,

[50] Bay Area Regional Health Inequities Initiative (BARHII). 2008. Health Inequities in the Bay Area.

cerebrovascular disease (often caused by hypertension), poisonings, nephritis/nephrosis (also known as kidney disease), other cardiovascular diseases, chronic obstructive pulmonary disease or COPD (often associated with chronic bronchitis and emphysema), and congenital anomalies (also known as birth defects).

Table C&R-4 2004 Leading Causes of Years of Life Lost (YLL) for BVHP (ZIP Code 94124)

Rank	*Cause*	*YLLs*	*Deaths*	*Avg YLLs/Death*
1	Violence	1,020	18	57.3
2	Ischemic heart disease	592	40	14.8
3	Tracheal/Bronchial/Lung Cancer	386	22	17.5
4	HIV/AIDS	384	10	38.4
5	Cerebrovascular Disease	350	27	13
6	Poisonings	268	8	33.5
7	Nephritis/nephrosis	221	9	24.6
8	Other Cardiovascular Diseases	221	13	17
9	Chronic obstructive pulmonary disease (COPD)	189	9	20.9
10	Other Congenital Anomalies	185	3	61.8

SOURCE: 2004 Community Health Needs Assessment, Building a Healthier San Francisco. http://www.healthmattersinsf.org/index.php?module=htmlpages&func=display&pid=26

BVHP residents lose more years of life due to violence than from any other cause. In 2004, 25 percent of all San Francisco deaths from violence and 27 percent of all premature years of life lost due to violence occurred in BVHP.[51] As noted on the Health Matters in SF website, "The high ranking of violence as a cause of YLLs reflects not just the number of deaths from it, but also the fact that victims of death from violence are overwhelmingly younger than those dying from other high-ranking causes of premature mortality."[52]

By comparison, BVHP deaths from ischemic heart disease (BVHP's #2 leading cause of YLL) represent less than 4 percent of the City's total deaths and 8 percent of the City's total years of life lost from ischemic heart disease. BVHP deaths from tracheal/bronchial/lung cancer (BVHP's #3 leading cause of YLL) represent 6 percent of the City's total deaths and 6 percent of the City's total years of life lost from tracheal/bronchial/lung cancer.[53]

[51] Specifically, 71 people died in 2004 from violence in San Francisco, 18 of those deaths (or 25 percent) occurred in Bayview. Years of life lost is a measure of assessing premature mortality. Of the 3773 years of life lost (YLL) from the 71 deaths from violence in San Francisco, 1020 YLL (or 27 percent) were from Bayview.
[52] 2007 Community Health Assessment Mortality Data Key Findings: http://www.healthmattersinsf.org/index.php?module=htmlpages&func=display&pid=29
[53] Specifically, 1,056 people died in 2004 from ischemic heart disease in San Francisco, 40 of those deaths (or 3.8 percent) occurred in Bayview. Of the 12,617 years of life lost (YLL) from the 1,056 deaths from ischemic heart disease in San Francisco, 592 YLL (or 8 percent) were from Bayview. 361 people died in 2004 from tracheal/bronchial/lung cancer in San Francisco, 22 of those deaths (or 6 percent) occurred in Bayview. Of the 5,947 years of life lost (YLL) from the 361 deaths from tracheal/bronchial/lung cancer in San Francisco, 386 YLL (or 6 percent) were from Bayview.

As demonstrated in the data above and stated concerns, asthma and lung cancer are major health issues in BVHP. Risk factors for lung cancer include tobacco smoking, exposure to secondhand smoke, exposure to radon or asbestos, arsenic in drinking water, family history of lung cancer, diet low in fruits and vegetables, and air pollution.[54] Exposure to tobacco smoke, either directly by smoking or through secondhand exposure, contributes to 90 percent of lung cancer nationwide.[55] Risk factors for asthma include family history, exposure to dust mites, cockroaches & secondhand smoke, and being overweight. Triggers for asthma attacks include respiratory infections, pollen, mold, pet dander, dust mites and cockroaches, tobacco smoke (both from smoking and secondhand smoke), air pollution, household and workplace chemicals, stress, and vigorous exercise.[56]

Potential Pathways for Environmental Exposure from Shipyard Conditions

Physical and chemical environmental hazards at the Shipyard site are discussed in detail in the Draft EIR, Section III.K. Currently, specific areas at the Shipyard site require remediation to meet appropriate standards for residential and other uses planned as part of the Project. As stated in Draft EIR, Section III.K, on page III.K-2, the Navy is remediating the Shipyard to meet standards acceptable for planned future uses and this remediation would occur regardless of whether the Project development proceeds or not.

A harmful exposure to current residents in BVHP to Shipyard environmental hazards would require exposure to contaminated soil or water mediated through ingestion, inhalation, or drinking. At present, there are few pathways that would expose community residents to Shipyard hazards. No food is grown on the Shipyard nor is the Shipyard a source of drinking water for residents. Contaminated sites have restricted access and, therefore, are generally not physically accessible to residents and are covered with roads, buildings, asphalt and clean soil and vegetation limiting potential inhalation exposure. The predominant wind direction is away from the community.

Construction phase activities do pose potential for airborne exposure to constituents in contaminated soil, particularly during remediation activities. Possible hazards associated with the construction phase of Project development are assessed in detail and mitigation measures are identified in the Draft EIR, Section III.K, pages III.K-53 through -109. The evaluation and response to risks related to naturally occurring asbestos is discussed in Master Response 12 (Naturally Occurring Asbestos). Development work and remediation activity is being conducted in accordance with Federal, State and local regulations and under the oversight of associated regulatory agencies to prevent off-site exposures and hazards as outlined in Section III.K of the Draft EIR.

Shipyard-Specific Environmental Health Investigations

A number of environmental investigations have been conducted by public agencies in response to specific concerns about environmental hazards at the Shipyard. In January 2003, the San Francisco Department of

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[54] Fact Sheets on Lung Cancer, Northern California Cancer Center. http://www.nccc.org/site/c.foJNIXOyEpH/b.3362225/k.8D60/Fact_Sheets.htm
[55] Fact Sheets on Lung Cancer, Northern California Cancer Center. http://www.nccc.org/site/c.foJNIXOyEpH/b.3362225/k.8D60/Fact_Sheets.htm
[56] California Breathing/CDPH. June 2007. http://www.californiabreathing.org/images/stories/publications/asthmaburdenreport.pdf

Public Health (SFDPH) reported on an analysis of Hospital Admissions Data during the Hunters Point Shipyard Fire of August 2000. The brush fire occurred on the Parcel E-2 landfill at the Hunters Point Shipyard on August 16, 2000 but continued to smolder under the surface for a number of weeks. A study was conducted to ascertain whether this fire, in the form of particulate matter or hazardous chemicals, resulted in measurable and observable health effects to community residents by examining discharge data from all hospital admissions not only in San Francisco. Data did not suggest increases in hospital admissions for asthma or other respiratory illnesses among BVHP residents relative to admissions Citywide during the time of the landfill fire.

Criteria air pollutants and toxic air contaminants have also been measured within the community. In November 2006, the Department of the Environment reported on the results of the Bayview Community Air Monitoring Project (BayCAMP) which measured a number of air pollutants for one year at a site located in the BVHP community. This report concluded that, in general, the levels of air contaminants measured at the BayCAMP site were comparable to, or lower than, those measured at other locations within the Bay Area. Acute (short-term) health risks associated with the toxic air contaminants monitored at the BayCAMP site are similar to levels measured in Fremont and elsewhere in the city, while they are significantly lower than those measured in San Jose. Similarly, chronic (long-term) health risks associated with the toxic air contaminants monitored at the BayCAMP site are similar to levels measured elsewhere in the City and in San Jose. Projected cancer risks associated with toxic air contaminants monitored at the BayCAMP site are similar to those for the compounds measured in San Jose, and lower than that for the levels measured in the other Bay Area sites. Peak ozone levels measured at BayCAMP were slightly above state standards, but similar to measurements at comparison sites. However, the annual average concentration was much lower than the annual average at comparison sites and well below state and federal standards. For all other criteria pollutants, BayCAMP measurements complied with federal and state limits and were similar to or less than those at comparison sites.

Non-Shipyard Environmental Hazards

Exposure to environmental hazards may be occurring due to other sources within the community, but unrelated to the Shipyard. Historically, BVHP housed a number of industrial operations including the Hunters' Point power plant. Current notable industrial sources include the Southeast Water Pollution Control Plant and cement production and diesel bus storage on Port property adjacent to neighborhoods.

Industrial Use Conflicts

Currently, BVHP is home to 39 percent of the City's industrial land. The close location between industrially zoned land and residential areas may create land use conflicts and potential health hazards for nearby residents. Environmental conflicts from industrial uses may be related to noise, exhaust or ventilation systems, industrial processes, or freight traffic.

Extensive research demonstrates that living in proximity to busy roadways is linked to negative health outcomes, including exacerbation of respiratory diseases, sleep disruption and cognitive disturbance, and unintentional (traffic) injuries.[57] Exposures to roadway vehicle pollutants are significant for BVHP residents, but generally lower than for the city as a whole. Forty-two percent of BVHP residents live within a traffic-

[57] http://thehdmt.org/objectives/view/55

related air quality hazard area (or within 150 meters of streets with 0.2 micrograms per cubic meter [$\mu g/m^3$] or greater of particulate matter 2.5 micrometers [$PM_{2.5}$] in diameter or less), which is lower than the city average of 68 percent. Thirty-eight percent of BVHP households live within 150 meters of designated truck routes, compared to 47 percent citywide. Although roughly 25 percent of the City's stationary sources of air pollution are located in BVHP, a smaller proportion of people live within 300 meters of the source compared to the city average (1 percent vs. 4 percent). Table C&R-5 (Environmental Conditions Potentially Impacting BVHP Health) describes the various environmental conditions that could affect the health of BVHP residents and compares it to the same conditions for residents throughout the City.

Table C&R-5 Environmental Conditions Potentially Impacting BVHP Health

Condition	*BVHP*	*Citywide*
% of Total Brownfield reuse sites	25%	—
% of Total leaking underground fuel tanks	31%	—
% Land zoned for Industrial uses	39%	7%
% Land zoned for Residential uses	25%	54%
Average daytime and nighttime outdoor noise levels (in Decibels)	66dB	62dB
Proportion of households living within 150 meters of designated truck routes	38%	47%
Proportion of streets with 0.2 $\mu g/m^3$ or greater of $PM_{2.5}$[a]	32%	27%
Proportion of households living within 150 meters of streets with 0.2 $\mu g/m^3$ or greater of $PM_{2.5}$	42%	68%
Proportion households living within 300 meters of major industrial stationary sources of air pollution	1%	4%

SOURCE: Information from SFDPH Healthy Development Measurement Tool. http://thehdmt.org/neighborhoods/compare (accessed on March 5, 2010)

a. A microgram per cubic meter ($\mu g/m^3$) is one one-millionth of a gram of substance per cubic meter of air. $PM_{2.5}$ are air pollutants with a diameter of 2.5 micrometers or less, small enough to invade airways. These particles generally come from activities that burn fossil fuels, such as traffic, smelting, and metal processing.

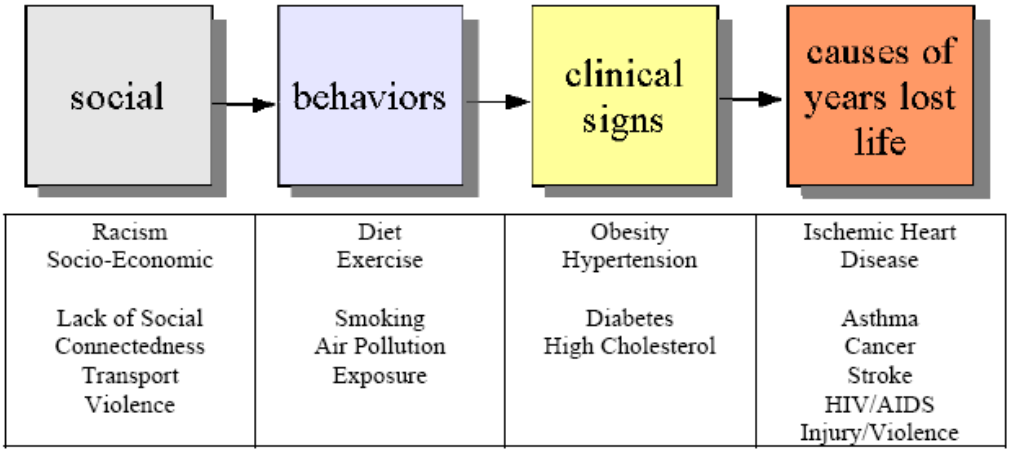
Housing Conditions

Although more than half of BVHP residents own their own homes (57 percent), a higher percentage of both homeowners and renters struggle financially to pay rent. One in four BVHP residents live in overcrowded living conditions, compared to one in seven residents citywide. BVHP is home to the majority of San Francisco's public housing projects, the majority of which are housed in buildings originally designed as temporary housing for Shipyard workers during World War II. Bayview has a high concentration of substandard and poorly maintained housing, with poor ventilation, pests such as cockroaches, vermin and dust mites, and mold. Substandard housing conditions can lead to poor indoor air quality contributing to higher rates of asthma and other respiratory diseases.

Social and Economic Conditions Impacting Community Health

Over the past two decades, researchers have demonstrated that social and economic conditions impact health significantly. Inequitable distribution of health protective resources like healthy food, recreational space, and opportunities for high quality education, and living wage employment, result in the clustering of health disparities across neighborhoods, and significant differences in the residents' quality and length

of life.[58] The diagram below from SFDPH illustrates how social conditions impact behaviors, which impact clinical symptoms resulting in premature years of life lost due to morbidity and mortality.



In general, BVHP has fewer options for accessing healthy foods, poorer performing schools, fewer jobs, poor housing conditions, fewer banks and credit unions, and a higher proportion of industrial and contaminated lands, compared to other neighborhoods in San Francisco.[59] Although the neighborhood does have a number of community assets that can positively impact health, such as strong civic engagement, community participation, and greater access to public open space, the historic context of economic deprivation, environmental racism and social marginalization following the closure of the Naval Shipyard has contributed to significant health inequities.[60] Table C&R-6 (Neighborhood Conditions Impacting Health Outcomes) compares neighborhood health resources in BVHP relative to San Francisco as a whole.

The following paragraphs briefly describe a couple of the major social and economic conditions impacting community health in BVHP.

Food Resources

Research has found that the absence of a supermarket in a neighborhood predicts lower fruit and vegetable consumption and an increased prevalence of overweight and obesity. Being overweight or obese are risk factors for heart disease, asthma, diabetes and various forms of cancer. Bayview has one of the worst retail food environments in the city, with little access to fresh fruits and vegetables. Although Bayview has a lower density of fast food and alcohol outlets per square mile compared to the city average, almost all of the fast food and alcohol outlets are concentrated along Third Street near residential areas.

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[58] ACPHD. Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County. 2008.
[59] SFDPH, BVHP Neighborhood Profile in SFDPH's Healthy Development Measurement Tool, www.thehdmt.org.
[60] SFDPH, *Health Programs in Bayview Hunter's Point and Recommendations for Improving the Health of Bayview Hunter's Point Residents*, July 5, 2006; San Francisco Human Rights Commission. *Environmental Racism: A Status Report & Recommendations*, December 2003.

Table C&R-6 Neighborhood Conditions Impacting Health Outcomes

Condition	*BVHP*	*Citywide*
Proportion of population within ½ mile of a supermarket	63%	84%
Retail Environmental Food Index (REFI)[a]	3.5	3.18
Proportion of households with ¼ mile access to community garden	11%	25%
Proportion of households within ½ mile of a farmer's market	49%	35%
Proportion of population within ½ mile from bank or credit union	44%	80%
Weighted average Academic Performance Index (API) of API rated schools in neighborhood	661	764
Number of requests per seats available at public schools in neighborhood	1.1	3.3
% of students attending neighborhood elementary (K–5) school	30%	36%
Proportion of households living in overcrowded conditions	24%	14%
Proportion of population within ¼ mile of a neighborhood or regional park	98%	88%
Proportion of population within ¼ mile of a recreation facility	96%	86%
Density of off-sale alcohol outlets per square mile	6.1	18
Density of fast food outlets per square mile	1	4.7

SOURCE: Information from SFDPH Healthy Development Measurement Tool. http://thehdmt.org/neighborhoods/compare (accessed on March 5, 2010)

a. The Retail Food Environment Index (RFEI) is a ratio describing the relative abundance of different types of retail food outlets in a given area. The RFEI is constructed by dividing the total number of fast-food restaurants and convenience stores by the total number of supermarkets and produce vendors (produce stores and farmers markets) in the area. The result is the ratio of retail food outlets that offer little in the way of fruits and vegetables and other healthy foods to those in which fruits and vegetables are readily available. The higher the RFEI index, the more likely consumers would find unhealthy food options.

Park and Recreational Resources

Proximity to neighborhood parks near one's home is associated with increased physical activity in children and adults, reduced stress and depression, and better self-rated health. Although quantitatively, a higher percentage of households live near neighborhood parks and recreational facilities than San Francisco residents citywide, the qualitative experience of residents is quite different. Factors such as perceived and actual safety, gang lines, limited hours of operation, limited transportation, lack of lighting, the quality of the facilities, and the presence of major roads, highways, buildings, or gates can limit access to the facilities.

Violence/Crime

Cumulatively, community violence results in increased social isolation and depression and decreased mobility and physical activity. Physical inactivity is a major determinant of ischemic heart disease and stroke, overweight/obesity, hypertension, diabetes, and high cholesterol.[61] Witnessing and experiencing community violence causes longer-term behavioral and emotional problems in youth.[62]

[61] SFDPH. San Francisco Burden of Disease & Injury Study: Determinants of Health. http://www.healthysf.org/bdi/outcomes/94124.htm

[62] Perez-Smith AM, Albus KE, Weist MD. Exposure to violence and neighborhood affiliation among inner-city youth. J Clin Child Psychol. 2001:30(4):464-72. Ozer EJ, McDonald KL. Exposure to violence and mental health among Chinese American urban adolescents. J Adolesc Health. 2006:39(1):73-9.

The rate of homicide in BVHP between 2005 and 2007 was the highest in San Francisco and almost five times the city average (1.4 homicides per 1,000 BVHP residents vs. 0.3 per 1,000 SF residents). Rates of physical assault, rape/sexual assault, and property crimes are also higher than the city average. Risk factors for violence and crime include: poverty and economic disparity; discrimination and oppression, negative family dynamics, firearms, media violence, alcohol and other drugs, incarceration and re-entry, experiencing and/or witnessing violence, community deterioration, illiteracy and academic failure, truancy, mental illness, and traditional gender socialization.[63]

Community violence impacts the perceived safety of a neighborhood, limiting social interactions between neighbors, the ability of children to walk to school and play outside, the accessibility of local resources (especially for the elderly), and adversely impacting on social cohesion.[64] Specifically, only 28 percent of residents in District 10 (which includes Bayview, Potrero Hill, and Visitacion Valley) stated that they feel very safe or safe at night, compared to 52 percent of residents citywide. During the day, residents of District 10 felt safer (72 percent feel very safe or safe) but still less frequently than residents citywide 84 percent.

Income and Poverty

Income is one of the strongest and most consistent predictors of health and disease in public health research literature. Higher income and accumulated or inherited wealth make it easier to buy health insurance and medical care, healthy foods, and quality childcare, and to live in a safe neighborhood with good schools and recreational facilities.[65] Poor health can mean lower earnings, creating a cycle between income and health that can continue across lifetimes and generations. Unemployment is associated with premature mortality, cardiovascular disease, hypertension, depression, and suicide.[66]

According to the 2000 Census, 21 percent of the BVHP population lives in poverty, almost twice the citywide average. In 2000, unemployment in BVHP was double the rate of San Francisco (10 percent vs. 5 percent). In 2007, the per capita income of BVHP residents was roughly half the citywide average ($18,258 vs. $34,946) and the median household income was two-thirds the citywide average ($46,323 vs. $73,528). In December 2009, statewide African American and Latino unemployment rates in December 2009 were higher than Whites (14 percent vs. 11 percent).[67] Given that over 50 percent of the population in BVHP is African American and/or Latino, it is assumed that the economic depression has disproportionately impacted BVHP residents.

City Actions to Reduce Environmental Risk to Bayview Hunters Point Residents

In September 2006, the SFDPH issued a report entitled *Health Programs in Bayview Hunters Point and Recommendations for Improving the Health of Bayview Hunters Point Residents*. The report discusses a number of factors responsible for poor health in turn, and presents recommendations for further work addressing

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[63]Preventing Violence: A Primer, Prevention Institute, 2009. http://www.preventioninstitute.org/component/jlibrary/article/id-144/127.html.
[64] Fullilove MT, Heon V, Jimenez W, Parsons C, Green LL, Fullilove RE. Injury and anomie: effects of violence on an inner-city community. Am J Public Health. 1998:88(6):924-7.
[65] http://www.commissiononhealth.org/Income.aspx.
[66] Jin RL, Shah CP, Svoboda TJ. The impact of unemployment on health: a review of the evidence. The Journal of the Canadian Medical Association. 1995:153, 529–540.
[67] http://www.bls.gov/lau/ptable14full2009.pdf.

each factor. The report notes substandard housing, poor quality of food resources, exposure to tobacco smoke, and economic all contribute to the relatively higher disease burden in the community. Recommendations for community health included efforts to improve residents' access to nutrition foods and safe neighborhood parks, as well as educational efforts to address tobacco use and other behaviors that negatively affect health. Appendix A of this report lists and describes 59 different programs that service the BVHP community that address issues ranging from gun violence prevention to HIV early intervention.

The city has conducted a number of coordinated actions to support public health in the past decade, including public health agency collaboration on land use and redevelopment planning and implementation. A number of City actions listed below are specifically responsive to environmental health needs and concerns of community residents.

- Facilitated the decommissioning of the PG&E Hunter's Point Power Plant
- Implemented truck route plan to reroute freight trucks away Third Street and residential areas and convert San Francisco Department of Public Works (DPW)/San Francisco Public Utilities Commission (SFPUC)/San Francisco Fire Department (SFPD) heavy vehicles to biodiesel fuel
- Constructed the electrified Third Street light-rail line, deployed non-diesel buses preferentially in BVHP and retrofitted remaining diesel buses with emissions reduction equipment
- Provided staffing for public schools Tools for Schools program to protect and improve school air quality
- Implemented a home environmental assessment program for asthma patients conducted by environmental health inspectors and San Francisco General Hospital Medical Clinic (SFGHMC) asthma clinic case managers
- Approved and implemented more stringent requirements to control the dispersion of construction dust during the first phase of Shipyard development (Health Code Article 31)
- Developed, approved, and implemented the country's first health code requirements for protecting new residential construction from traffic pollutants (Health Code Article 38)
- Implementing the HOPE SF program to rebuild dilapidated San Francisco Housing Authority (SFHA) public housing beginning with the Hunters View's project
- Developing an environmental education center for youth at Heron's Head Park with a community environmental justice organization

In summary, BVHP has poorer health outcomes relative to other neighborhoods in San Francisco. These disparities may be attributed to significant historical and current social, economic, and environmental inequities (i.e., the cumulative impact of higher unemployment, substandard housing, reduced access to nutritious food resources, and limited retail services, and community violence). The close proximity of residential and industrial uses in BVHP also contributes to unhealthy environmental conditions for many residents. The City and County of San Francisco has acknowledged the existence of community health disparities for many years and responded with a number of actions, including infrastructure and redevelopment initiatives as well as social and health programs to address health and welfare concerns in BVHP.

Nevertheless, there is currently no evidence to suggest that current and recent Shipyard conditions and activities are exacerbating BVHP health disparities. The Draft EIR analyzes how hazards at the Shipyard would be addressed during Project construction and identifies mitigation measures.

Master Response 6: Seismic Hazards

Introduction

Overview

Comments have been raised suggesting that the Draft EIR has not adequately addressed seismicity and the associated potential seismic hazards at the site. This master response addresses comments made concerning the potential for earthquakes and seismic hazards on the Project site given its proximity to major area faults. The response also discusses the site-specific geotechnical and seismic studies that would be required for the Project prior to issuance of any permits.

This response is organized by the following topics:

- Introduction
- Site-Specific, Design-Level Geotechnical and Seismic Studies
- Mitigation Measures to Address Potential Seismic Hazards
- Amplification
- Seismic Effects on Movement or Exposure to Toxics

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - None
- Organizations
  - Breast Cancer Action (55-3)
  - Green Action Health and Environmental Justice (58-8, SFRA1-83)
  - POWER (52-3, 69-1)
  - San Francisco Green Party (36-4)
- Individuals
  - Ahimsa Porter Sumchai (SFRA2-18)
  - Carol Harvey (67-2, 94-1)
  - Colleen Muhammad (72-2)
  - Dan Solberg (SFRA1-39)
  - Daniel Landry (SFPC-26)
  - Espanola Jackson (6-1, SFPC-8)
  - Jaron Brown (SFRA1-43)
  - Juana Tello (66-5, 66-13)
  - Tim O'Miles (SFRA2-36)
  - Willie Ratcliff (SFPC-107)

Comments received on the Draft EIR related to seismic activity were focused almost exclusively on issues addressed in Section III.L (Geology and Soils) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.L.

Comment Summary

This master response responds to all or part of the following comments: 6-1, 36-4, 52-3, 55-3, 66-5, 66-13, 67-2, 69-1, 72-2, 94-1, SFRA1-39, SFRA1-43, SFRA1-83, SFPC-8, SFPC-26, SFPC-107, SFRA2-18, SFRA2-36.

Summary of Issues Raised by Commenters

- Draft EIR has not adequately addressed seismic hazards
- Concern expressed regarding an earthquake or seismic activity mobilizing soil or groundwater contaminants

Response

Introduction

The entire San Francisco Bay Area is in a seismically active region. Seismic activity associated with a large earthquake on a nearby fault can potentially result in seismic hazards such as groundshaking, fault rupture, liquefaction, lateral spreading, ground settlement, ground oscillation, and seismic slope instability. As evidenced by the level of development throughout the San Francisco Bay, successful building construction is possible in a seismically active zone and can be readily accomplished even where seismic hazards are thought to exist through the implementation of appropriate structural and foundation design and/or ground improvement measures.

Seismic hazards for the site are defined in general terms in the Draft EIR; the Draft EIR is not intended to be a design-level document to address site-specific seismic hazards or mitigation of associated hazards. However, the Draft EIR points out that for final design, site-specific design-level seismic and geotechnical studies are required and appropriate mitigation measures, including ground improvement and/or structural design measures, would be implemented. This master response is intended to direct the reader to specific sections and figures in the Draft EIR that address these issues.

The Draft EIR states that the Project site is in a seismically active region (Section III.L, Draft EIR page III.L-11). Figure III.L-2 (Regional Fault Map) identifies the active nearby faults that could potentially generate an earthquake. Seismic activity associated with a large earthquake on a nearby fault could potentially result in seismic hazards at the site such as groundshaking, fault rupture, liquefaction, lateral spreading, ground settlement, ground oscillation, and seismic slope instability. Each of these potential seismic hazards is further discussed in the Draft EIR as follows:

- Groundshaking is expected to occur at the site during a large earthquake on one of the nearby faults. The intensity of seismic shaking or strong ground motion during an earthquake at any particular location is dependent on a number of factors, including the distance and direction of the site from the earthquake epicenter, the earthquake magnitude, and the geologic conditions at and in the vicinity of the site. Site-specific seismic and geotechnical studies would be undertaken prior to final design to evaluate the peak ground acceleration from an earthquake expected at the site and the structure would be designed to accommodate the anticipated groundshaking under the peak ground acceleration (Draft EIR page III.L-40).
- No known active faults cross the site, rendering hazards from fault rupture at the site unlikely (Draft EIR page III.L-14).

- Refer to Section III.L, Impact GE-5, and Master Response 7 (Liquefaction) for a discussion regarding the potential for and mitigation of liquefaction and liquefaction-induced seismic hazards, including lateral spread, sand boils, and ground settlement, at the site (Draft EIR pages III.L-40 through -46).
- Earthquake-induced settlement, other than that associated with liquefaction (refer to Master Response 7), which occurs only in soil below the groundwater level, could potentially occur in areas where loose sand is present above the groundwater (differential compaction). The upper fill layer at the site has been characterized as a heterogeneous mix of gravel, sand, silt, and clay that contains varying amounts of debris (wood, glass, etc.). There could be zones of soil within this layer above the groundwater level that contain loose sand. Because of the heterogeneous nature of the fill layer, settlements resulting from differential compaction could occur both uniformly and differentially, unless mitigation measures such as ground improvement and/or structural/foundation solutions are implemented (Draft EIR page III.L-16).
- Portions of the site have been mapped in a zone designated to have the potential for seismically induced landslides (Seismic Hazard Map, Figure III.L-3). Hazards associated with seismically induced landslides can be mitigated using methods generally accepted by California Certified Engineering Geologists (CEG) and California Registered Geotechnical Engineers (GE), including ground improvement and/or structural/foundation solutions (Impact GE-6 and mitigation measure MM GE-6 [Seismically Induced Landslides], Draft EIR pages III.L-46 through 49).
- Ground oscillation is a phenomenon where the surface soil layer, riding on a buried liquefied layer, is thrown back and forth by the shaking and can be severely deformed. While areas of the site have been identified as containing potentially liquefiable soils, there is no evidence of a broadly spanning buried liquefiable layer above or below the existing groundwater table on which the surface layer could be oscillated. Therefore, the potential for this hazard at the site would be considered low. Furthermore, mitigation measures MM GE-4a.1, MM GE-4a.2, and MM GE-4a.3, which would be implemented where liquefiable soils are identified, would also reduce the risk of damage to structures from ground deformation (Draft EIR page III.L-16).

Site-Specific, Design-Level Geotechnical and Seismic Studies

As discussed on page III.L-18 of the Draft EIR, the State has regulations protecting the public from geo-seismic hazards that are contained in California Public Resources Code (PRC) Division 2, Chapter 7.8 (the Seismic Hazards Mapping Act) and 2007 California Code of Regulations (CCR), Title 24, Part 2 (the California Building Code [CBC]). The Seismic Hazard Mapping Act was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. The Act requires site-specific geotechnical investigations to identify potential seismic hazards and formulate corrective measures prior to permitting of developments designed for human occupancy within the Zones of Required Investigation. The Seismic Hazard Map for the City and County of San Francisco shows portions of the Project site to be within a Zone of Required Investigation for liquefaction potential. For projects in a hazard zone, the Department of Building Inspections (DBI) requires that the geologic and soil conditions of the Project site be investigated and appropriate mitigation measures, if any, incorporated into development plans.

The Draft EIR points out that site-specific, design-level geotechnical and seismic studies, which are also discussed and described in mitigation measures MM GE-4a.1 and MM GE-4a.2 (Seismically induced groundshaking, Section III.L, pages III.L-37 and -38), MM GE-5a (Seismically induced ground failure,

Section III.L, pages III.L-42 and -43) and MM GE-6a (Seismically induced landslides, Section III.L, page III.L-47) would be performed prior to issuance of any building permits to identify the potential for seismic hazards at the site. These studies would consist of geotechnical investigations with site-specific seismic analysis and would provide ground improvement/mitigation and/or foundation design recommendations to address potential seismic hazards, should they exist. Seismic studies would evaluate the anticipated site-specific peak ground accelerations that would induce groundshaking so that the structure (foundation and superstructure) can be designed to accommodate the anticipated shaking. All Project structural designs would incorporate and conform to the requirements and recommendations in the site-specific geotechnical and seismic investigations. Furthermore, the City's DBI permit application, review, and inspection process ensures that structures would be designed and built to Code. The geotechnical engineer would review Project plans and specifications and observe ground improvement and foundation installation to check for conformance to the geotechnical and seismic recommendations and requirements.

Mitigation Measures to Address Potential Seismic Hazards

Mitigation measures to address potential seismic hazards include structural measures and ground improvement methods (Section III.L, MM GE-4a.1, MM GE-4a.2, MM GE-5a, and MM GE-6a, Draft EIR pages III.L-37 through -47). As discussed above, all structures, including the foundation (below ground portion) and superstructure (above ground portion), would be designed to accommodate the anticipated groundshaking under the peak ground acceleration (as determined by the site-specific seismic study) and other potential seismic hazards, including earthquake-induced ground settlement (refer to Master Response 7 for a discussion of liquefaction mitigation measures). Foundation mitigation measures could include the construction of deep foundations, which transfer building loads to competent soil or rock below the zone where seismic densification/differential compaction could potentially occur, or use of a structural, sufficiently reinforced mat foundation and/or a geotextile/geogrid beneath structures to distribute loads and reduce the potential for damage to the structure from earthquake-induced ground settlement. Ground improvement measures could include (1) overexcavation and replacement of soil potentially subject to earthquake-induced settlement with engineered compacted fill; (2) dynamic compaction (such as deep dynamic compaction or rapid impact compaction) to densify the loose soil; and (3) stone columns, soil-cement columns, or rammed aggregate piers (RAPs) to densify the loose soil and provide additional bearing support beneath building foundations.

As described in MM GE-6a, Draft EIR page III.L-47, if the design-level, site-specific geologic, seismic, and geotechnical studies identify the presence of landslides that could be triggered by an earthquake, recommendations for slope stabilization procedures shall be provided and implemented. Slope stabilization procedures could include (1) use of retaining walls, rock buttresses, screw anchors, or concrete piers; (2) provision of slope drainage or removal of unstable materials; (3) provision of rockfall catch fences, rockfall mesh netting or deflection walls; (4) provision of setbacks at the toe of slopes; and/or (5) avoidance of highly unstable areas.

Amplification

Comments have been raised suggesting that the Draft EIR has not adequately addressed amplification, a phenomena associated with seismic hazards, at the site. Amplification effects can occur when seismic waves travel through soft soils underlain by shallow bedrock. During the design-level site-specific seismic hazards

assessment, appropriate attenuation relationships would be selected to account for amplification effects. All structures and improvements would be designed based on the procedures in ASCE 7-05 Chapters 11.4 and 21.2in accordance with the 2007 *California Building Code*, Chapter 21.

Seismic Effects on Movement or Exposure to Toxics

As discussed in Section III.K.1, Draft EIR page III.K-2, there are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations throughout HPS Phase II. These are the only known hazardous material release sites requiring remediation at the Project site; there are no known hazardous material release sites requiring remediation at Candlestick Point, or at locations where off-site improvements are proposed, based on the results of investigations to date and a review of government agency databases. The Navy is providing soil and groundwater remediation (cleanup) at the HPS Phase II site to reduce chemical concentrations to meet cleanup levels approved by federal and state regulatory agencies. After completion of cleanup activities, chemicals present in concentrations below these cleanup levels would remain. Although residual chemicals may remain in soil after cleanup, the residual chemicals would be located under a physical barrier (e.g., soil cover, pavement, concrete building foundation) that prevents human exposure to these residual chemicals. It is also expected that federal and state regulatory agencies would allow a group of naturally occurring metals associated with fill material derived from native bedrock to remain under a final cover in concentrations above risk levels. In this scenario, the cover would limit exposure and protect humans from long-term health risks even if breaches in the cover temporarily occur. Operation and maintenance plans for these covers would be carried out to periodically monitor and repair any breaches. Breach of the cover would be required to be repaired so that no long-term health risk would occur. Therefore, even if ground rupture were to occur, contaminants and naturally occurring metals would not be released at levels presenting a concern to human or ecological health.

Section III.K of the Draft EIR page III.K-17 describes how surface covers are being installed or existing surface covers are expected to be required to remain in place as part of the Navy's Comprehensive Environmental Cleanup and Liability Act (CERCLA) program (refer to Master Response 9 [Status of CERCLA Process]), to support the development (e.g., building slabs, pavement for roads, concrete for sidewalks, soil or grass for landscaped areas) and minimize exposure to background metals (refer to Master Response 15 [Proposition P and the Precautionary Principle]). These covers would meet certain specifications of thickness and be maintained to prevent breaches.

Anticipated sea level rise is being taken into account during the development design process to ensure preservation of the planned land uses (refer to Master Response 8 [Sea Level Rise] for a discussions of sea level rise and potential exposure to toxics). Additionally, when specific buildings are being designed, this anticipated sea level rise would be taken into consideration when establishing surrounding grades, ground floor elevations and, if incorporated into a building, the type of below grade parking garage and associated foundation type to prevent groundwater infiltration. Note that in areas where below grade structures are installed below the groundwater table there are several well tested methodologies that have been used with success to prevent groundwater intrusion into these below grade structures. As stated in Master Response 8, the buildings would be designed for the anticipated groundwater levels to prohibit groundwater from entering basements.

In addition, the site is also known to contain a landfill, and possibly other areas of debris disposal. Under CCR Title 27, Section 21090, all closed landfills are required to have an engineered landfill cap if landfill materials are left on site. The landfill cap is intended to maintain a protective seal to keep moisture and rain from penetrating the landfill waste and prevent exposure of the public and the environment to the disposed waste. If the Navy proposes and USEPA concurs that engineered caps may be placed on top of an area of known or suspected residual contamination (typically a landfill) in order to prevent unsafe exposures from chemicals allowed by the regulators to be left on site, site-specific geotechnical studies, which would evaluate maximum potential earthquakes and liquefaction potential, would be used in the design of such caps to minimize potential breaches. In addition, operation and maintenance plans for these caps would be developed and be required to be carried out to monitor for and repair potential breaches should they occur. Additionally, emergency response plans would be carried out following major seismic events at which time caps and covers would be investigated for potential or actual breaches and repaired. Please also see Master Response 8 (Sea Level Rise) for discussion of effect of sea level rise on caps and covers.

Master Response 7: Liquefaction[68]

Introduction

Overview

Comments have been raised suggesting that the Draft EIR has not adequately addressed liquefaction potential and mitigation of potential liquefaction-associated hazards at the site. This master response provides further information on the subject of liquefaction at the Project site and discusses specific hazards that could be connected with or amplify liquefaction potential, such as sea level rise or hazardous materials. The response also describes the design-level studies that would be required prior to issuance of any permits for the Project and the mitigation measures that would be implemented for the Project.

This response is organized by the following topics:

- Introduction
- Liquefaction Potential and Associated Hazards
- Site-Specific, Design-Level Liquefaction Studies
- Liquefaction Effects on Hazardous Materials
- Sea Level Rise Effects on Liquefaction Potential
- Mitigation Measures to Potential Liquefaction-Related Hazards

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - None

[68] Liquefaction is a phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

- Organizations
  - Breast Cancer Action (55-3)
  - POWER (52-2, 52-3, 69-1)
  - San Francisco Green Party (36-4)
- Individuals
  - Al Symon (SFPC-35)
  - Carol Harvey (67-2, 67-4, 94-1)
  - Cecille Caterson (SFRA1-83)
  - Daniel Landry (SFPC-26)
  - Espanola Jackson (6-1)
  - Francisco Da Costa (105-1)
  - Jaron Brown (SFPC-24)
  - Jessie Tello (SFPC-21)
  - Juana Tello (66-5, 66-13, SFPC-94)
  - Karissa Cole (SFRA1-54)
  - Nyese Joshua (65-1, 65-4)
  - Saul Bloom (SFPC-133)
  - Starr Miles (SFPC-75)
  - Vivien Donahue (60-4)
  - Willie Ratcliff (SFPC-107)

Comments received on the Draft EIR related to liquefaction and hazardous materials were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) and III.L (Geology and Soils) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K and Section III.L.

Comment Summary

This master response responds to all or part of the following comments: 6-1, 36-4, 52-2, 52-3, 55-3, 60-4, 65-1, 65-4, 66-5, 66-13, 67-2, 67-4, 69-1, 94-1, 105-1, SFRA1-54, SFRA1-83, SFPC-21, SFPC-24, SFPC-26, SFPC-35, SFPC-75, SFPC-94, SFPC-107, SFPC-133.

Summary of Issues Raised by Commenters

- Liquefaction has not been adequately addressed in EIR
- Concern expressed regarding the effect sea level rise can have on liquefaction potential
- Concern expressed regarding the risk liquefaction poses for release of hazardous materials

Response

Introduction

The potential for liquefaction associated with strong to very strong groundshaking during a major earthquake exists throughout the San Francisco Bay Area, as well as in many other seismically active areas throughout the world. Liquefaction can result in ground failure if the potential for liquefaction is not

mitigated through engineering design or ground improvement. Throughout San Francisco, including the Marina, Embarcadero, Financial District, South of Market Street, and Mission Bay neighborhoods, many buildings have been successfully constructed within potentially liquefiable zones through the implementation of proper foundation design and/or ground improvement.

Comments have been raised suggesting that the Draft EIR has not adequately addressed liquefaction potential and mitigation of potential liquefaction-associated hazards at the site. Liquefaction potential and associated hazards for the site are defined in general terms in Section III.L (Geology and Soils) of the Draft EIR; the Draft EIR is not intended to provide detailed individualized hazards assessments of each potential building site and the detailed design-specifications that would be used at each individual site to mitigate liquefaction hazards. Instead, the Draft EIR identifies the potential types of liquefaction hazards that may exist at the site and the approaches that can be used to mitigate these hazards along with the performance criteria that would be imposed on the development to assure that these techniques would fully mitigate the potential site hazards identified. The EIR points out that for final design, site-specific design-level liquefaction studies, as well as recommendations for appropriate techniques to be implemented to avoid the hazards, are required. Ground improvement and/or structural design measures would be implemented to fully mitigate liquefaction hazards. This master response is intended to direct the reader to specific sections and figures in the Draft EIR that address these issues.

Liquefaction Potential and Associated Hazards

Section III.L of the Draft EIR states that the project site is in an area of San Francisco that has been designated as potentially liquefiable (Section III.L, page III.L-15, Figure III.L-3 [Seismic Hazard Map]). Figure III.L-1 (Geologic Map) illustrates that the majority of the site is covered by artificial fill, which is a heterogeneous mix of gravel, sand, silt, and clay that contains varying amounts debris (wood, concrete, glass, etc.). There could be zones of soil within this layer that contain loose granular soil that may be susceptible to liquefaction. However, because of the heterogeneous nature of the fill, liquefaction within the fill is expected to occur in random layers and pockets, limiting the extent of seismically induced settlement and lateral spreading[69] to localized zones within the fill. Section III.L points out that there is a hydraulically placed sand fill in the vicinity of the southeast-facing shoreline of Parcels D and E at HPS Phase II that consists of a thick unit of predominantly uniform loose, dredged sand and is, therefore, more susceptible to liquefaction.

Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures, and sand boils are evidence of liquefaction. The Draft EIR indicates that, based on existing data, there is little or no risk of large translational ground movements at the site as a result of liquefaction. However, should liquefaction occur, there are five commonly recognized liquefaction-associated hazards, which site-specific, design-level studies should address. Design-level liquefaction studies, which are further described in mitigation measures MM GE-4 in Section III.L (Geology and Soils) of the EIR, would address five general types of localized potential hazards, and provide treatment methods, Mitigation measures require that the structure be designed to accommodate potential liquefaction-associated hazards or ground treatment/site

[69] Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

improvement techniques are implemented prior to construction. The specific potential liquefaction-associated hazards at the site are (1) potential foundation bearing failure, or large foundation settlements caused by ground softening, (2) potential structural and/or site settlements, (3) localized lateral displacement; "lateral spreading" and/or lateral compression, (4) flotation of light structures with basements, or underground storage structures, and (5) hazards to lifelines (utilities critical to emergency response). The response below explains the regulatory scheme that exists in California to address these liquefaction hazards and how the project would mitigate hazards.

Site-Specific, Design-Level Liquefaction Studies

The State has regulations protecting the public from geo-seismic hazards, such as liquefaction, that are contained in California *Public Resources Code* Division 2, Chapter 7.8 (the *Seismic Hazards Mapping Act*) and 2007 *California Code of Regulations* (CCR), Title 24, Part 2 (the *California Building Code* [CBC]). The *Seismic Hazard Mapping Act* was passed in 1990 following the Loma Prieta earthquake to reduce threats to public health and safety and to minimize property damage caused by earthquakes. The Act requires site-specific geotechnical investigations to identify potential seismic hazards and formulate corrective measures prior to permitting of developments designed for human occupancy within the Zones of Required Investigation. The Seismic Hazard Map for the City and County of San Francisco shows portions of the Project site to be within a Zone of Required Investigation for liquefaction potential. For projects in a hazard zone, the DBI requires that the geologic and soil conditions of the Project site be investigated and appropriate mitigation measures, if any, incorporated into development plans. Measures that can be employed, depending on the specific site conditions, include (1) overexcavation and replacement of potentially liquefiable soil with engineered compacted fill, (2) compaction grouting to densify the loose, potentially liquefiable soil, (3) dynamic compaction (deep dynamic compaction or rapid impact compaction) to densify the loose, potentially liquefiable soil, (4) vibro-compaction (also known as vibro-flotation) to densify the loose, potentially liquefiable soil, (5) stone columns to provide pathways for pore pressure to dissipate in potentially liquefiable soil, thus reducing the potential for liquefaction-induced settlement, and (6) soil-cement columns to densify the loose, potentially liquefiable soil and provide additional bearing support beneath building foundations. Alternatively, if appropriate and depending on the specific site conditions, the structure can be designed to accommodate the potential liquefaction-associated hazards, such as ground settlement. Mitigation measures, including structural measures and ground improvement techniques are discussed in the EIR in Section III.L, pages III.L-42 and -43.

Section III.L, page III.L-15 points out that site-specific, design-level liquefaction studies, which are also further discussed and described in mitigation measures MM GE-4a.1 and MM GE-4a.2 (Seismically induced groundshaking, Section III.L, pages III.L-37 and -38) and MM GE-5a (Seismically induced ground failure, Section III.L, pages III.L-42 and -43) would be performed prior to issuance of any building permits. These studies would consist of geotechnical investigations with site-specific seismic analysis and would provide ground improvement and/or other mitigative recommendations to address potential liquefaction-related ground hazards, should they exist. The recommendations would identify the specific recommended techniques for achieving the site-specific performance goals to mitigate liquefaction-related hazards (e.g., performance standards for specific ground improvement techniques, such as the level of densification to which the soil needs to be improved to mitigate liquefaction). Available, possible techniques, as discussed above in this document and identified in the EIR in Section III.L, pages III.L-42 and -43 include

overexcavation and replacement of liquefiable soil, compaction grouting, deep dynamic compaction, vibro-compaction and stone or soil-cement columns. All project structural designs would incorporate and conform to the requirements and recommendations in the geotechnical investigations. Furthermore, the geotechnical engineer would review project plans and specifications and observe ground improvement and foundation installation to check for compliance to the geotechnical recommendations and requirements.

Liquefaction Effects on Hazardous Materials

As discussed in Section III.K.1, Draft EIR page III.K-2, there are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations throughout HPS Phase II. These are the only known hazardous material release sites requiring remediation at the Project site; there are no known hazardous material release sites requiring remediation at Candlestick Point, or at locations where off-site improvements are proposed, based on the results of investigations to date and a review of government agency databases. The Navy is providing soil and groundwater remediation (cleanup) at the site to reduce chemical concentrations to meet cleanup levels developed to protect human health and the environment and approved by Federal and State regulatory agencies. After completion of cleanup activities, chemicals present in concentrations below these goals would remain. It is also expected that regulators would allow a group of naturally occurring metals associated with fill material derived from native bedrock to remain under a final cover in concentrations above risk levels. The cover in this scenario would limit exposure and protect humans from long-term health risks even if breaches in the cover temporarily occur. Operation and maintenance plans for these covers would be carried out to periodically monitor and repair any breaches. Therefore, even if ground rupture were to occur, naturally occurring metals would not be released at levels presenting a concern to human or ecological health; further if such metals are allowed to be left in place and covered, any breach of the cover would be required to be repaired so that no long-term health risk would occur. Section III.K (Hazards and Hazardous Materials), Draft EIR page III.K-17, describes how surface covers are being installed or remaining in place as part of the Navy's cleanup program (refer to Master Response 9 [Status of CERCLA Process]), to support the development (e.g., building slabs, pavement for roads, concrete for sidewalks, soil or grass for landscaped areas), and minimize exposure to background metals (refer to Master Response 15 [Proposition P and the Precautionary Principle]), these covers would meet certain specifications of thickness and be maintained to prevent breaches.

In addition, the site is known to have a landfill, and possibly other area of debris disposal. Under CCR Title 27 Section 21090, all closed landfills are required to have an engineered landfill cap if landfill materials are left onsite. The landfill cap is intended to maintain a protective seal to keep moisture and rain from penetrating the landfill waste and prevent exposure of the public and the environment to the disposed waste. If the Navy proposes and USEPA concurs that engineered caps may be placed on top of an area of known or suspected residual contamination (typically a landfill) in order to prevent unsafe exposures from chemicals allowed by the regulators to be left on site, site-specific geotechnical studies, which would evaluate maximum potential earthquake and liquefaction potential, would be used in the design of such caps to minimize potential breaches or damage to the cap during a seismic event. Operation and maintenance plans for these caps would be carried out to monitor and repair any damage that occurs to the cap as a result of a seismic event. Additionally, emergency response plans would be carried out following major flooding and seismic (refer to Master Response 6 [Seismic Hazards]) events, at which time caps and covers would be investigated for potential breaches and repaired.

Sea Level Rise Effects on Liquefaction Potential

Concern has been raised regarding the impacts of future sea level rise on site liquefaction susceptibility. If sea level should rise in the future, it would be anticipated that there is a corollary rise in the groundwater table elevation. As liquefaction can only occur in saturated soils located below the groundwater table, this would cause soil not currently beneath the groundwater table to become saturated and potentially susceptible to liquefaction in the future. Site design would accommodate a future sea level rise of 36 inches (refer to Master Response 8 [Sea Level Rise]). To account for the future impact of sea level rise, design-level liquefaction analysis and modeling would be based on a groundwater table elevation that assumes groundwater is 36 inches higher than present conditions. Since liquefaction occurs only in soil below the groundwater table and the groundwater table would be higher because of sea level rise, depending on the site-specific soil conditions, the thickness of the liquefiable layer and corresponding liquefaction-induced settlement could be increased. Another, mitigating consideration, however, is that as the groundwater level rises, the thickness of soil that would potentially be subject to seismically induced differential compaction settlement (loose non-saturated sand above the groundwater level) would decrease. Depending on site-specific soil conditions, the settlement of soil induced by liquefaction (saturated soil below the groundwater) and the settlement of soil induced by differential compaction (non-saturated soil above the groundwater) would be expected to be of similar magnitude; therefore, the overall impact on the site from liquefaction would be unaffected or negligibly affected by sea level rise. Thus, the net effect of sea level rise on seismically induced settlement (increased thickness of potentially liquefiable layer and decreased thickness of layer subject to differential compaction) is expected to be minimal.

Mitigation Measures to Potential Liquefaction-Related Hazards

Mitigation measures that can reduce or avoid potential liquefaction-related hazards include structural measures and ground improvement methods. Structural measures could include the construction of deep foundations, which transfer building loads to competent soil or rock below the potentially liquefiable zone, or use of a structural, sufficiently reinforced mat foundation to distribute loads and reduce the potential for damage to the structure from liquefaction-induced ground settlement with flexible utility connections to allow some settlement beneath the buildings. If liquefaction estimates are such that these treatments would not address liquefaction and settlement-related impacts adequately, ground improvement measures could include (1) overexcavation and replacement of potentially liquefiable soil with engineered compacted fill, (2) compaction grouting to densify the loose, potentially liquefiable soil, (3) dynamic compaction (deep dynamic compaction or rapid impact compaction) to densify the loose, potentially liquefiable soil, (4) vibro-compaction (also known as vibro-flotation) to densify the loose, potentially liquefiable soil, (5) stone columns to provide pathways for pore pressure to dissipate in potentially liquefiable soil, thus reducing the potential for liquefaction-induced settlement, and (6) soil-cement columns to densify the loose, potentially liquefiable soil and provide additional bearing support beneath building foundations. These ground improvement methods are identified in the EIR in Section III.L, pages III.L-42 and -43. Performance standards that must be achieved are set forth in the geotechnical report recommendations specific to the site-specific ground improvement technique. For example, for compaction grouting, a minimum Standard Penetration Test (SPT) blow count in the compaction-grouting-improved soil would be specified that must be tested and achieved prior to construction.

Master Response 8: Sea Level Rise

Introduction

Overview

Several comments have been received regarding the project's approach to addressing sea level rise. These comments largely focus on the method for estimating total sea level rise; how the Project would be designed to accommodate sea level rise over time; and how sea level rise could impact other site conditions, such as groundwater, contamination, liquefaction, seismicity, and infrastructure. This master response specifically addresses:

- The approach used in addressing coastal flooding potential with and without sea level rise allowances
- The methodology used in developing sea level rise estimates
- The strategy developed to provide continued protection against future sea level rise

Responses to specific comments on sea level rise that are not covered in this master response are provided separately. Also, other topics indirectly related to sea level rise that were brought up in the comments are presented in separate master responses, including Master Response 6 (Seismic Hazards), Master Response 7 (Liquefaction), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup).

This response is organized by the following topics:

- Introduction
- Approach to Address Sea Level Rise Effects on Flooding
  - Coastal Flooding Studies
  - Literature on Sea Level Rise
  - Summary and Adopted Approach
- Mitigation Measures for Potential Sea Level Rise Hazards Related to Hydrology and Flooding
  - Shoreline Protection
  - Storm Drain System
  - Development Areas
  - Adaptation Strategy
  - Potential Adaptation Measures
- Other Sea Level Rise–Related Issues
  - Sea Level Rise Effects on Seismicity
  - Sea Level Rise Effects on Liquefaction
  - Sea Level Rise Effects on Movement of or Exposure to Toxics
  - Mitigation Measures for Other Potential Sea Level Rise Hazards

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > California State Parks (86-9)
  - > Planning Commissioner Borden (SFPC-112)
  - > Redevelopment Agency President Swig (SFRA2-37)
- Organizations
  - > Arc Ecology (82-19)
  - > Golden Gate Audubon Society (81-25)
  - > Green Action Health and Environmental Justice (58-1, 58-3, 58-5, 58-6, 58-7)
  - > Hunters Point Shipyard Citizen's Advisory Committee (90-3, 90-10)
  - > POWER (People Organized to Win Employment Rights) (43-19, 50-3, 50-26, 50-32, 50-33, 52-4, 52-5)
  - > San Francisco Green Party (36-2, 36-3, 36-4, 36-5, SFRA1-87)
- Individuals
  - > Al Symon (SFPC-35)
  - > Alice Franklin (57-1, 57-2, 57-3, 57-4, 57-6)
  - > Carol Harvey (67-1, 67-2, 94-1, SFRA2-28)
  - > Colleen Muhammad (72-2)
  - > Eric Brooks (SFPC-102)
  - > Espanola Jackson (6-1, SFPC-8)
  - > Francisco Da Costa (SFRA2-4)
  - > Juana Tello (SFPC-94)
  - > Mishwa Lee (73-1, 73-4, SFPC-31)
  - > Nyese Joshua (65-4, 65-35)
  - > Starr Miles (SFPC-75)
  - > Tim O'Miles (SFRA2-36)
  - > Vivien Donahue (60-4)

Comments received on the Draft EIR related to sea level rise were focused primarily on issues presented in Section II.F.2 (Site Preparation and Earthwork/Grading) and Section III.M (Hydrology and Water Quality) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section II.F.2 and Section III.M.

Comment Summary

This master response responds to all or part of the following comments: 6-1, 36-2, 36-3, 36-4, 36-5, 43-19, 50-3, 50-26, 50-32, 50-33, 52-4, 52-5, 57-1, 57-2, 57-3, 57-4, 57-6, 58-1, 58-3, 58-5, 58-6, 58-7, 60-4, 65-4, 65-35, 67-1, 67-2, 72-2, 73-1, 73-4, 81-25, 82-19, 86-9, 90-3, 90-10, 94-1, SFRA1-87, SFPC-8, SFPC-31, SFPC-35, SFPC-75, SFPC-94, SFPC-102, SFPC-112, SFRA2-4, SFRA2-28, SFRA2-36, SFRA2-37.

Summary of Issues Raised by Commenters

- Method for estimating sea level rise at the Project site

- How the Project would be designed to accommodate sea level rise over time
- Potential impacts of sea level rise on site conditions, such as groundwater, contamination, liquefaction, seismicity, and infrastructure

Response

Introduction

With respect to flooding, the Federal Emergency Management Agency (FEMA) maps flood zones based on potential flooding caused by rainfall, or a combination of rainfall, tides, storm surge, and waves. Flood zones are geographic areas that FEMA has defined according to varying levels of flood risk. These zones are depicted on a community's Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map. Each zone reflects the severity or type of flooding in the area.

The traditional approach to designing coastal developments is as specified by FEMA and local agency guidance policies, which is to set interior grades throughout a community such that finished floor elevations for buildings (e.g., the elevation of the first floor of inhabitable space) would be at or above the present-day Base Flood Elevation (BFE) (e.g., the water surface elevation that would occur during a 100-year flood event). Improvements along the shoreline are required only to protect nearby structures or facilities against storm wave run-up and overtopping during a flood event that has a one percent chance of occurring, as specified by FEMA (sometimes referred to as the "One Percent Annual Chance of Occurrence Event").

The modest amount of sea level rise that has been estimated by the National Oceanic and Atmospheric Administration (NOAA) based on historical observations is about 8 inches over the past century, which is consistent with the estimates that traditional coastal developments have included in their design. However, based on climate change studies over the past two decades, the rate of sea level rise appears to be accelerating and climate change models are predicting greater rates of sea level rise in the future in response to warmer temperatures and melting ice caps.

In California, Executive Order S-13-08, which was issued in November 2008, recognizes the impact that sea level rise may have on coastal development in California. The executive order directs the California Resources Agency to request that the National Academy of Sciences convene an independent panel to complete the first California Sea Level Rise Assessment report. The report, to be completed by December 2010, would advise how California communities should plan for sea level rise.

Regional and local agencies have also taken a more proactive approach in addressing the issue of sea level rise. For example, the San Francisco Bay Conservation and Development Commission (BCDC), in a recently released study (BCDC 2009), is recommending that Bayfront developments consider a 16-inch sea level rise value by 2050 (mid-term) and a 55-inch sea level rise value by 2100 (long-term). The California State Coastal Conservancy (SCC) has issued a similar guidance policy (SCC 2009) with the same mid-term and long-term values. These values were based on work by the California Climate Change Center (CCCC 2006).

Although no specific design criteria related to sea level rise have been formally adopted by federal, state, or local agencies, this Project must be designed to account for sea level rise as part of the planning process to prevent future flooding or loss of infrastructure resulting from shoreline erosion. Therefore, a project-

specific approach was developed to address sea level rise for this Project. This approach is described in this master response, in this document.

Approach to Address Sea Level Rise Effects on Flooding

Section II.F.2, pages II-69 to II-70, and MM HY-12a.1 and MM HY-12a.2, pages III.M-100 to -103 of the Draft EIR provide a discussion of the project-specific study of and approach to address sea level rise. The study and approach are expanded upon in this master response in response to the comments raised on the Draft EIR.

As part of project planning studies, an assessment of existing shoreline conditions and anticipated sea level rise within the Project site was completed to develop planning and design guidance for the various phases of the project (Moffatt & Nichol 2009a, 2009b). The studies included:

1. A condition assessment of the existing shoreline and shoreline structures, along with a comprehensive review of as-built conditions
2. A coastal engineering analysis of tidal, wind-wave, and storm-wave processes for the Project site and vicinity, with the objective of developing recommendations for development and open-space grades for the Project, as well as edge treatment along the Project shoreline
3. A review of published, peer-reviewed literature related to sea level rise, with the objective of developing sea level rise allowance estimates for the future
4. A review of guidance and policy documents from state and regional agencies to establish design parameters for shoreline elevation and grades for development areas and open-space
5. Development of a strategy to address sea level rise at the Project site

A summary of the coastal flooding studies and the literature on sea level rise is provided in the following sections. The subsequent section, Mitigation Measures for Potential Sea Level Rise Hazards Related to Hydrology and Flooding, provides details related to the strategy developed for addressing future sea level rise at the Project site.

Coastal Flooding Studies

The primary factors that influence coastal flooding are water levels, which are influenced by a combination of astronomical tides and storm surges, and wave overtopping, which is caused by wind waves. Because these factors do not occur independent of each other (i.e., both are present at any given time), it is necessary to estimate the frequency of their combined occurrence. Tidal information was collected from NOAA gauges, which shows that the tidal range along the Project shoreline is between elevations -0.23 to 6.5 feet NAVD88. This analysis resulted in 10- and 100-year return period tides (meaning tides that would occur once in 10 or 100 years) of elevation +8.5 and +9.5 feet NAVD88, respectively. (NAVD88 is a vertical control datum established for the purposes of vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988.) The BFE used for the purpose of establishing development and open-space grades was, therefore, estimated to be +9.5 feet NAVD88. As previously mentioned, the approach to designing coastal developments is to set finished floor elevations for buildings at or above the present-day BFE.

One of the primary methods recommended by FEMA for the purpose of estimating the total potential run-up along the shoreline is outlined by the Technical Advisory Committee on Flood Defense—The

Netherlands. The analysis resulted in One Percent Annual Chance of Occurrence Event for wave run-up elevations ranging from +10.5 feet to +14.3 feet NAVD88 along the Hunters Point Shipyard shoreline and +11.6 feet to 15.3 feet NAVD88 along the Candlestick Point shoreline. Recommended perimeter elevations were then developed based on allowable overtopping rates to achieve safe conditions for pedestrians during the One Percent Annual Chance of Occurrence Event for wave run-up. This resulted in an additional one foot of elevation for the most exposed portions of the perimeter (meaning those areas that are not provided some degree of protection from existing structures).

Allowances for sea level rise based on the literature described below were then added to these minimum required grades in the interior and along the perimeter, and a strategy for the future was then developed for higher sea level rise estimates such that the level of protection provided when the Project is constructed continues into the future.

Literature on Sea Level Rise

This section presents a summary of the most commonly quoted estimates of sea level rise in scientific and planning literature, with particular reference to California and San Francisco Bay. This portion of the Master Response provides a summary of technical papers written on the topic of sea level rise and. due to the subject matter and the sources reviewed, can be highly technical.

Thousands of journal articles, newspaper stories, and publications on the topic of climate change and associated sea level rise have been published in the past 20 years. For purposes of this literature review, eight documents that are widely recognized as credible sources in the scientific community were reviewed. They are summarized here briefly, listed in reverse chronological order as Documents A through H, and they are also listed in the References provided in Section G of this document (Reference Numbers 10-17). Additional documents that are less well recognized, but are illustrative of ongoing development in the scientific, engineering, and planning communities, are also listed in the References section of this document.

A summary of the sea level rise estimates presented in the reviewed literature is presented in Table C&R-7 (Summary of Reviewed Documents to Determine Sea Level Rise Estimates) and discussed in greater detail in the following paragraphs.

Table C&R-7 Summary of Reviewed Documents to Determine Sea Level Rise Estimates

	Sea Level Rise Estimate/Projection		
Document	*inches*	*meters*	*Time frame (years)*
California Climate Change Center, 2009	24 to 55	0.6 to 1.4	2000–2100
CALFED Bay-Delta Program, 2007	20 to 55	0.5 to 1.4	2100
Intergovernmental Panel on Climate Change, 2007 (AR4)	7 to 30	0.18 to 0.76	1990–midpoint of 2090–2099
Rahmstorf, 2007	20 to 55	0.5 to 1.4	1990–2100
California Climate Change Center, 2006	8 to 31	0.2 to 0.8	2000–2100
Intergovernmental Panel on Climate Change, 2001 (TAR)	4 to 35	0.09 to 0.88	1990–2100
US Environmental Protection Agency, 1995	5 to 34	14 to 86	2100
National Research Council, 1987	20, 39, and 59	0.5, 1.0, and 1.5	2100

Since building structures are generally "immovable," whereas a shoreline protection system and/or storm drain system can be adapted to keep up with changing sea levels, different planning horizons need to be adopted for different elements of this project. In searching for guidance policies from agencies, the most relevant and recent policy statements that can be used are from BCDC and the SCC. The SCC's policy statement on climate change includes the following:

> Prior to the completion of the National Academies of Science report on sea level rise, consistent with Executive Order S-13-08, the Conservancy will consider the following sea level rise scenarios in assessing project vulnerability and, to the extent feasible, reducing expected risks and increasing resiliency to sea level rise:
>
> a. 16 inches (40 cm) by 2050
> b. 55 inches (140 cm) by 2100

The strategy for the Project is founded on using mid-term sea level rise values for the shoreline edge and storm drainage system. For a long-term planning horizon (for example, beyond 50 years from now), the evolving nature of climate change and sea level rise science needs to be recognized, and no single sea level rise value should be relied upon at this point in time. Instead, an adaptive management strategy should be put in place such that improvements for sea level rise beyond the mid-term planning horizon can be designed and implemented as sea levels rise.

A more detailed discussion of the strategy for addressing sea level rise for this Project is provided at the conclusion of the discussion of the various documents that were reviewed to determine the rate of sea level rise that could occur (Documents A through H).

Document A: California Climate Change Center, 2009 (Estimated range of 24 to 55 inches Sea Level Rise by 2100)

This assessment forms the basis of the increase of 55 inches (140 cm) by 2100 specified by the SCC. It was prepared as a contribution to the second California Climate Change Scenarios Assessment, which was mandated by Executive Order S-3-05 to "report to the Governor and the State Legislature by January 2006 and biannually thereafter on the impacts to California of global warming". The assessment, which replaces the earlier 2006 assessment (CCCC 2006), was prepared by nine respected academics.

The assessment provides two sets of sea level rise estimates. Each set of estimates is based on a subset of the temperature projections provided in the *2007 IPCC Report* (refer to Document C, below). Specifically, two of the climate changes emission scenarios (A2 and B1) and a subset of the Global Circulation Models (those providing sufficiently detailed output data) were used. The assessment assumes that sea level rise along the California coast would continue to match global rates.

The first set of sea level rise estimates uses Rahmstorf's semi-empirical method (Document D, described below) to estimate sea level rise based on the temperature projections contained in the Intergovernmental Panel on Climate Change Fourth Assessment Report.

The second set of sea level rise estimates further includes a method by Chao et al (2008) to account for the twentieth century growth of dams and reservoirs. By impounding water, these structures may have artificially decreased the rate of sea level rise in the twentieth century. Correcting for this possible decrease would increase the future rate of sea level rise.

The resulting range of projections for sea level rise between 2000 and 2100 is from 24 inches (60 cm) to 55 inches (140 cm). The increase of 55 inches by 2100 specified by the SCC is based on the upper limit of these projections.

Document B: CALFED Bay-Delta Program, 2007 (Estimated range of 20 to 55 inches by 2100)

This memorandum was prepared by the CALFED Independent Science Board, a committee consisting of nine respected academics, to examine the array of sea level rise projections available in published reports and, based on current scientific understanding, advise the CALFED Science Program about which projections are most appropriate for incorporating into ongoing planning for the California Delta. The report does not include any modeling or stand-alone analysis. However, as part of the Delta Vision strategy that is being developed as a guidance and policy document for the California Department of Water Resources, it has been widely quoted as a basis for flood planning in the San Francisco Bay Area.

The conclusions of the Independent Science Board are summarized as follows:

- The board recommends that planning efforts use three approaches to incorporate sea level rise uncertainty.
- First, given the inability of current physical models to accurately simulate historic and future sea level rise, until future model refinements are available, it is prudent to use existing empirically based models for short to medium term planning purposes. The most recent empirical models project a midrange rise this century of 28 to 39 in. (70 to 100 cm) with a full range of variability of 50 to 140 cm (20 to 55 in.). It is important to acknowledge that these empirical models also do not include dynamical instability of ice sheets and likely underestimate long-term sea level rise.
- Secondly, the Board recommends adopting a concept that the scientific and engineering community has been advocating for flood management for some time. This involves developing a system that cannot only withstand a design sea level rise, but also minimizes damage and loss of life for low-probability events or unforeseen circumstances that exceed design standards.
- Finally, the Board recommends the specific incorporation of the potential for higher-than-expected sea level rise rates into long term infrastructure planning and design. In this way, options that can be efficiently adapted to the potential for significantly higher sea level rise over the next century could be favored over those that use "fixed" targets for design."

As a clarification, the *current physical models* referenced by the Independent Science Board are the models included in the 2007 IPCC Report (refer to Document C. below); while the *most recent empirical models* quoted correspond to the work of Stefan Rahmstorf (refer to Document D, below).

Document C: Intergovernmental Panel on Climate Change, 2007 (AR4) (Estimated range of 7 to 30 inches by 2100)

This report is often referred to as AR4 (the Fourth Assessment Report of the IPCC). It contains an exceptionally detailed synthesis of the available peer-reviewed science of climate change and sea level modeling and has received contributions and comment from a vast array of respected researchers in the field.

The AR4 gives a widely quoted projection of 7 inches (18 cm) to 23 inches (59 cm) for sea level rise in the twenty-first century. These are considered 5 to 95 percent ranges. The AR4 includes a second set of projections—from 7 inches (18 cm) to 30 inches (76 cm)—that include a scaled-up ice discharge term. The projections cover the period from 1990 to the midpoint of 2090–2099; the AR4 does not provide sea level rise values at intermediate periods (e.g., to 2050).

The models described in the AR4 give reasonable hindcasts of observed sea level rise between 1993 and 2003, although they under-predict observed sea level rise between 1961 and 2003.

The uncertainty in the quoted projections derives from two main sources:

- Different greenhouse gas emission scenarios—the IPCC defines six future scenarios of world population and economy that predict different levels of greenhouse gas emissions. The AR4 stresses that no scenario can be considered more likely than another.
- The second and larger uncertainty is associated with limitations to current scientific knowledge. The range of sea level rise projections for a given scenario is based on the range of results from 17 independently developed and peer-reviewed general circulation models (GCMs).

Compared to the 2001 IPCC Report, known as the Third Assessment Report (TAR) refer to Document F, below), the projections in the AR4 are 7 to 30 inches by 2100 as opposed to 4 to 35 inches (9 cm to 88 cm) between 1990 and 2100. The reasons for the differences are as follows:

- The projections in the AR4 are to the midpoint of the period 2090 to 2099, while those in the TAR are to 2100.
- The TAR included some small additional contributions (e.g., 0.5 cm additional rise in the twenty-first century due to permafrost), which are not included in the AR4.
- The modeling uncertainties have been decreased with improved information and modeling capabilities. The TAR uses simple climate models to estimate sea level rise, which are less detailed than the atmosphere-ocean general circulation models used in the AR4.

Mechanisms that may lead to sea level rise are not included in the AR4 projections unless there is a broad scientific consensus that they are well understood with quantifiable implications. In particular, the projections do not include potentially large and nonlinear effects such as an accelerated loss of the Antarctic and Greenland Ice Sheets because there are no broadly accepted models of these processes. It is not even known whether ice sheet discharge would increase or decrease sea level rise in the short term. However, the projections do include the best current understanding of polar ice dynamics.

Critics of the IPCC (Oppenheimer et al. 2007) have generally focused on its scientific conservatism. In particular, many planners have expressed concern that the upper limits of the IPCC projections do not represent a worst-case scenario. However, the scientific community has not attempted further synthesis of the wide range of available models and potential contributions to future sea level rise. Few numerical predictions of total sea level rise have been published in the peer-reviewed literature since dissemination of the AR4.

Document D: Rahmstorf, 2007 (Estimated range of 20 to 55 inches by 2100)

Stefan Rahmstorf of the Potsdam Institute for Climate Impact Research in Germany developed a semi-empirical approach to predict sea level rise. This semi-empirical model assumes that the initial rate of sea level rise is proportional to the increase in temperature relative to a previous equilibrium temperature:

$$\frac{dH}{dt} = a(T - T_0)$$

In this formula, H is the global mean sea level, t is time, T is the global mean temperature, T_0 is the previous equilibrium temperature value, and a is an empirically derived proportionality constant. Rahmstorf fits this

linear relationship with available observations of global sea level and global mean temperature between 1880 and 2001. This fit provides a proportionality constant, which allows him to use the temperature projections from the IPCC's 2001 TAR to project future sea level rise. An increase of 28 to 39 inches (70–100 cm) between 1990 and 2100 is obtained by using the best fit to the proportionality constant *a* and the range of temperature projections from the TAR. An increase of 20 to 55 inches (50–140 cm) is obtained by adding one standard deviation to the derived value of *a*. These are the values discussed by the CALFED Independent Science Board (refer to Document B).

Rahmstorf's work is, in part, based on the observation that the TAR under-predicts sea level rise from 1990 to 2006 (Rahmstorf et al. 2007), whereas the semi-empirical approach predicts sea level rise from 1990 to 2006 better than the TAR. However, Rahmstorf's work suggests that the 2007 AR4 adequately describes sea level rise from 1993 to 2003, although global measurements are still near the upper limits of the AR4 modeling range. Because the rate of global sea level rise has slowed since 2005 (Cazenave et al. 2008), this observation may be a less strong argument in favor of the semi-empirical approach than it was in early 2007. In addition, published comments on this paper have argued that it misuses statistical methods (Holgate et al. 2007; Schmith et al. 2007). However, it has been widely quoted by authors, particularly in the planning and policy fields, who are critical of the IPCC's focus on scientific consensus.

Document E: California Climate Change Center, 2006 (Estimated range of 8 to 31 inches by 2100)

The CCCC comprises the California Energy Commission, Scripps Institution of Oceanography at the University of California at San Diego, and the University of California at Berkeley. The CCCC report on sea level rise was based on the Atmosphere-Ocean General Circulation Model simulation results prepared by IPCC in AR4. However, at the time the CCCC report was published, the AR4 report was in preparation, with only partial results available. For example, the modeling of sea level rise associated with thermal expansion was complete for only a subset of the emissions scenarios, and the component of sea level rise associated with ice melt had not been finalized. The CCCC report used additional models (Hulme et al. 1995) to develop a full range of estimates of eustatic sea level rise. The results (20 to 80 cm or 8 to 31 inches between 2000 and 2100) are similar to those in the AR4 report. Given that the AR4 report has now been published, it seems reasonable to treat the sea level rise projections in the CCCC result as superseded.

The CCCC report goes on to discuss the potential implications of sea level rise for exacerbating storm effects (e.g., high surf combined with high tides) and on the Delta levees. This discussion uses an illustrative sea level rise increase of 12 inches (30 cm) in the twenty-first century. This illustrative value lies within the range published in the AR4, so that the CCCC report remains current in its discussion of implications.

Document F: Intergovernmental Panel on Climate Change, 2001 (TAR) (Estimated range of 4 to 35 inches by 2100)

The Third Assessment Report (TAR) of the IPCC, like the fourth (e.g., AR4), is a detailed synthesis of the available peer-reviewed science. It is similar to the AR4 in being consensus-driven – potential contributions to sea level rise are not included unless there is broad agreement that they are quantitatively understood.

The TAR projects a sea level rise of 4 to 35 inches (9 to 88 cm) between 1990 and 2100. As with the AR4, the largest contribution to the uncertainty is associated with modeling uncertainties, and in particular with

the potential for dynamic ice sheet instability. The West Antarctic Ice Sheet (WAIS) is particularly called out in regard to uncertainty.

Document G: US Environmental Protection Agency, 1995 (Estimated range of 5 to 34 inches by 2100)

The focus of this report is on an explicit probabilistic assessment of different sea level rise scenarios for the 21st century. The report bases its modeling on earlier IPCC work (IPCC 1990, IPCC 1992) and creates a simplified model that captures the dependence of the IPCC projections of sea level rise on 35 major uncertainties. The main contributions to sea level rise in this model are thermal expansion together with ice melt in Greenland, the Antarctic, and small glaciers. The report develops a probability distribution for each of these 35 variables through a literature review and by discussion with a panel of expert reviewers. Finally, the report develops explicit probability distributions for the potential future sea level rise (specifically, the increase in sea level rise relative to an increase at the current rate). Results are given both for a mix of future emissions scenarios used by the IPCC in 1990, and for each emission scenario.

The report is careful to state that:

> … our <u>probability estimates are not based on statistics.</u> Our estimates simply convey what the probability of various rates of sea level rise would be if one is willing to assume that the experts we polled are each equally wise and that their collective wisdom reflects the best available knowledge […] Our projections are less like a statistical weather forecast and more like handicapping a horse race.

For San Francisco, the 5 to 95 percent range for the global average sea level rise, assuming the current rate of global average sea level rise, is the central value of 1.8 mm/year or 5 to 34 inches (14 to 86 cm) between 1990 and 2100. The 1 to 99 percent range (the widest range reported) is -2 to +44 inches (-4 to +112 cm). These percentages are cumulative probabilities; therefore, the 1percent value indicates that there is a 1percent chance that the value would not be exceeded.

Document H: National Research Council (NRC), 1987 (Estimated range of 20 to 59 inches by 2100)

The focus of this document is on the anticipated effects of sea level rise and the recommended responses. The report does not make specific projections of sea level rise: rather, it adopts three plausible conditions of 20 inches, 39 inches, and 59 inches (50, 100, and 150 cm) by 2100. Also, this document serves as the basis for recent United States Army Corps of Engineers (USACE) (July 2009) document.

Summary and Adopted Approach

As described above and summarized in Table C&R-7, the estimates of sea level rise in the literature vary widely, from an observed value of 8 inches per century to a modeled value of about 35-inches per century based on IPCC high estimates. Semi-empirical studies by Rahmstorf and news articles have stated that sea level rise over the next 100 years could be substantially higher than that suggested by IPCC and could be as much as 55 inches by 2100. This sea level rise estimate was adopted by the CALFED Independent Science Board as a plausible, albeit high, value, and was also used as a basis for some of the estimates prepared by the CCCC. It is also the basis for the long-term estimate recommended by BCDC and SCC. High-resolution global altimetry data (which measures the altitude of an object above a fixed level) through the end of 2009 suggest that in the last two decades, global mean sea level has increased at a rate close to

the upper end of the IPCC projections. This corresponds to an increase in global mean sea level of around 10 inches by 2050 and 30 inches by 2100.

From the above, what is clear is that the science of climate change and sea level rise is evolving, implying that it is prudent to develop community designs that can accommodate various levels of sea level rise over the planning horizon, rather than design to a specific report or estimate.

In developing numerical allowances for future sea level rise for the CP-HPS Phase II project, two considerations went into the selection of a set of sea level rise projections and a planning horizon:

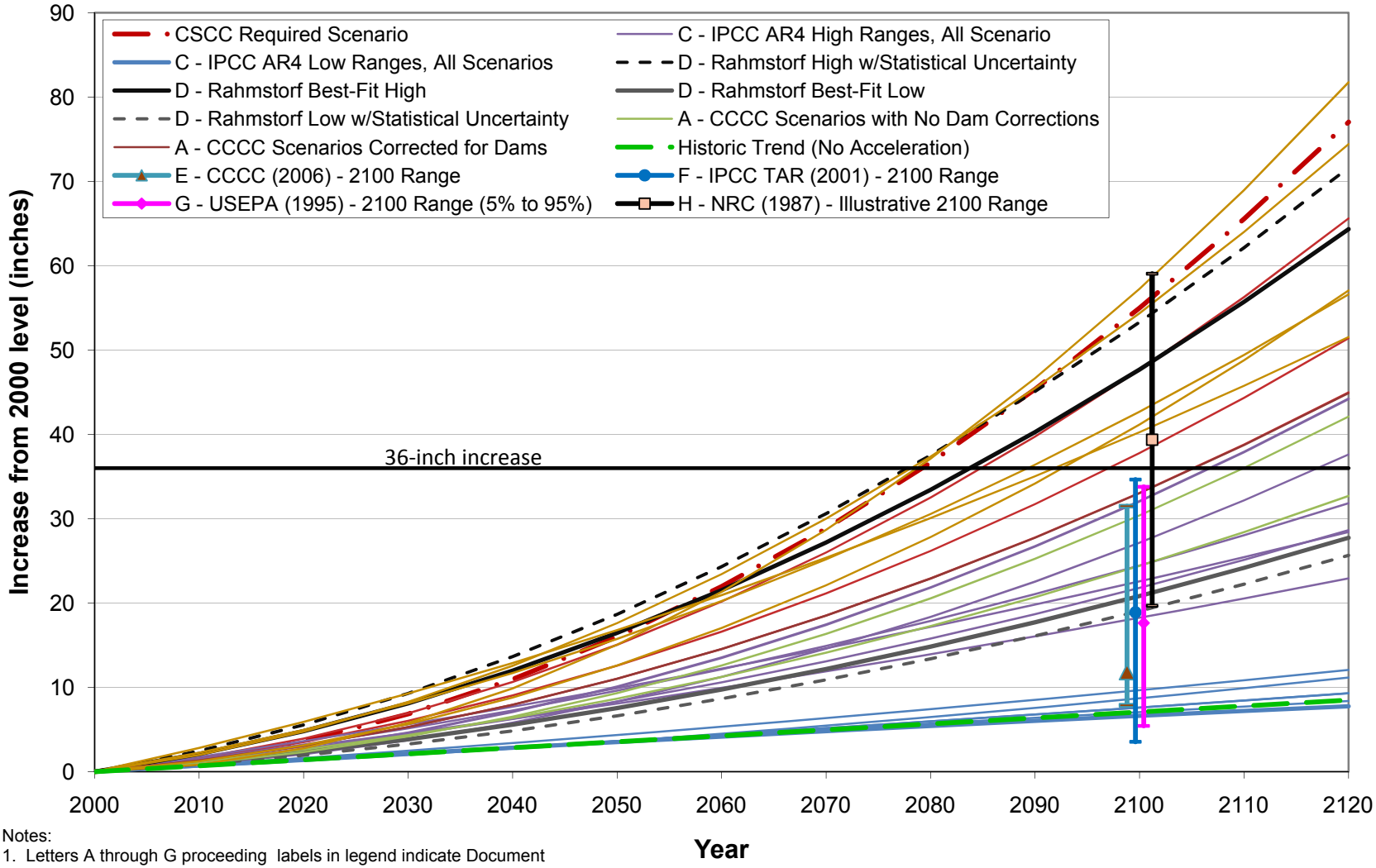
- First, the importance of distinguishing between scientific projections (prepared by the IPCC and by Rahmstorf) and illustrative cases (by the NRC).
- Second, the evolving and improving nature of the science of climate change and sea level rise. This fact does not necessarily lead to a narrower spread of projections over time. For example, ice sheet dynamics is a very active research field, and measurements of the polar ice caps are showing rapid melt in some areas. Improving measurement techniques could potentially highlight new mechanisms that were not previously understood.

Figure C&R-2 (Sea Level Rise Projections) illustrates the different projections of sea level rise reviewed and from 2000 to 2100 based on the literature discussed previously. The shapes on the curves are approximate, based on available data. Where rates of sea level rise were not provided in the literature or where the studies have been superseded by more recent studies, ranges are shown for the year 2100. The curves in Figure C&R-2 show projections from the following reports:

- **California Climate Change Center, 2009.** This report includes a number of projections, largely based on the IPCC AR4 temperature projections and the semi-empirical approach of Rahmstorf.
- **Intergovernmental Panel on Climate Change, 2007.** This report provides low, mid-level, and high values for six independent emissions scenarios, with and without a scaled-up ice discharge term. Thus, in principal, a total of 36 different estimates are available. Figure C&R-2 shows the low and high values for the different scenarios including the scaled-up ice discharge term.
- **Rahmstorf, 2007.** This paper includes four projections: low and high values based on the low and high temperature projections of the TAR (IPCC 2001), both with and without inclusion of a statistical uncertainty in an empirically derived proportionality constant. Figure C&R-2 shows all four curves.

The upper limit of sea level rise provided by the NRC in Document H is similar to Rahmstorf's upper curve; however the NRC curves are *not* projections, but rather illustrative cases. Finally, the figure shows how sea level would increase if there were no acceleration, based on the current (1961–2003) global average increase of 1.8 mm/year (IPCC 2007).

Recent news articles, based in part on recent measurements of ice cap melt, have stated that the increase in sea level rise over the next 100 years could be double that previously calculated. However, this doubling is relative to the IPCC predictions, which provide much lower curves. Therefore, these recent measurements do not change the conclusions stated above.



Notes:
1. Letters A through G proceeding labels in legend indicate Document reference in text.
2. Curves show increases based on reviewed literature (Documents A through H). Detailed Curve shapes by M&N are approximate. Additional ranges in 2100 (vertical bars) are from superseded analyses or published illistrative values, Documents E through H.

SOURCE: Moffat & Nichol, 2010.

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FIGURE C&R-2

Candlestick Point — Hunters Point Shipyard Phase II EIR

SEA LEVEL RISE PROJECTIONS

Since building structures are generally "immovable," whereas a shoreline protection system and/or storm drain system can be adapted to keep up with changing sea levels, different planning horizons need to be adopted for different elements of this project. In searching for guidance policies from agencies, the most relevant and recent policy statements that can be used are from BCDC and the SCC. The SCC's policy statement on climate change includes the following:

> Prior to the completion of the National Academies of Science report on sea level rise, consistent with Executive Order S-13-08, the Conservancy would consider the following sea level rise scenarios in assessing project vulnerability and, to the extent feasible, reducing expected risks and increasing resiliency to sea level rise:
>
> a. 16 inches (40 cm) by 2050
> b. 55 inches (140 cm) by 2100

The strategy for the Project is founded on using mid-term sea level rise values for the shoreline edge and storm drainage system. For a long-term planning horizon (for example, beyond 50 years from now), the evolving nature of climate change and sea level rise science needs to be recognized, and no single sea level rise value should be relied upon at this point in time. Instead, an adaptive management strategy should be put in place such that improvements for sea level rise beyond the mid-term planning horizon can be designed and implemented as sea levels rise.

Project Design and Mitigation Measures for Potential Sea Level Rise Hazards Related to Hydrology and Flooding

Section II.F.2, pages II-69 to -70, MM HY-12a.1 and MM HY-12a.2, pages III.M-100 to -103, of the Draft EIR discusses the measures planned to address sea level rise. In response to comments on the Draft EIR, an expanded discussion of the adaptive management strategy that would be used for this Project and specific mitigation measures that would be used for the development areas, storm drainage system, and shoreline protection are presented here. Based on the coastal study, literature review, and numerous discussions with other City agencies (including SFPUC and DPW), the following strategy for protection against sea level rise has been incorporated into the project. It is comprised of four separate components:

- Construction of a shoreline protection system that is initially built to accommodate a mid-term rise in sea level of 16 inches, with a design that is adaptable to meet higher than anticipated values in the mid-term, as well as for the long-term
- Construction of a storm drainage system that is initially built to accommodate a mid-term rise in sea levels of 16 inches, with a design that is adaptable to meet higher than anticipated sea level rise values (similar to the first bullet)
- Construction of buildings and vital transportation infrastructure at elevations that would not be exceeded by flood waters, even if the shoreline protection does not function, for existing conditions and over a longer-term as compared to the two above
- Formation of an Adaptation Strategy that would include preparing an Adaptive Management Plan that outlines an institutional framework, monitoring triggers, a decision-making process, and creates an entity with taxing authority that would pay for infrastructure improvements necessary to adapt to higher than anticipated sea levels

The Project design for sea level rise, therefore, meets both near-term and longer-term objectives; in addition, it incorporates an adaptive management strategy to address improvements related to sea level rise

in the future. Each element of construction was designed to a specific planning horizon as described below. Implementation of mitigation measures 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.

Shoreline Protection

For the perimeter system, it is not preferable to build a high wall around the Project for a design condition that may not happen for several decades for a couple of primary reasons: one, it would pose a visual obstruction, and, two, it would severely limit public access. At the same time, it is not prudent to build to current sea level conditions and keep raising the grade and/or structures as sea levels rise. Therefore, an interim sea level rise estimate for the year 2050, as put forth by BCDC and the SCC, was selected as the design criteria to use for design and initial construction—that sea level is 16 inches higher than the existing conditions, which would ensure that adaptive management construction activities are not triggered until at least the year 2050. Mitigation measure MM HY-12a.2 provides for the protection of the Project site from sea level rise over the life of the Project by requiring the design to be adaptable to higher levels of sea level rise by leaving a significant development setback such that future improvements can be made. A funding source to construct these improvements is required by MM HY-12a.2 and would also be part of the Adaptation Plan.

Storm Drain System

The storm drain system would be constructed with an initial sea level rise allowance of 16 inches and, per MM HY-12a.2, would be adaptable to higher levels of sea level rise with minimal intervention. The system would function as a gravity-drained system until about 2050. After that date, the mitigation measure requires that a portion of the Adaptation Strategy would be implemented, which would consist of installing storm drain pumps or other system for which the establishment of a funding mechanism is provided for in the mitigation measure.

Development Areas

In accordance with MM HY-12a.1, all buildings and entrances to subterranean parking and streets would be set at an elevation that is 36-inches higher than the existing BFE. This 36-inch sea level rise allowance, plus a freeboard of 6 inches, is proposed to be used for finished floor elevations of all buildings. This would ensure that even if no shoreline protection improvements are undertaken, or in the event of a slope failure along the shoreline, neither buildings nor transportation infrastructure would be flooded when water levels rise 42 inches higher than current BFE. Additionally, this allowance provides subterranean parking a minimum of approximately 36 inches between parking finish floor and present groundwater levels. This increase in elevation would provide flood protection beyond the 2080 time frame according to the most aggressive sea level rise, and well beyond 2100 according to the highest IPCC projection (refer to Figure C&R-2).

Adaptation Strategy

As a part of MM HY-12a.2, a project-specific sea level rise Adaptation Strategy would be implemented to provide guidance, identify relevant stakeholders, define appropriate management actions and triggers, and establish a project-specific funding mechanism. It would be administered by an entity created for the Project that would have taxing authority and funding responsibility.

The strategy envisions incorporating ongoing measurements of sea level rise from the scientific community into a Monitoring Program that would guide the decision-making process for future improvements. The Monitoring Program would include protocols to compare observed changes in sea level with the as-built perimeter elevations, using updates of changes in sea level provided by the NOAA, National Geodetic Survey, or other appropriate agencies. The Monitoring Program would be administered by a public entity with similar funding responsibilities as a Community Facilities District (CFD). This entity would guide the decision-making process for implementation of future improvements, such as raising the perimeter.

The Adaptive Management Plan would define specific triggers for action, based on observed changes in sea level arising from ongoing measurements obtained during the Monitoring Program. The Plan would require 5- or 10-year updates based on observed changes in sea levels, as well as any other effects of climate change (i.e., more or less extreme storm wave conditions). The initial strategy, as well as any updates, would be coordinated with relevant stakeholders, including the City and County of San Francisco, State Parks, FEMA, and BCDC.

Future improvements that may be needed to respond to sea level rise are as follows:

- When the mean sea level rises 16 inches above existing values, the crest elevation of the shoreline protection system would be raised 20 inches and storm drain system pumps would be installed
- When the mean sea level rises 36 inches above existing values, the shoreline protection system would be improved to act as a flood barrier

Potential Adaptation Measures

The proposed development setback distances would enable a variety of future perimeter modifications to accommodate at least 55-inches, with the ability to accommodate sea level rise even higher than 55 inches. The adaptive management strategy described above is based on elevation and structural characteristics of the shoreline along the project boundaries. The varied nature of this shoreline, ranging from protected and unprotected slopes, beaches, seawalls, and wharves, results in a multitude of potential adaptive management measures.

Perimeter adaptations would likely include a combination of the following components in response to varying land uses and wave run-up characteristics at different locations around the Project site:

- Raising the shoreline embankment in place to function as a storm surge or flood barrier
- Constructing a series of embankments of increasing heights away from the water. Land between sets of embankments could hold periodic wave overtopping that "drain out" between high tides
- Constructing sea walls, particularly along Parcel B where they would also function as a public amenity
- Where feasible, "lay back" the shoreline to create cobblestone beaches or tidal marshes that limit wave run-up and overtopping, rather than increasing embankment heights

Other Sea Level Rise–Related Issues

Sea Level Rise Effects on Seismicity

Seismicity can be described as the relative frequency and geographic and historical distribution of earthquakes (refer to Master Response 6 [Seismic Hazards]). The intensity of seismic shaking or strong ground motion during an earthquake at any particular location is dependent on a number of factors, including the distance and direction of the site from the earthquake epicenter, the earthquake magnitude,

and the geologic (soil and rock) conditions at and in the vicinity of the seismic event. The frequency, intensity, and distribution of earthquakes are unrelated to the groundwater level; that is, fluctuations in the groundwater level do not increase or decrease the likelihood or intensity of an earthquake. Other than to increase the thickness of the potentially liquefiable layer (by an amount proportional to the sea level rise), sea level rise would have a negligible effect on seismicity or potential seismic hazards at the site.

As discussed in the Draft EIR Section III.M.2 (Setting), page III.M-13, the potential hazard related to tsunamis in San Francisco Bay have been analyzed in regional studies. The expected 100-year tsunami wave run-up elevation at South Basin (which is adjacent to both Candlestick Point and HPS Phase II) is +4.8 feet (National Geodetic Vertical Datum [NGVD29]) or -3.8 feet (San Francisco City Datum [SFCD]). As discussed in the Draft EIR Impact HY-15 (Seiche, Tsunami, and Mudflows), page III.M-106, the development of the Project site, which takes sea level rise into account, as described above, would be protected from tsunami wave run-up with increases in sea levels up to 46 inches, if shoreline improvements were to fail during the seismic event.

Sea Level Rise Effects on Liquefaction

The discussion following Impact GE-5, Draft EIR page III.L-46, states:

> … The structural design review required by MM GE-4a.1, MM GE-4a.2, MM GE4a.3, and MM GE-5a 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 <u>to</u> a less-than-significant level.

Additionally, as stated in Master Response 7 (Liquefaction), the potential for liquefaction is discussed, including site-specific geotechnical investigation and seismic analysis that would be completed prior to final design and construction. To account for the future impact of sea level rise, design-level liquefaction analysis and modeling would be based on a range of groundwater table elevations that are higher than existing conditions. Recommended mitigation measures for liquefaction, which would be developed during the geotechnical investigation and seismic analysis, and may include structural design measures and/or ground improvement, would be implemented at each site as determined necessary by the Lead Agency. Refer to Master Response 7 (Liquefaction) for a discussion of the potential for and mitigation of liquefaction and liquefaction-induced seismic hazards, including lateral spread, sand boils, and ground settlement at the site.

Sea Level Rise Effects on Movement of or Exposure to Toxics

Sea levels will increase over time and, therefore, there is a potential for residual levels of contaminants to interact with potentially rising levels of groundwater. As discussed the Draft EIR in Section III.K.1, page III.K-2, there are substantial ongoing remediation programs at known hazardous material release sites in throughout HPS Phase II (refer to Master Response 13 [Post Transfer Shipyard Cleanup]). There are no known hazardous material release sites requiring remediation at Candlestick Point, or at locations where off-site improvements are proposed, based on the results of investigations to date and a review of government agency databases. The Navy is providing soil and groundwater remediation (cleanup) at the HPS site to reduce chemical concentrations to meet cleanup levels approved by federal and state regulatory agencies. If the potential for the interaction with groundwater were to present a risk to human health or the environment, further remedial activities would be required by law. Additionally, the Institutional

Controls placed on areas with residual contaminants, as described in Section III.K.2, would require actions to maintain the protection to the environment and prevent human exposure.

Mitigation Measures for Other Potential Sea Level Rise Hazards

Sea level rise impacts and associated mitigation measures are described in Section III.M (Hydrology and Water Quality) of the Draft EIR. Anticipated sea level rise is being taken into account during the development design process to ensure preservation of the planned land uses. When specific buildings are designed, anticipated sea level rise would be taken into consideration when establishing grades, ground floor elevations and, if incorporated into a building, the type of below grade parking garage and associated foundation type to prevent groundwater infiltration. In areas where below grade structures are installed below the groundwater table, there are several well-tested methodologies that are successful at preventing groundwater intrusion into these below grade structures. As stated above, the development areas, including buildings would be designed for increased levels of sea level rise. This allowance would provide protection to sub grade levels against sea level rise and prohibit groundwater from entering basements.

Residual chemicals in soil (refer to Master Response 15 [Proposition P and the Precautionary Principle]) largely consist of certain specific metals, which are typically associated with the rock and soil that were historically used to fill in the Bay to expand the Shipyard; thus, they are not part of a "spill" or "release" of contaminants, but rather reflect metal concentrations normally associated with Franciscan Formation bedrock and/or reflect metals concentrations normally associated with the type and quality of soil used during the period the Shipyard was filled. The metals that are found in soil at the Shipyard are predominantly immobile (meaning they are not readily soluble) and, therefore, would not dissolve into groundwater at concentrations of concern and cause problems associated with human health effects or ecological effects. Thus, a rise in the groundwater level caused by a rise in sea level would not mobilize these metals. As a further protective measure, there would be a strict prohibition against pumping groundwater for domestic, commercial, industrial or irrigation purposes. Any groundwater pumped to support construction efforts would be disposed of in accordance with San Francisco Public Utilities Commission discharge requirements.

Although residual chemicals may remain in soil after cleanup, the residual chemicals would be located under a physical barrier (e.g., soil cap, pavement, office building) that prevents human exposure to the residual chemicals. This requirement to cover the entire site to prevent access to residual contamination is required by the Navy CERCLA clean up documents, which have been approved by the USEPA, DTSC, and the Regional Water Quality Control Board. Furthermore, the requirement to install a cover is one that would be a requirement of each landowner within the former Shipyard.

Currently, existing groundwater contamination would be remediated prior to development to levels that would allow safe reuse of the property (refer to Master Response 9 [Status of CERCLA Process]). After remediation is complete, there may still be low levels of residual volatile organic compound (VOC)–affected groundwater and soil that, in turn, could cause the potential for vapor intrusion into buildings constructed over these areas. In order to address this potential, the Navy would conduct a subsurface soil vapor sampling program to define areas where this vapor intrusion may be an issue. If this soil vapor sampling program results in the definition of areas where vapor intrusion could be an issue, the data would be used to properly design vapor mitigation systems to be constructed within and underneath building foundations. These vapor

mitigation systems are common, well tested, and protective of building occupants, whether they include residential or commercial occupants. All soil vapor sampling programs, definition of areas requiring vapor controls, and the design and installation of vapor mitigation systems would be overseen and approved by the regulators (USEPA, DTSC, and RWQCB). Furthermore, any soil vapor mitigation system would be subject to periodic inspection and maintenance to ensure proper operation.

VOC vapors occur in soil that is not totally saturated with water. Therefore, if sea level were to rise and if there was an associated rise in groundwater, generation of VOC vapors would actually be reduced. VOC vapors migrate from impacted soil and groundwater into soil pore spaces that would become saturated due to this higher groundwater level.

If the potential for the interaction with groundwater were to present a risk to human health or the environment then further remedial activities would be required by law. Additionally, the Institutional Controls placed on areas with residual contaminants, as described in Section III.K.2, would enforce action to maintain the protection to the environment and prevent human exposure.

Sea level rise would not compromise covers and/or engineered caps that may be placed on top of an area of known or suspected residual contamination. Operation and maintenance plans for these covers and caps would be carried out to monitor and repair potential breaches. Additionally, emergency response plans would be carried out following major flooding events, at which time caps and covers would be investigated for potential breaches and repaired. These caps and covers would prevent contaminates from interacting with the environment and retain in place any sea level rise interaction with residual contamination. Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), and Master Response 13 (Post-Transfer Shipyard Cleanup) further discuss the cleanup process and residual contamination that could remain on the Project site after transfer.

Master Response 9: Status of the CERCLA Process

Introduction

Overview

Comments have been raised asking for clarification of the CERCLA process at HPS Phase II and the status of the various HPS parcels within the CERCLA process. The Navy is conducting the environmental cleanup at HPS, and will do so independent of whether this project proceeds or not. The Navy conducts the cleanup in accordance with a process set forth in an agreement between the Navy, USEPA, the state Department of Toxic Substances Control (DTSC), and the regional water quality control board (RWQCB). That agreement is called the Federal Facilities Agreement (FFA). This ongoing remedial program is required to implement all remedial actions necessary to protect human health and the environment from risks associated with hazardous materials released into soil or groundwater, in consideration of the uses contemplated by the Project. This master response is intended to direct the reader to specific sections and figures in the Draft EIR that address these issues.

This response is organized by the following topics:

- Introduction
- Summary of Navy Cleanup Process

- Navy Radiological Cleanup Process
- Current Status of Navy Clean-up Activities at HPS Phase II
  - Parcel B
  - Parcels C and UC-2
  - Parcel D (including new Parcels D-1, D-2, UC-1, and G)
  - Parcel E
  - Parcel E-2
  - Parcel F

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - California Department of Transportation—Transportation Planning (71-11)
  - Planning Commissioner Borden (SFPC-111, SFPC-113, SFPC-114, SFPC-118, SFPC-119)
  - San Francisco Bay Conservation and Development Commission (BCDC) (103-6)
- Organizations
  - Breast Cancer Action (55-1, 55-4)
  - Green Action Health and Environmental Justice (58-1)
  - POWER (People Organized to Win Employment Rights) (50-6, 52-1, 52-3, 69-1)
  - San Francisco Green Party (36-6, 36-7)
- Individuals
  - Ahimsa Porter Sumchai (SFPC-46)
  - Bernadette Sambrano (SFPC-78)
  - Car Green Action Health and Environmental Justice (SFRA1-83)
  - Carol Harvey (67-2, 67-3)
  - Dan Solberg (SFRA1-38)
  - Daniel Landry (SFRA2-34)
  - Francisco Da Costa (SFPC-51)
  - Jaron Browne (SFPC-23)
  - Juana Tello (66-3, 66-4, 66-5, 66-8, 66-12, 66-16)
  - Juana Tello (SFRA1-59)
  - Michael E. Boyd (SFPC-39)
  - Nyese Joshua (65-4, 65-31, 65-33, SFPC-59)
  - Perry Matlock (74-3)
  - Starr Miles (SFPC-74)
  - Willie Ratcliff (SFPC-107)

Comments received on the Draft EIR related to the CERCLA process were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 36-6, 36-7, 50-6, 52-1, 52-3, 55-1, 55-4, 58-1, 65-4, 65-31, 65-33, 66-3, 66-4, 66-5, 66-8, 66-12, 66-16, 67-2, 67-3, 69-1, 71-11, 74-3, 103-6, SFRA1-38, SFRA1-59, SFRA1-83, SFPC-23, SFPC-39, SFPC-46, SFPC-51, SFPC-59, SFPC-74, SFPC-78, SFPC-107, SFPC-111, SFPC-113, SFPC-114, SFPC-118, SFPC-119, SFRA2-34.

Summary of Issues Raised by Commenters

- Inquiring about the status of the cleanup on the various Shipyard parcels

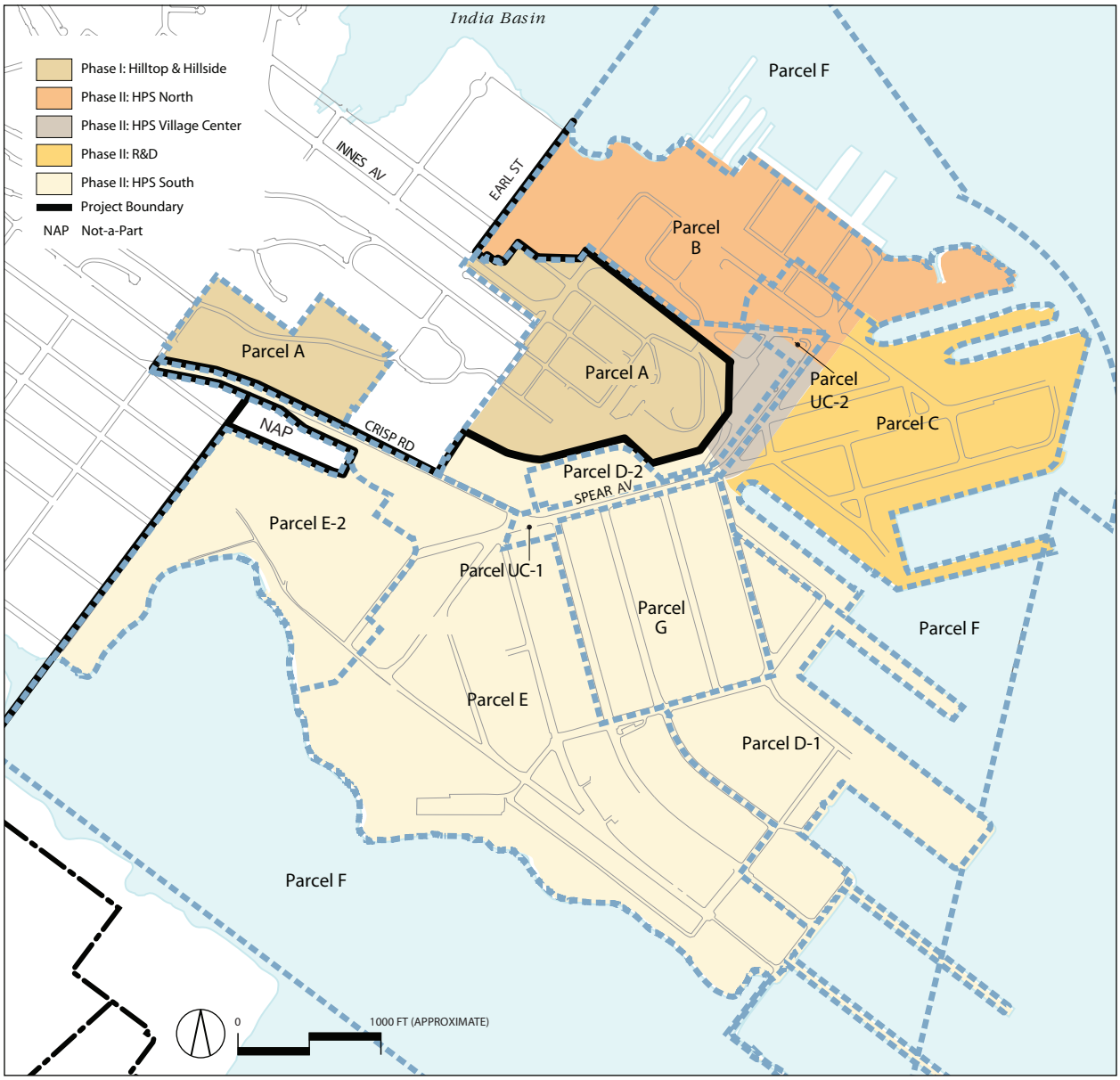
Response

Introduction

The *Comprehensive Environmental Cleanup and Liability Act* (CERCLA) process is defined in general terms in the Draft EIR in Section III.K.1 (Introduction), page III.K-2. A summary of the steps in the CERCLA process is presented below. Revised Figure III.K-5 (Hunters Point Shipyard Phase II Navy Parcel Overlay) and new Figure III.K-6 (Status of CERCLA Process) provide a map of the various parcels that are described below and illustrate the steps in the CERCLA process and the current status of the parcels in that process. For greater detail on these steps and status, consult the Draft EIR, pages III.K-11 through -26. As stated in the Draft EIR, the goal of the EIR is not to assess the adequacy or impacts of the Navy's remediation actions but instead to assess the impacts of implementing the Project. The relevant environmental regulatory agencies would require performance of the remedial activities that the Navy is undertaking regardless of whether this Project or any other development proposals were proceeding. Potential environmental effects of the remedial activities (i.e., of soil excavation, soil transport, and operation of treatment systems) have been, and will continue to be, evaluated by the Navy and regulatory agencies in conjunction with the approval process for specific remedial actions, and appropriate environmental controls have been, and will continue to be, incorporated into the design and implementation of those remedial actions. Therefore, although the Draft EIR evaluates the potential for construction and occupancy of the Project to affect, or be affected by, hazardous materials release sites, it does not evaluate the potential impacts of the specific remedial activities conducted as part of the ongoing programs that the Navy is conducting as required by CERCLA and the FFA.

Summary of Navy Cleanup Process

The Navy is carrying out each of the steps listed below for each parcel (or subparcel in some cases) at the Shipyard. Each step results in the preparation of a document which is available to the public at the official document repository which the Navy is required to maintain for the project (located at the San Francisco Public Library located at 100 Larkin Street, San Francisco, California). All of the documents related to the Navy's remedial actions that are referenced in the Draft EIR or these responses to comments are also available at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103 as part of File No. 2007.0946E. Many of these documents (e.g., the Feasibility Study and Proposed Plan) are made available in draft form for public review and comment before they are



SOURCE: Lennar Urban, 2009.

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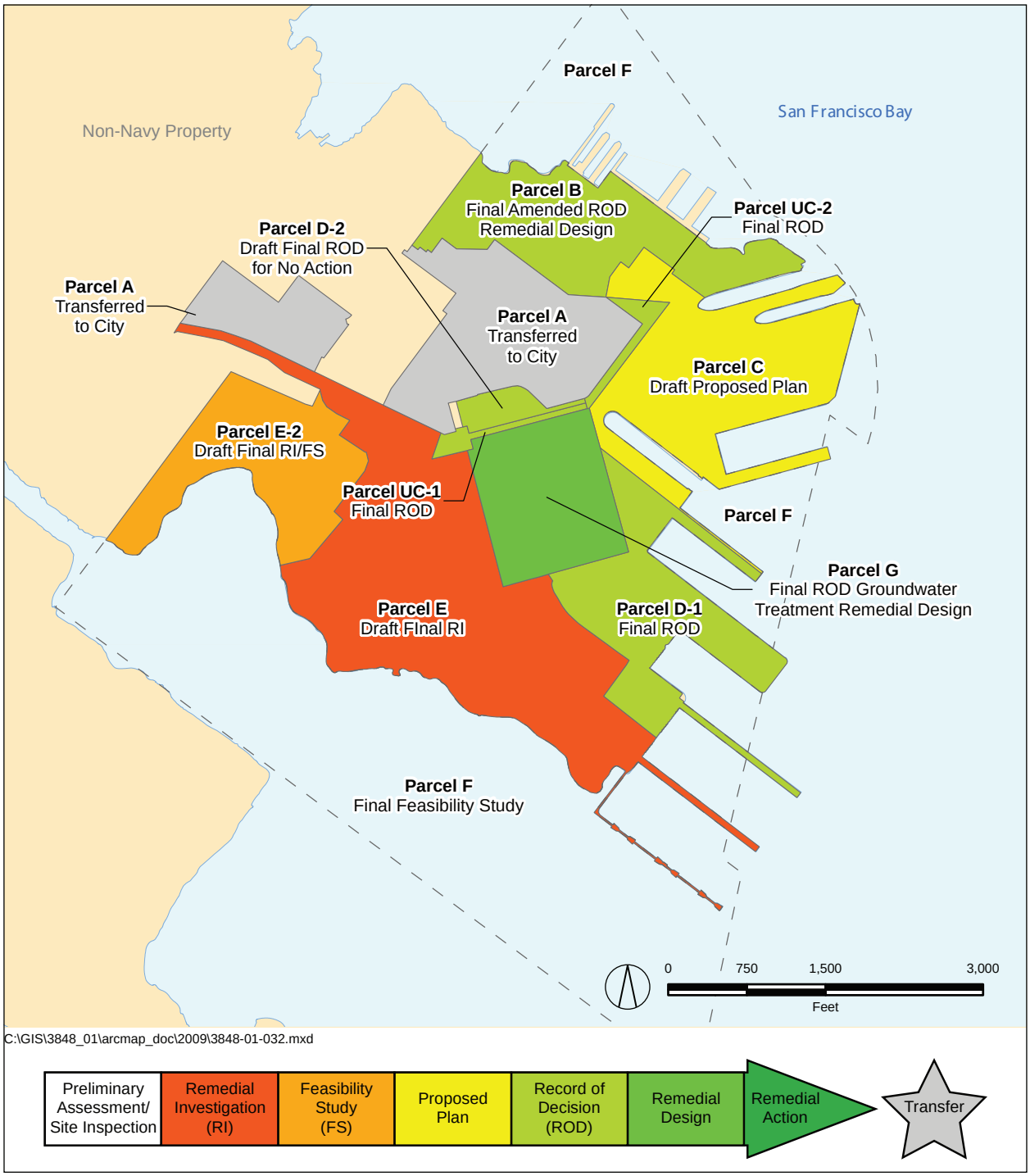
Candlestick Point — Hunters Point Shipyard Phase II EIR

HUNTERS POINT SHIPYARD PHASE II NAVY PARCEL OVERLAY

FIGURE III.K-5



SOURCE:PBS&J, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

STATUS OF CERCLA PROCESS

FIGURE III.K-6

finalized. Pursuant to the Community Involvement Plan implemented by the Navy and approved by the regulatory agencies, various types of community outreach activities are conducted in association with each of these steps.

- **Preliminary Assessment/Site Inspection**—An initial review of the site, including review of historic records and visual inspections. Sampling and analysis of soil, surface water, and/or groundwater may occur to evaluate whether the site needs to move to the next phase for further investigations.
- **Remedial Investigation**—A closer look including collecting and analyzing samples to assess risk to human health and the environment. Treatability studies may occur in conjunction with or alongside physical investigation and alternative evaluation. A Removal Action may also be performed at this point.
- **Feasibility Study**—Results of the risk assessment, along with other data collected during the Remedial Investigation, are used to evaluate cleanup alternatives that have been screened for effectiveness, implementability, and cost.
- **Proposed Plan**—A fact sheet that describes cleanup alternatives evaluated in the Feasibility Study and explains the preferred alternative. This step requires a meeting to be held to provide information to the public and allow the public to comment on the preferred cleanup alternative.
- **Record of Decision (ROD)**—The selected cleanup alternative is documented and publicized in this document. A summary and responses to all comments on the Proposed Plan are included in this document.
- **Remedial Design**—A design for implementing the selected cleanup alternative is prepared. A fact sheet is sent to the public before the Navy begins work on the cleanup.
- **Remedial Action**—The cleanup remedy is carried out and the public is kept informed.

Navy Radiological Cleanup Process

As part of the CERCLA process at HPS, the Navy is surveying for radionuclides at structures, former building sites, and areas potentially impacted by radiological activities. The Navy is decontaminating structures found to contain radionuclides above established remedial goals. The Navy is removing all of the storm drains and sanitary sewer lines across HPS, testing soil below the lines for radionuclides, excavating materials and soils that contain radionuclides above established remedial goals and disposing of these materials and soils at off-site facilities. The Navy is seeking to have structures and areas of the sewer system and storm drain system that are impacted with radionuclides cleared for unrestricted use related to the radionuclides. But, in the Parcel B ROD, the Navy has identified a remedial approach for two areas of Parcel B that would result in a restricted use designation for radionuclides. For example, the ROD for Parcel B proposes a restricted use designation for a large fill area in Parcel B referred to as IR-07 and IR-18. This area of Bay fill has not been found to contain radionuclides but the Navy has determined that the presence of radionuclides in the fill cannot be ruled out, as described in more detail in Master Response 13 (Post-Transfer Shipyard Conditions). The Navy proposed remediation consisting of conducting a surface scan and removing any radiological anomalies detected to a depth of 1 foot (the maximum effective depth of the surface scan). A 1-foot-thick layer of clean soil would be added above the screened and radiologically cleared surface. A demarcation layer would be installed on the new soil surface and a new 2-foot-thick soil cover would be constructed over all of IR-07 and IR-18 area that may contain radionuclides. When the property transfers, institutional controls would be imposed that would restrict use of the property to

recreational uses and open space and require the Agency to maintain the soil cover in place. Radiological related activities and potential impacts at Hunter's Point Naval Shipyard that may result during the Project construction and implementation as a result are discussed in Section III.K.2 (Setting) page III.K-9 and page III.K-27 of the Draft EIR. The Draft EIR references the Historical Radiological Assessment (HRA) for more information about the radiological impacts to the site (Reference #313 of Section III.K [Hazards and Hazardous Materials] of the Draft EIR). The Agency will not accept radiologically impacted property for transfer until the Navy has completed radiological surveys, investigations, and cleanup as approved by Federal and State regulatory agencies.

Current Status of Navy Clean-up Activities at HPS Phase II

Parcel B

The Navy has completed the preliminary investigation, site inspection, remedial investigation, feasibility study, proposed plan, and ROD. The Navy issued an initial ROD in 1997, prepared a remedial design, and proceeded with remedial action implementation. After a decade of work and additional study, it developed a revised remedy. The Navy issued an amended ROD in 2009.

The Navy has been carrying out remediation of radiologically impacted sewers and storm drains and buildings since 2007 and this work is expected to be completed by early 2010. Remediation means that the sewers and storm drains are removed from the ground and adjacent soil is excavated until confirmed clean. The Navy has completed the remedial design (RD) for Installation Restoration (IR) Sites IR-07 and IR-18, an area of fill in the northwestern area of the parcel. This RD includes plans for remediation of near-shore sediments and construction of a protective revetment along the shore of San Francisco Bay in IR-07. The Navy is completing a remedial design for the remaining work on the rest of the Parcel. Also, under California law, the corrective action work plan for the petroleum hydrocarbon program in Parcel B was finalized in 2009, fieldwork has been completed, and reporting is ongoing. For further detail on the status of Parcel B, refer to pages III.K-13 through -18 of the Draft EIR.

Parcels C and UC-2

The Navy has completed the preliminary investigation, site inspection, remedial investigation, feasibility study and proposed plan and a ROD is currently being prepared. The ROD will describe the remedial actions that have been approved by the Navy, the USEPA, and the state regulatory agencies for remediating soil and groundwater in Parcel C. A study to evaluate methods to clean up solvents and metals in groundwater (known as a "treatability study) is in progress at Buildings 134, 211, 231, and 253 in the eastern area of Parcel C. There is a draft final ROD for UC-2, which is a utility corridor along Fisher Avenue that has recently been separated from Parcel C. For further detail on the status of Parcel C, refer to pages III.K-18 and -19 of the Draft EIR.

Parcel D (including new Parcels D-1, D-2, UC-1 and G)

The original Parcel D consisted of 101 acres of the southeast-central portion of HPS. After completing the preliminary investigation/site assessment, remedial investigation, and feasibility study for Parcel D, the Navy prepared a Proposed Plan that presented a proposal for remedial action to be selected in the ROD for the entire Parcel. Although the Proposed Plan covered all of Parcel D, for final remedy selection, the Navy divided Parcel D into four new parcels: Parcels D-l, D-2, G, and UC-l (UC" stands for Utility

Corridor). One combined ROD for Parcels D-1 and UC-l was issued and separate draft RODs were prepared for Parcel D-2 and Parcel G.

- **Parcel D-1**—The Final Parcel D-1 ROD was issued in 2009. A groundwater treatability study was recently completed for Parcels D-1 and G and the final treatability study report will be issued and describes the success of the treatment method to clean up solvents and metals in groundwater. For further detail on the status of Parcel D-1, refer to pages III.K-19 through -21 of the Draft EIR.
- **Parcel D-2**—Radiologically impacted sewers and storm drains were recently removed for clean up in Parcel D-2. The Parcel D-2 Removal Action Completion Report is being prepared. The final "No Further Action" ROD for Parcel D-2 is expected in spring 2010. The property will then be ready to be transferred after the Navy issues, with the concurrence of regulators, a Finding of Suitability to Transfer. For further detail on the status of Parcel D-2, refer to pages III.K-19 through -21 of the Draft EIR.
- **Parcels UC-1**—The Navy is currently cleaning up radiologically impacted sewer and storm drain lines along Spear Avenue in Parcel UC-1. There is a Final ROD for UC-1. For further detail on the status of Parcel UC-1, refer to pages III.K-19 through -21 of the Draft EIR.
- **Parcel G**—The Navy issued a final ROD for Parcel G in March 2009. A draft Remedial Design document is currently under review. These documents call for excavation and off-site disposal of contaminated soils and installing soil covers; treating groundwater at specific locations by injecting chemicals or biological nutrients to break down the chemicals, along with groundwater monitoring; and continuing the removal of radiologically contaminated building materials and soils. For further detail about the status of Parcel G, refer to page III.K-21 of the Draft EIR.

Parcel E

The Navy has completed the preliminary assessment/site investigation and the remedial investigation, and has prepared a draft feasibility study (FS) for Parcel E that provides and evaluates a list of various methods, known as remedial alternatives, to address impacts to soil and groundwater. The Navy began a groundwater treatability study in 2009. For further detail on the status of Parcel E, refer to pages III.K-22 through -24 of the Draft EIR.

Parcel E-2

The Navy has completed the preliminary assessment/site investigation is expected to issue the final combined remedial investigation and FS (RI/FS) Report for Parcel E-2 in spring 2010. This report will provide information on the distribution of impacts to soil and groundwater in Parcel E-2 and evaluates a list of available alternatives to clean up the impacts. In addition, an addendum to the FS is being prepared to address radiological impacts in Parcel E-2. For more information about Parcel E-2, refer to Master Response 11 (Parcel E-2 Landfill) and pages III.K-22 through -24 of the Draft EIR.

Parcel F

The Navy has completed the preliminary assessment/site investigation and a combined remedial investigation/feasibility study, as well an updated feasibility study. A Proposed Plan is expected to be issued in 2011. For further detail about the status of Parcel F, refer to pages III.K-26 and -27 of the Draft EIR.

Master Response 10: Pile Driving through Contaminated Soils

Introduction

Overview

Comments have been raised suggesting that the Draft EIR has not adequately addressed the potential effects of pile driving through contaminated soil at the site. This master response addresses the ongoing remediation programs in process on the site and describes the mitigation measures that would ensure that pile driving is not done through contaminated soil or, if it cannot be avoided, require the implementation of methods that case the pile through the contaminated zone and allow the pile installation through zones of contamination without adversely impacting the environment or spreading the contamination to other subsurface layers.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > California State Parks (86-3)
  - > Planning Commissioner Borden (SFPC-111)
- Organizations
  - > Arc Ecology (82-4)
  - > Breast Cancer Action (55-5)
- Individuals
  - > Carol Harvey (67-4)
  - > Francisco Da Costa (105-1)
  - > Karissa Cole (SFPC-15)
  - > Nyese Joshua (65-1, 65-34)
  - > Sam Lao (SFPC-69)

Comments received on the Draft EIR related to hazardous materials were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 55-5, 65-1, 65-34, 67-4, 82-4, 86-3, 105-1, SFPC-15, SFPC-69, SFPC-111.

Summary of Issues Raised by Commenters

- Pile driving through contaminated soil could cause spread of the contamination

Response

It is likely that deep foundations would be required for support of some new buildings and structures at the site including Yosemite Slough bridge and other structures near the Bay where soft sediments are present near the ground surface. To provide adequate support for these structures, the foundations may extend below the soft sediments into competent soil or bedrock.

As discussed in Section III.K.1, Draft EIR page III.K-2, there are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations throughout HPS Phase II. These are the only known hazardous material release sites requiring remediation at the Project site; there are no known hazardous material release sites requiring remediation at Candlestick Point, or at locations where off-site improvements are proposed, based on the results of investigations to date and a review of government agency databases. The Navy is providing soil and groundwater remediation (cleanup) at the site to reduce chemical levels to meet cleanup levels approved by federal and state regulatory agencies (refer to Master Response 9 [Status of CERCLA Process]). Residual chemicals in soil, largely consisting of certain specific metals which are typically associated with the rock and soil that were historically used to fill in the Bay to expand the Shipyard, may remain. These chemicals are not part of a "spill" or "release" of contaminants, but rather reflect metals concentrations normally associated with Franciscan Formation bedrock and/or reflect metals concentrations normally associated with the type and quality of soil used during the period the Shipyard was filled. Therefore, the site should not be contaminated and pile driving should not present any concern of cross-contamination. However, should contamination still be a concern at the site, there are available pile installation methods that case the pile through the contaminated zone and allow the pile installation through zones of contamination without adversely impacting the environment or spreading the contamination to other subsurface layers. Section III.K, page III.K-63 through III.K-66 points out the potential impacts related to installation of foundation or utility support piles and mitigation measure MM HZ-5a (Foundation Support Piles Installation Plan, Section III.K, page III.K-65) would be performed prior to issuance of any building permits.

Additionally, if contaminants were encountered in a location where piles are to be installed, the site mitigation plan required by Article 22A and mitigation measure MM HZ-1a would specify procedures necessary to prevent pile installation from creating a vertical conduit for chemicals occurring in shallow groundwater to move along the pile to deeper groundwater zones, and avoid degradation of the deeper groundwater. The measure would require all excess fill or native soil materials generated during pile driving to be properly managed. Implementation of mitigation measures MM HZ-1a and MM HZ-2a.1 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 a less-than-significant level.

Master Response 11: Parcel E-2 Landfill

Introduction

Overview

This master response addresses comments made on the method for cleaning the Parcel E-2 landfill located on the west side of the Shipyard near Yosemite Slough. Comments were also made concerning radiation on the site, the past brush fire, methane and landfill gas, and other hazards such as liquefaction, sea level rise, and seismic hazards.

This master response is organized by the following topics:

- Parcel E-2 and Landfill Remedial Process
- Radiation Assessments and Remedial Investigations
- Parcel E-2 Alternatives for Remediation
- Removal Actions and Other Remediation Actions Taken
- Liquefaction, Sea Level Rise, and Seismic Hazards

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - None
- Organizations
  - Arc Ecology (85-19)
  - Breast Cancer Action (55-5)
  - Green Action Health and Environmental Justice (58-1, SFRA1-83)
  - POWER (People Organized to Win Employment Rights) (52-3, 69-1)
  - San Francisco Green Party (36-6)
  - Technical Assistance For Communities (TASC) (68-2)
- Individuals
  - Ahimsa Porter Sumchai (SFRA1-23, SFPC-46)
  - Bernadette Sambrano (SFPC-79)
  - Carol Harvey (67-2, 67-3, 67-4)
  - Dan Solberg (SFRA1-38)
  - Diane Wesley Smith (SFRA1-61)
  - Francisco Da Costa (105-1, SFPC-51)
  - Jaron Browne (SFPC-23, SFPC-24)
  - Juana Tello (66-4, SFRA1-59, SFPC-94)
  - Karissa Cole (SFRA1-54, SFPC-15)
  - Nyese Joshua (65-1, 65-34, SFPC-59)
  - Sam Lao (SFPC-69)
  - Saul Bloom (SFPC-134)

> Starr Miles (SFPC-74)
> Willie Ratcliff (SFPC-107)

Comments received on the Draft EIR related to hazardous materials and the landfill were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 36-6, 52-3, 55-5, 58-1, 65-1, 65-34, 66-4, 67-2, 67-3, 67-4, 68-2, 69-1, 85-19, 105-1, SFRA1-23, SFRA1-38, SFRA1-54, SFRA1-59, SFRA1-61, SFRA1-83, SFPC-15, SFPC-23, SFPC-24, SFPC-46, SFPC-51, SFPC-59, SFPC-69, SFPC-74, SFPC-79, SFPC-94, SFPC-107, SFPC-134.

Summary of Issues Raised by Commenters

- The landfill should be excavated and cleaned, not covered or capped
- If landfill is not cleaned properly, there would be adverse health effects
- Radiation on the site has not been adequately analyzed
- Methane and other landfill gas has not been adequately considered
- Other factors could influence spread of contamination, such as sea level rise, seismic activity, or liquefaction

Response

Parcel E-2 and Landfill Remediation Process

The Navy is remediating Parcel E-2 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The remediation process and the current status of the various parcels in the Shipyard are discussed in Master Response 9 (Status of the CERCLA Process). The Navy has completed the preliminary assessment and site investigation for Parcel E-2, and has also published a Draft Final Parcel E-2 RI/FS Report (Draft Final RI/FS).[70] The Navy has also performed various removal actions at the parcel. Remediation of radiological materials in the E-2 landfill generally consists of: surveying structures, former building sites, and radiologically impacted areas; decontaminating buildings; disposing of excavated materials and soils at off-site facilities; and conducting surveys to ensure that sites are safe.

Radiation Assessment and Remedial Investigations

The Navy assessed radiological and other potential hazards at Parcel E-2 through preparation of a comprehensive base-wide radiological assessment, and also through the Parcel E-2 specific Remedial Investigation and Feasibility Study. As discussed in Section III.K.2 beginning on page III.K-27 of the Draft EIR, the Navy prepared the Historical Radiological Assessment (HRA) to identify all sites that have a potential for or are known to contain radioactive contamination based on historical information. These

[70] Engineering/Remediation Resources Group, *Draft Final Remedial Investigation /Feasibility Study Report for Parcel E-2*, February 1, 2009.

sites are identified as radiologically impacted sites and include: sites where radioactive materials were used or stored; sites where known spills, discharges, or other activities involving radioactive materials have or may have occurred, that could have resulted in the release or spread of contamination; and sites where radioactive materials might have been disposed of or buried. The Draft Final RI/FS provides information on the distribution of impacts to soil and groundwater in Parcel E-2 and addresses in detail radiological impacts in an addendum.[71] The Draft Final RI/FS Report addressed CERCLA hazardous substances except for radionuclides. The radiological addendum presents characterization data for radionuclides at Parcel E-2, quantifies the potential risk to future site users, and develops and evaluates remedial alternatives for potential radionuclides of concern at Parcel E-2. Both nonradiological and radiological contaminants would be addressed together in the proposed plan and record of decision documents which are anticipated to be completed in 2011.

The Draft Final Parcel E-2 RI/FS Report identifies four distinct but contiguous areas contained within Parcel E-2 (refer to Figure 2 in the RI/FS):

- The "Landfill Area," which comprises the closed industrial landfill and its immediate perimeter
- The "East Adjacent Area," located to the east of the Landfill Area
- The "Panhandle Area," located west and southwest of the Landfill Area
- The "Shoreline Area," located at the interface with San Francisco Bay

The HRA concluded that low levels of radiological contamination exist within Parcel E-2 including in the following areas (refer to RI/FS Figure 3):

- Experimental Ship-Shielding Area
- Installation Restoration (IR) Site 01/21 (which encompasses most of the land area at Parcel E-2)
- IR Site 02 (located partially within Parcel E-2)
- Metal Slag Area
- Parcel E-2 shoreline
- Storm drains and sanitary sewer system

Most of the land area within Parcel E-2, except for small portions of the East Adjacent Area, is considered radiologically impacted. RI sampling and analysis results indicate that concentrations of radioactive chemicals in surface soil pose a potential unacceptable risk to future site users, and remedial alternatives should be evaluated to address the potential risks. Although the extent of radioactive contamination in subsurface soil has not been defined, the radiological addendum to the Draft Final RI/FS conservatively assumes, consistent with the findings of the HRA, that potential radioactive chemicals may be present in subsurface soil at Parcel E-2 and therefore require analysis of remedial alternatives as do non-radioactive chemicals in soil.

Groundwater radionuclide data from two investigations, performed in 2002 and 2008, were compared with drinking water standards and were found not to exceed the standards at statistically significant levels. As a result, groundwater does not appear to have been impacted by radionuclides. However, the RI/FS Report

[71] Engineering/Remediation Resources Group, *Draft Final Radiological Addendum to the Remedial Investigation /Feasibility Study Report for Parcel E-2,* March 2, 2010.

concluded that non-radioactive chemicals in groundwater within and in close proximity to the Landfill Area require analysis of remedial alternatives. The RI/FS Report evaluated remedial alternatives for groundwater that include monitoring, institutional controls, source removal, and containment. Note, as documented in the Draft Final RI/FS Report, A-aquifer groundwater is not a potential source of drinking water.

Parcel E-2 Alternatives for Remediation

The method of remediation of Parcel E-2 and the landfill is determined through the CERCLA process. The CERLCA process is a regulatory process that is independent of the project, requires the selected remedy to be protective of human health and the environment in light of planned future land use, and provides opportunity for public participation. Through CERCLA, the Navy has identified four alternatives for remediation of the Parcel E-2 area, as discussed below.

Determining Remediation Options

Independent of whether the Project proceeds or not, the Navy is required by law and is conducting comprehensive remediation activities at HPS, including at Parcel E-2. The Navy has not yet issued a formal decision about how it intends to remediate the landfill. That decision, known as "remedy selection," will have to be concurred in by USEPA and the other FFA signatories, which include the Cal/EPA's Department of Toxics Substances Control (DTSC) and San Francisco Bay Regional Water Quality Control Board (RWQCB), implemented under their supervision, and then they will have to concur in the Navy's decision that it has fully implemented the remedy. USEPA and the other FFA signatories may determine that restrictions must be placed on the property to protect human health and the environment while the remediation is ongoing and after the remediation is complete. Refer to Section III.K.2 of the Draft EIR and the subsection entitled, "Regulatory Process for Cleanup Process at HPS Phase II," beginning on page III.K-31 for a discussion of why restrictions may be placed on the property and the nature of these possible restrictions. Refer to Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a discussion of the enforcement of those restrictions.

As noted above, the CERCLA process is presently ongoing at Parcel E-2, and the Navy has prepared a Draft Final RI/FS for Parcel E-2. The City and County of San Francisco regularly reviews and comments on Navy documents related to the CERCLA process. The Navy has received comments from the FFA signatories, the City of San Francisco Department of Public Health, and Arc Ecology, technical consultant for the Citizen's Advisory Committee and is in the process of responding to comments and revising the RI/FS. Parcel E-2 is proposed for use as open space. The remedial alternatives identified in the Draft Final RI/FS summarized below, with the exception of Alternative 1 (No Action), are compatible with the open space land use, and if necessary would include restrictions on uses and activities to protect human health and the environment during and after Project development. As a general matter, the voters and the Board of Supervisors have taken the position that the Navy should remediate the Shipyard to be compatible with unrestricted use to the extent it is feasible to do so. Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) for discussions of an unrestricted use alternative and Proposition P, respectively. In any case, as indicated in Section III.K.2, pages III.K-31 through III.K-36, the Agency would not accept fee transfer of the E-2 area until the Navy has completed the approved remediation and issued a FOST concurred upon by the USEPA, DTSC, and RWQCB. Upon transfer, the Agency and any developer on E-2 would be required to comply with any

environmental restrictions placed on the property by the regulatory agencies. Thus, regardless of the remedial alternative selected by the Navy, the Project would not be expected to result in adverse effects to humans or the environment. The City's Health Department would continue to review Navy documents to ensure that the selected remedial alternative would effectively protect human health and the environment and gives due consideration to input from members of the Bayview/HPS community. The CERCLA documents are also being reviewed and approved by federal and state regulatory agencies. The public is invited to participate in the Navy's Community Involvement Plan and comment on documents prepared as part of the CERCLA process (see Master Response 9).

Formal Alternatives for Remediation

The Navy's remedial objective is to prevent exposure to radionuclides at levels exceeding remediation goals. The Draft Final RI/FS Report for Parcel E-2 developed four remedial alternatives for Parcel E-2 that are also presented in the radiological addendum. The four remedial alternatives for Parcel E-2 are:

- Alternative 1: No Action
- Alternative 2: Excavate and Dispose of Solid Waste, Soil, and Sediment (including monitoring and institutional controls)
- Alternative 3: Contain Solid Waste, Soil, and Sediment with Hot Spot Removal (including monitoring and institutional controls)
- Alternative 4: Contain Solid Waste, Soil, Sediment, and Groundwater with Hot Spot Removal (including monitoring and institutional controls)

Alternative 2 would involve excavation of all solid waste and contaminated soil from the Landfill Area, the Panhandle Area, and East Adjacent Area, and excavation of contaminated sediment from the Shoreline Area. Alternative 3 would involve capping the Landfill Area and excavation of solid waste and contaminated soil in the Panhandle Area and East Adjacent Area and excavation of contaminated sediment from the Shoreline Area. Alternative 4 includes Alternative 3 components as well as a slurry wall to limit groundwater flow to the Bay. Alternatives 2, 3, and 4 were developed to address nonradioactive chemical contamination throughout Parcel E-2, and include varying amounts of intrusive work within radiologically impacted areas. As a result, Alternatives 2, 3, and 4, as presented in the Draft Final RI/FS Report, specify radiological control procedures to properly screen, segregate, characterize, and dispose of radioactive materials. The radiological addendum includes a post-remediation risk analysis that evaluates the protectiveness of Alternatives 3 and 4 with respect to radionuclides. Results demonstrated that Alternatives 3 and 4 are health protective for future recreational receptors. The radiological addendum also identifies additional components of the alternatives that are needed to meet remedial action objectives for radioactively contaminated media. The additional components, to be implemented regardless of which of the Alternatives is selected are:

- Removal and remediation of sanitary sewer, storm drain, and septic sewer lines that extend into the East Adjacent Area but are located outside of the IR-01/21 site boundary (refer to RI/FS Figure 3)
- Removal and remediation of the ship-shielding berm in the Panhandle Area
- Final status surveys of the excavated subgrade of Parcel E-2 to locate and remove any radiological anomalies prior to backfilling with soils meeting the radiological acceptance criteria

Removal Actions and Other Remedial Actions Taken

Under CERCLA, as discussed in Section III.K.2 of the Draft EIR on page III.K-12, the Navy often does not wait for the Remedial Investigation / Feasibility Study process to be complete before beginning physical cleanup activities. The Navy has completed various removal actions and time critical removal actions (TCRAs), as well as treatability pilot studies, all in conjunction with investigation and evaluation of alternatives for remediation. At Parcel E-2, the Navy has removed radiological material in removal actions, and has performed various TCRAs associated with the brush fire in fall 2000 and migration of landfill gases (discussed below).

Removal of Radiologically Contaminated Materials

The Navy has performed two removal actions at Parcel E-2 that have involved excavation and offsite disposal of low-level radioactive waste. At the Metal Slag Area, the Navy removed and disposed of off-site approximately 8,200 cubic yards of soil, metal slag, and debris; of this removed material, approximately 74 cubic yards of the soil was identified as radiologically impacted. Also, the Navy removed and disposed of off-site 32 radiological devices, 15 cubic yards of radiological debris (primarily fire bricks), and approximately 30 cubic yards of metal debris. At the PCB Hot Spot Area, the Navy removed and disposed of off-site, approximately 44,500 cubic yards of soil and debris; 533 cubic yards of the removed soil and fire brick debris was identified as radiologically impacted. Also, the Navy removed and disposed of off-site 40 radiological devices, 78 cubic yards of metal debris, and 19 pieces of other radioactively contaminated debris and two drums of mixed waste.

Response to Brush Fire

As described in Section III.K, page III.K-23 of the Draft EIR, on August 16, 2000, a brush fire burned approximately 45 percent of the Parcel E-2 landfill surface area; small subsurface areas continued to burn for approximately one month after the surface fire was extinguished. As part of a TCRA, an interim cap was constructed over the majority of the landfill in order to extinguish the fire and prevent future fires until the Record of Decision has been completed and chosen remediation implemented. The cap covers approximately 14.5 acres; it reduces water infiltration, thereby reducing the potential for hazardous substances to leach out from the landfill. Because the interim cap effectively limits air intrusion into the landfill, the effect was a smothering of any smoldering subsurface areas remaining from the fire. In addition, the interim cap significantly reduces storm water infiltration through the landfill, thereby reducing the potential for hazardous substances to leach out from the landfill. The interim cap has been vegetated to stabilize surface soils and limit erosion. Additional information on construction of the interim cap is provided in the *Final Removal Action Landfill Cap Closeout Report*[72]. As discussed above, the Navy is in the process of selecting a final remedy for the landfill and all of the Navy decisions on the Parcel E-2 landfill will undergo regulator review and approval and provide opportunities for public input.

Controlling Landfill Gas and Methane

A TCRA was also implemented to address human health risks associated with off-site migration of landfill gas toward the UCSF property located immediately north of the landfill. Methane and carbon dioxide are

[72] TtEMI. 2005a. *Final Removal Action Landfill Cap Closeout Report, Parcel E-2, Hunters Point Shipyard, San Francisco, California*. February 7.

the two main components of landfill gas. Methane is non-toxic but it can create a potential explosion hazard if it collects inside of a structure. In 2002, the Navy installed, on the north side of the landfill, and between the landfill and Parcel A, a gas control system that includes a subsurface gas cutoff wall, passive and active landfill gas extraction wells and three tiers of gas monitoring probes (GMPs) which are sampled monthly and results reported quarterly.[73] The three tiers of GMPs primarily monitor whether the gas is migrating beyond the boundaries of the landfill and onto the immediately adjacent UCSF property. If gas (volatile organic compounds or methane) is detected above the trigger levels in the GMPs, the Navy promptly activates its extraction system to remove the gas from the subsurface. The Navy has a detailed Landfill Gas Monitoring and Control Plan in place, which includes steps for notifying the relevant regulators and extracting the gas from the UCSF property. In addition, as the cleanup of the Parcel E-2 landfill continues, the Navy will select a final remedy for the landfill and for monitoring and controlling the landfill gas. All of the Navy decisions on the Parcel E-2 landfill will undergo regulator review and approval and provide opportunities for public input. There are 13 GMPs located on Crisp Avenue north of the landfill which are monitored for methane to demonstrate whether methane has migrated into the subsurface under Crisp Avenue. To date these GMPs have been sampled 50 to 100 times and there has been no detection of methane or landfill gases in the Crisp Avenue probes indicating that the cutoff wall is effective in preventing offsite migration of landfill gas including methane.

Liquefaction, Sea Level Rise, and Seismic Hazards

Master Response 6 (Seismic Hazards), Master Response 7 (Liquefaction), and Master Response 8 (Sea Level Rise) discuss seismic hazards, liquefaction, and sea level rise. Refer to those master responses for detailed discussions on those topics. With respect to remediation of the Parcel E-2 landfill, the CERCLA documents the Navy is preparing take these considerations into account, as will any approved remedies for the site.

As described in Section III.K of the EIR, **if** the Navy proposes and USEPA concurs that engineered caps be installed on top of an area of known or suspected residual contamination (typically a landfill) as part of the Navy's CERCLA program, site-specific geotechnical studies would be used in the design of such caps to minimize potential breaches. The cover would limit exposure and protect humans from long-term health risks even if breaches in the cover temporarily occur. Operation and maintenance plans for these covers and caps would be carried out to monitor and repair potential breaches. Therefore, if ground rupture were to occur, contaminants should not be released at levels presenting a concern to human or ecological health.

The Navy's Draft Final RI/FS Report included a liquefaction and slope stability evaluation. The evaluation concluded that, for soil layers that could liquefy during the largest potential earthquakes, lateral movement of soil below the waste may be approximately 4 to 5 feet. This estimate is conservative because of the discontinuous layers and resistance from nonliquefiable soils at the boundaries, which would likely reduce the amount of lateral movement to less than the estimated 4 to 5 feet. Settlement of liquefiable soil below the waste may be up to 10 inches. The evaluation also concluded that, if containment were selected as the final remediation measure, further analysis would be required on response of the landfill cap, overall stability of the landfill site, slope stability, and other closure features. The Navy will also consider sea level

[73] ITSI. 2008d. *Final Landfill Gas Monitoring Report For July-September 2008, Post-Removal Action, Parcel E-2, Industrial Landfill, Hunters Point Shipyard, San Francisco, California*. October 27.

rise when developing remedial designs for the Parcel E-2 landfill. Parcel E-2 Groundwater is not a source of drinking water and results show that leaching from landfill has the potential to impact to the Bay. The Parcel E-2 FS has identified containment remedies to mitigate these potential impacts through containment and monitoring.

Residual chemicals in soil would largely consist of certain specific metals, which are associated with the rock and soil that were historically used to fill in the Bay to expand the shipyard, thus they are not part of a "spill" or "release" of contaminants but rather reflect metals concentrations normally associated with Franciscan Formation bedrock. These metals that are predominantly immobile and are not associated with any existing groundwater contamination. Thus, a rise in the groundwater level would not mobilize these metals. Although residual contamination may remain after cleanup, these residuals would be below levels that may present a threat to human health or the environment and/or they would be located under an engineered cap that prevents human exposure to these residuals. Sea level rise would not compromise covers and/or engineered caps that may be placed on top of an area of known or suspected residual contamination as operation and maintenance plans for these covers and caps would be carried out to monitor and repair potential breaches. Additionally, emergency response plans would be carried out following major flooding and seismic events, at which time caps and covers would be investigated for potential breaches and repaired.

Master Response 12: Naturally Occurring Asbestos

Introduction

Overview

This master response addresses comments made concerning naturally occurring asbestos dust and how the Project Applicant can be required to adequately mitigate this hazard.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - Planning Commissioner Lee (SFPC-126)
- Organizations
  - Arc Ecology (82-5)
  - Breast Cancer Action (55-5)
  - POWER (People Organized to Win Employment Rights) (52-3)
  - San Francisco Green Party (36-6, 36-8)
- Individuals
  - Ahimsa Porter Sumchai (SFPC-46, SFRA2-19)
  - Bernadette Sambrano (SFPC-78)
  - Carol Harvey (67-2, 67-3, 67-4)
  - Francisco Da Costa (105-1, SFPC-51)
  - Juana Tello (66-9, 66-10, SFPC-95)

> Karissa Cole (SFPC-15)
> Michael E. Boyd (SFPC-41)
> Nyese Joshua (65-1, 65-4, 65-34)
> Sam Lao (SFPC-69)

Comments received on the Draft EIR related to naturally occurring asbestos were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) and Section III.H (Air Quality) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K and Section III.H.

Comment Summary

This master response responds to all or part of the following comments: 36-6, 36-8, 52-3, 55-5, 65-1, 65-4, 65-34, 66-9, 66-10, 67-2, 67-3, 67-4, 82-5, 105-1, SFPC-15, SFPC-41, SFPC-46, SFPC-51, SFPC-69, SFPC-78, SFPC-95, SFPC-126, SFRA2-19.

Summary of Issues Raised by Commenters

- Concern expressed regarding the control of asbestos dust
- The Project Applicant does not have a good track record with regard to monitoring of asbestos dust.

Response

The Draft EIR states that Hunters Point Shipyard contains serpentinite, chert, and basalt bedrock typical of the Franciscan Complex (Section III.K [Hazards and Hazardous Materials], page III.K-29). Serpentinite may contain naturally occurring asbestos, which is identified as a potential health hazard requiring control measures outlined in Section III.K, page III.K-98 of the Draft EIR. As shown on Figure III.L-1 (Geologic Map) of Section III.L (Geology and Soils) of the Draft EIR, there is an area of serpentinite mapped in Parcel A, Parcel B, a portion of Parcel C, and a small area of Parcel G.

Due to the health concerns surrounding naturally occurring asbestos, both the Project Applicant and the Agency have been monitoring the vicinity of Parcel A for asbestos that may become airborne due to soil-disturbing activities (e.g., grading) since September 2006. As described in Section III.K, pages III.K-98 to -103 of the Draft EIR, this monitoring program is being carried out in accordance with a Dust Control Plan (DCP), approved by the SFDPH, and an Asbestos Dust Mitigation Plan (ADMP), approved by the Bay Area Air Quality Management District (BAAQMD).

Numerous measures to control asbestos dust during the Project are described in Section III.K, pages III.K-98 to -103 of the Draft EIR, including applying water during and after grading activities, covering stockpiles and truckloads, operating wheel washing stations, and placing cover material over any exposed naturally occurring asbestos at the end of grading.

Section III.K of the Draft EIR (on pages III.K-97 and III.K-98) also acknowledges significant community concern about the implementation of asbestos and dust control measures arising from the fact that during Phase I, the Project Applicant's former asbestos air monitoring contractor failed to ensure proper operation of the air monitoring stations for the first several months of grading activities in 2006 and could not validate the sampling results. As the Draft EIR indicates, after this problem was reported by the Project

Applicant, the SFDPH, the BAAQMD, and independent experts from the UCSF, along with the federal Centers for Disease Control (CDC) and the CDC Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the potential health risks from construction dust containing asbestos in HPS Phase I. The reviews concluded that there was no significant health risk created by the grading activities at the Shipyard. BAAQMD pursued enforcement action against the Project Applicant, who entered into a consent agreement to pay civil penalties for its air-monitoring contractor's failure to properly monitor and for its grading contractor's failure to fully implement components of the BAAQMD-approved asbestos dust-monitoring plan. The City also implemented a number of actions to enforce the requirements of its required DCP in order to minimize the potential for airborne asbestos during grading in HPS Phase I, including issuing several notices of violation requiring corrective action. Since then, the SFDPH has worked with the Project Applicant to improve the dust-monitoring program, and required preparation of a Revised DCP for HPS Phase I, which was implemented in February 2007. Currently, the SFDPH conducts random daily inspections to monitor dust control measures. BAAQMD has also worked with the Project Applicant to improve the ADMP required by the State Airborne Asbestos Toxics Control Measure.

As indicated on pages III.K-98 through -101, MM HZ-15 would be implemented to reduce impacts related to asbestos exposure during construction activities including enforcing proper implementation of dust control and monitoring procedures. In addition to developing approved DCPs through *San Francisco Health Code* Articles 22B and 31 and ADMPs, as required by CCR Title 17 (Section 93105), MM HZ-15, San Francisco ordinances, and state regulations, the Project Applicant must ensure that the construction activities comply with SFDPH and BAAQMD standards. Applicants are required to implement specified dust control measures throughout the construction Project to meet SFDPH and BAAQMD standards. These measures may include any or all of the following, as needed at a particular site and for a particular activity: operating particulate monitors and sampling air for asbestos as required; controlling traffic and limiting vehicle speeds to 15 mph; limiting construction areas; sufficiently wetting ground surfaces to prevent visible dust emissions from crossing the property line; minimizing soil stockpiled; washing down equipment before moving on to a paved public road; covering, wetting and/or hydroseeding soil stockpiles; covering and limiting the amount of soil placed in trucks; installing dust curtains and windbreaks on windward and downwind sides of the property lines; cleaning all visible track out from paved public roads, and stabilizing disturbed areas following construction. The Project Applicant would be required to shutdown construction work based on wind, dust migration, or if dust is contained within the property boundary but not controlled after a specified number of minutes or if asbestos levels reach work-shutdown criteria which have been developed by BAAQMD. A hotline would be established for surrounding community members who may be potentially affected by Project-related dust and a contact person shall respond and take corrective action within 48 hours. For areas covered by an ADMP, publicly visible signs would be posted around the site with the hotline number as well as the phone number of the BAAQMD and the numbers would be given to adjacent residents, schools, and businesses.

Master Response 13: Post Transfer Shipyard Cleanup

Introduction

Overview

Comments have been raised regarding the relationship between the Navy's cleanup program and the Navy's transfer of the property to the Agency. These comments have included requests for clarification regarding who would be responsible for any cleanups necessary after transfer and regarding what types of residual contaminants (in particular radiological contaminants) would remain at the site after transfer and after completion of cleanup activities.

This response is organized by the following topics:

- Introduction
- Cleanups Necessary After Transfer
- Site Conditions Following Cleanup
- Non-Radiological Materials Present in the Subsurface at HPS Phase II
  - Parcel B
  - Parcels C and UC-2
  - Parcel D
  - Parcels E and E-2
- Radiological Materials Present in the Subsurface at HPS Phase II

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - California Department of Transportation—Transportation Planning (71-11)
  - Planning Commissioner Borden (SFPC-113, SFPC-114, SFPC-118, SFPC-119)
- Organizations
  - Breast Cancer Action (55-1, 55-5)
  - Green Action Health and Environmental Justice (58-1, SFRA1-83)
  - POWER (People Organized to Win Employment Rights) (50-6, 52-1, 52-3, 69-1)
  - San Francisco Green Party (36-5, 36-6, 36-7)
  - Technical Assistance For Communities (TASC) (68-2)
- Individuals
  - Ahimsa Porter Sumchai (SFRA1-23, SFPC-46)
  - Bernadette Sambrano (SFPC-78)
  - Carol Harvey (67-2, 67-3, 67-4)
  - Colleen Muhammad (72-2)
  - Dan Solberg (SFRA1-38)
  - Daniel Landry (SFRA2-34)
  - Francisco Da Costa (105-1, SFPC-51)

> Jaron Browne (SFPC-23, SFPC-24)
> Juana Tello (66-3, 66-4, 66-5, 66-10, 66-12, 66-17, SFRA1-59, SFPC-94)
> Karissa Cole (SFRA1-53, SFPC-15)
> Michael E. Boyd (SFPC-39)
> Nyese Joshua (65-1, 65-4, 65-31, 65-32, 65-34, SFPC-59)
> Perry Matlock (74-3)
> Sam Lao (SFPC-69)
> Saul Bloom (SFPC-134)
> Starr Miles (SFPC-74, SFPC-75)
> Willie Ratcliff (SFPC-107)

Comments received on the Draft EIR related to cleanup of the Shipyard were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 36-5, 36-6, 36-7, 50-6, 52-1, 52-3, 55-1, 55-5, 58-1, 65-1, 65-4, 65-31, 65-32, 65-34, 66-3, 66-4, 66-5, 66-10, 66-12, 66-17, 67-2, 67-3, 67-4, 68-2, 69-1, 71-11, 72-2, 74-3, 105-1, SFRA1-23, SFRA1-38, SFRA1-53, SFRA1-59, SFRA1-83, SFPC-15, SFPC-23, SFPC-24, SFPC-39, SFPC-46, SFPC-51, SFPC-59, SFPC-69, SFPC-74, SFPC-75, SFPC-78, SFPC-94, SFPC-107, SFPC-113, SFPC-114, SFPC-118, SFPC-119, SFPC-134, SFRA2-34.

Summary of Issues Raised by Commenters

- Concerns were expressed over who would be responsible for cleanup at the site
- Concerns expressed regarding the residual contamination left at the site
- Concerns expressed regarding how the radiation would be cleaned up on the site

Response

Introduction

The cleanup process required by the FFA (and the current status of cleanup activities) is described in Master Response 9 (Status of the CERCLA Process). The Navy is performing remedial activities in accordance with the process described in Master Response 9 under the supervision of the regulatory agencies. As indicated in Master Response 9, for much of the property the Navy already has completed many of the steps required by the remediation process. Under the transfer process envisioned by the Navy and Agency, the Navy will at a minimum complete a ROD for any property it proposes to offer to the Agency for transfer. The Navy then will complete the remedy called for by the ROD and transfer the property to the Agency with regulatory concurrence that no further remediation is required, or it will enter into a transfer agreement with the Agency in which the Navy will pay the Agency to complete the remedial work. This latter scenario is referred to as an early transfer and requires the approval of USEPA, with the concurrence of the Governor of California. Both of these transfer processes are explained in the Draft EIR, Section III.K, pages III.K-31 through -36. Below is a summary of the cleanup actions that could

occur after transfer. Also explained below are the types of residual contaminants that may remain at the site after the remediation process is complete.

Cleanups Necessary After Transfer

If the Navy completes the remediation process and transfers the property after the regulators determine that no further remediation is required, the Agency would not be obligated to complete any further remediation. Under the CERCLA law, Section 120(h), the Navy will provide a warranty upon transfer that the property has been cleaned to a level that is protective of human health and the environment given the intended use and that if additional remedial action is found to be necessary after transfer, the Navy will be responsible for completing any required cleanup. The Conveyance Agreement between the Agency and the Navy acknowledges that the Navy will indemnify subsequent owners and retain liability for unknown or newly discovered hazardous materials even after the transfer to the Agency and subsequent developers.

The Agency is considering whether to seek approval of an "early transfer" of Parcel B and Parcel G (except for IR 7/18, for which the Navy would complete remediation before transfer). Subsequent early transfers of other parcels may also be considered once RODs for the parcels are complete and where the remediation does not involve radionuclides. Further, due to the complexity of remediation at Parcel E-2, the Agency is not considering early transfer of that area. In an early transfer, USEPA and the Governor would authorize the Navy to transfer ownership before the remediation has been completed, subject to use and activity restrictions to ensure human health and the environment are protected from potential exposures to hazardous materials that may not yet have been fully remediated. After an early transfer, the Agency would be responsible for implementing those remedial activities in accordance with the approved remedial design documents, i.e., the groundwater and soil vapor treatment systems, the surface cover, the vapor barriers and the shoreline revetment wall. All remediation related to radioactive contaminants would be completed by the Navy prior to the transfer.

The Navy would provide a grant to the Agency of the funds necessary for the Agency to implement the remedial activities identified in the ROD that have not been completed by the Navy at the time of transfer. The funds would also be used to procure environmental insurance covering cost over-runs and discovery of unknown contaminants. The Agency would be supervised by the same regulatory agencies supervising the Navy, and would be held to standards at least as strict as those the Navy is held to, under a legal agreement called an Administrative Order of Consent (AOC) which would be signed by USEPA, DTSC, and the RWQCB. MM HZ-12 requires any remediation activities undertaken on behalf of the Agency or Project Applicant at the Project to be in compliance with the provisions of the AOC. If the Agency or Project Applicant were found to be in default of the AOC, the regulatory agencies could require the Navy to reassume its responsibilities for completing the cleanup. More detail about early transfer is included in the Draft EIR at pages III.K-31 through -34.

Site Conditions Following Cleanup

Commenters have asked for information about the types, locations, and concentrations of residual contaminants that may be left in place after the environmental cleanup is complete and development commences. Generally speaking, chemicals left in place would consist largely of specific metals that are associated with the native rock quarried for use as fill and associated soil historically used to fill in the Bay to expand the shipyard. The ubiquitous nature of these naturally occurring metals indicate they are not the

result of a "spill" or "release" of contaminants from operational activities, but rather reflect metals concentrations normally associated with Franciscan Formation bedrock described in Section III.L (Geology and Soils) and similar to those found in other Bay fill sites throughout the City, such as Mission Bay. Like Mission Bay, which has been approved for development with a "cover" remedy to assure that long-term exposure to metals in soil and groundwater would not occur, at HPS Phase II, a final cover would be placed over existing soil through the use of new building foundations, roads, sidewalks, parking lots and/or placement of clean fill in open space areas.

In all cases, pursuant to CERCLA and the FFA, any chemical left at any location in the Shipyard would be in concentrations and conditions determined by USEPA, DTSC, and RWQCB to be protective of human health and the environment (refer to Section III.K, pages III.K-2 and III.K-11). In reviewing and approving the remedy selected by the Navy in the ROD, these agencies set a target concentration for chemicals in soil and groundwater; concentrations above the target level are subject to remedial action. The types of chemicals present in the various parcels as well as the Navy's ongoing remedial action are discussed at length in Section III.K.2, beginning on page III.K-13 of the Draft EIR. The specific target concentration levels associated with each remedial action are available in the associated CERCLA documents, and specifically in the Remedial Action Objectives sections of those documents. Chemicals may remain on the parcels at levels below the target concentrations, and/or in conditions that eliminate exposure pathways at target concentrations. The Draft EIR does not evaluate the remedial target concentration levels of chemicals determined by the regulatory agencies to be protective of human health and the environment, nor the methods determined to attain cleanup goals. This is because, as stated on page III.K-2 of the Draft EIR, the Navy's ongoing remediation activities are not part of the Project, and it is thus not the goal of the EIR to assess the adequacy or impacts of the Navy's remediation actions. Instead, the Draft EIR presents information on the location of contamination and the Navy's remediation in the Environmental Setting Section (III.K.2). For the reader's convenience, that information is summarized in part below with references to pertinent sections of the CERCLA documents.

Non-Radiological Materials Present in the Subsurface at HPS Phase II

Parcel B

As discussed on page III.K-14 of the Draft EIR, the primary chemicals of concern in the soil at Parcel B include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals. The groundwater contains VOCs, chromium VI (hexavalent chromium), and mercury. Petroleum hydrocarbons exist at certain levels in both soil and groundwater, and methane was detected at IR Sites 7/18. The presently ongoing remedial action associated with these contaminants was documented in a ROD, and most recently in a ROD Amendment of February 2009. Section 8 (Amended Remedial Action Objectives) of the ROD outlines the remediation concentration goals for each specific chemical of concern in various exposure scenarios and from various sources (see *Final Amended Record of Decision for Parcel B*, January 14, 2009, pages 8-1 through 8-3, Tables 8-1 through 8-4). Chemical concentrations below these goals could remain after completion of cleanup activities. The Amended ROD was prepared in part to present updated information gained through sampling and excavation during remedial actions. The discrete release of chemicals referred to as the "spill model" was the basis for the initial remedial actions. Under the spill model, high chemical concentrations occur near the center of the release and decrease outward. Verification sampling for remedial excavations involved collecting successive

"step-out" samples. At 13 of 106 excavation areas, successive step-out excavation and sampling did not yield delineation and removal of all contaminants indicating that the spill model and excavation was not an appropriate remedy for these areas. A group of metals, especially arsenic and manganese, consistently exceeded cleanup goals at locations across Parcel B. The widespread or "ubiquitous" nature of these metals is related to the occurrence of these metals in local bedrock that was quarried for fill during the expansion of the Shipyard in the 1940s. The Navy acknowledges that industrial sources of metals exist at HPS, and there is a potential that some concentrations of metals could have sources other than naturally occurring materials. The Navy has worked to remove these sources during the response actions taken to date. Cleanup levels and remedial alternatives developed in the Amended ROD address concentrations of metals that may occur above risk levels but within the range of naturally occurring (or background) metals, regardless of their source. Thus, naturally occurring metals would remain in some cases at concentrations above risk levels, but would be under the final cover placed to cutoff the exposure pathway. Refer to the Draft EIR pages III.K-14 through -18 and to the ROD for detail on the Navy's selected remedy and the manner in which it attains cleanup goals.

Parcels C and UC-2

As discussed on page III.K-18 of the Draft EIR, the primary chemicals of concern in Parcel C soil and groundwater include COCs, SVOCs, PCBs, petroleum hydrocarbons, and metals. The remedial action taking place on Parcel C is documented in a Draft Proposed Plan, and action taking place at UC-2 is documented in a Final ROD. Tables 4 through 7 in the Proposed Plan for Parcel C outline the concentration goals for each specific chemical of concern in various exposure scenarios and from various sources (see *Draft PP for Parcel C*, January 2009, pages 8-9, 31-36). Section 2.7 (Remedial Action Objectives) of the ROD for UC-2 outlines the remediation concentration goals for each specific chemical of concern in Parcel UC-2 for various exposure scenarios and from various sources (see *Final Amended Record of Decision for Parcel UC-2*, December 17, 2009, pages 27-29). After completion of cleanup activities, these chemicals present in concentrations below these goals would remain, and a group of naturally occurring metals associated with fill material derived from native bedrock is expected to remain under the final cover in concentrations above risk levels throughout the parcel. Refer to the Draft EIR pages 18-19 and to the RODs for detail on the Navy's selected remedies and the manners in which cleanup goals are attained.

Parcel D

As discussed on pages III.K-19 and -20 of the Draft EIR, the primary chemicals of concern in soil and groundwater at Parcel D are metals and VOCs. Chemical contaminants include petroleum hydrocarbons, beryllium, and various other metals found in serpentinite-derived fill materials, such as arsenic, chromium, nickel, and manganese. Other contaminants detected in the soil include PCBs and elevated concentrations of lead in several areas. The groundwater underneath IR-09, the former pickling and plating yard, was shown to contain Chromium VI as well. For remedy selection, Parcel D was divided into four new parcels: Parcels D-1, D-2, G, and UC-1. Section 2.7 (Remedial Action Objectives) of the ROD prepared jointly for Parcels D-1 and UC-1 outlines the remediation concentration goals for each specific chemical of concern in those parcels for various exposure scenarios and from various sources (see *Draft Final ROD for Parcels D-1 and UC-1*, May 20, 2009, pages 30-33). Section 2.7 (Remedial Action Objectives) of the ROD for Parcel G outlines the remediation concentration goals for each specific chemical of concern in Parcel G for various exposure scenarios and from various sources (see *Final ROD for Parcels G*, February 18, 2009, pages 28 through 32,

Tables 4 and 5). The Navy prepared a ROD for No Action at Parcel D-2, which recommends no action because no source of chemical contamination above the target concentrations was identified on that parcel (refer to *Draft Final ROD for No Action at Parcel D-2*, January 16, 2009, pages 2, 3, and 10). If these chemicals were present below the target concentrations, they would remain. Additionally, as described above for Parcels B and C, it is expected that naturally occurring metals would remain under the final cover in concentrations above risk levels throughout the parcel. Refer to the Draft EIR pages 20 and 21 and to the RODs for detail on the Navy's selected remedies and the manners in which it attains cleanup goals.

Parcels E and E-2

As discussed beginning on page III.K-22 of the Draft EIR, the chemicals of concern at Parcel E include metals and organic compounds such as VOCs, polycyclic aromatic hydrocarbons (PAHs), PCBs, and pesticides, while the chemicals of concern at Parcel E-2 include metals, PCBs, SVOCs, pesticides, and petroleum hydrocarbons. E-2 also contains the radionuclides cobalt-60, cesium-137, radium-226, and strontium-90, discussed below. Studies are currently ongoing at the Parcels and draft proposed plans and RODs are expected in the 2010/11 timeframe. The remediation concentration goals of the known chemicals are available in the Draft FS Report for Parcel E in Section 3 (Remedial Action Objectives), and in the Draft RI/FS Report for Parcel E-2 in Section 9 (Remedial Action Objectives) (refer to *Draft FS Report for Parcel E*, July 2009, pages 3-1 through 3-10, Tables 3-1 through 3-5; *Draft RI/FS Report for Parcel E-2*, February 2009, pages 9-1 through 9-6). After completion of cleanup activities, if these chemicals were present below the target concentrations, they would remain and naturally occurring metals present above risk levels are expected to remain under the final cover throughout the parcel. Refer to the Draft EIR pages 23 and 24 and to the CERCLA documents for additional detail on the Navy's ongoing remedial actions and the manner in which these actions attain cleanup goals. Also, see below for more discussion of the Navy's handling of the radiological contamination.

Radiological Materials Present in the Subsurface at HPS Phase II

As explained in Master Response 9 (Status of the CERCLA Process), the Navy is currently remediating all radiologically impacted structures and radiological contamination associated with the sewer and storm drain system. The Navy is disposing of off-site radiologically impacted soil and materials that it finds . The Navy is in the process of seeking an unrestricted use designation for structures and areas where it has undertaken radiological remediation associated with the sewer and storm drain system. The Agency would not accept property for transfer until the Navy has completed radiological surveys, investigations, and radiological cleanup as approved by Federal and State regulatory agencies.

Beyond the storm drain and sewer system and structures identified as radiologically impacted, there are areas containing fill that the Navy has identified as containing or potentially containing radionuclides in soil. These areas are in Parcel B in the IR 7/18 areas, in portions of Parcel E and in Parcel E-2. The Navy has not completed RODs for Parcel E or E-2, meaning that no decision has been made by the Navy and regulators as to the remedial action that is acceptable for these areas; therefore it is not known at this time to what extent radionuclides may remain after transfer. The known conditions in these areas are described below. The ROD for Parcel B identifies two areas that may be "restricted" due to potential radiological impacts: the discharge tunnel beneath historical Building 140 and the future open space area that lies within IR-7/18. IR sites 7/18 and restrictions are depicted in Figure III.K-2 (Parcel B Areas Requiring Institutional Controls).

Discharge tunnel beneath Building 140: Building 140 is a one-story brick building shaped as a rectangle with a rounded eastern end resembling an apse. The building measures about 96 by 56 feet and is located north of Drydock 3, about midway along the drydock. The HRA indicates that Building 140 is an impacted area, due to the history of Drydock 3 being used as a decontamination facility for ships that participated in atomic weapons testing and support equipment. The various decontamination methods included sandblasting of shipboard components. These sandblast wastes may have been discharged through the pumping equipment of Building 140 into the Bay (after drydock flooding and dewatering operations). An underground Suction Channel for water from Drydock 3 passes from the drydock through the pump house to the Bay via a Discharge Channel. Based on preliminary, screening-level sampling, the discharge channel may be defined as a "restricted" area due to radiation-impacted sediments that cannot be removed due to unsafe, underwater working conditions. If so, then the tunnel would be sealed off to prevent off-site migration of these sediments into the Bay. The tunnel is located 52 feet beneath the ground surface and would remain inaccessible to site visitors under any circumstances.

IR-7/18 Open Space: A review of the bayshore filling history of this area suggests that some radiologically impacted fill material may have been deposited in this area. However, no evidence of radiological impacts has been found in this area. Nevertheless, as indicated in the Draft EIR on page III.K-15 and on Figure III.K-2, this area would be considered an "area requiring institutional controls" (ARIC) for radionuclides due to the potential for the area to contain radiologically impacted fill material, such as sand-blast grit used in decontaminating ships that participated in atomic weapons testing, and radioluminescent dials and gauges. The remedial design for this area includes covering the ARIC with three feet of clean fill cover, which would be separated from currently in-place soils by a physical demarcation layer. A revetment wall would be constructed along the entire shoreline, which is intended to prevent any erosion of IR-7/18 fill materials into the Bay; the revetment wall design would take into account projected sea level rise. The IR-7/18 area is designated as open space; therefore no pile-supported structures would be built within this ARIC. Prior to placement of the cover, a radiological surface scan of the top 12 inches of soil would be conducted and any radiological anomalies that are found would be removed and the area rescanned. The ARIC cover would be monitored as required by the Operation and Maintenance Plan and groundwater would be monitored to verify that radionuclides are not present.

Parcel E Shoreline: A review of the bayshore filling history of this area suggests that some radiologically impacted fill material may have been deposited in this area. No evidence of radiological impacts has been found in this area, but radiological investigation and remedial evaluation have not been completed.

Parcel E-2 Landfill: Parcel E-2 has the potential to contain radiologically impacted fill material, such as sandblast grit used in decontaminating ships that participated in atomic weapons testing, and radioluminescent dials and gauges in the landfill present on this site. The radionuclides of concern associated with Parcel E-2 include cobalt-60, cesium-137, radium-226, and strontium-90. The remedial alternatives evaluated in the Draft Final Parcel E-2 RI/FS Report, and other details about Parcel E-2 such as landfill gas and methane collection and monitoring, the brush fire, and liquefaction are discussed in Master Response 11 (Parcel E-2 Landfill).

Master Response 14: Unrestricted Use Alternative

Introduction

Overview

Some commenters have requested that the Draft EIR analyze an alternative where all of HPS is cleaned up to allow unrestricted, residential use.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - Planning Commissioner Borden (SFPC-113, SFPC-114, SFPC-118)
- Organizations
  - Breast Cancer Action (55-5)
  - Green Action Health and Environmental Justice (58-2)
  - POWER (People Organized to Win Employment Rights) (52-1)
- Individuals
  - Carol Harvey (67-2, 67-4)
  - Colleen Muhammad (72-2)
  - Ernest Stokes (53-1)
  - Francisco Da Costa (105-1)
  - Juana Tello (66-7, SFRA1-57)
  - Karissa Cole (SFRA1-52, SFPC-15)
  - Nyese Joshua (65-1, 65-34)
  - Perry Matlock (74-3)
  - Sam Lao (SFPC-69)
  - Vivien Donahue (60-3, 60-5)

Comments received on the Draft EIR related to full cleanup of the site were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 52-1, 53-1, 55-5, 58-2, 60-3, 60-5, 65-1, 65-34, 66-7, 67-2, 67-4, 72-2, 74-3, 105-1, SFRA1-52, SFRA1-57, SFPC-15, SFPC-69, SFPC-113, SFPC-114, SFPC-118.

Summary of Issues Raised by Commenters

- The entire site should be cleaned to full, unrestricted use

Response

As indicated on page III.K-2 of the Draft EIR, the remediation program at HPS is being carried out by the Navy through a 1992 Federal Facilities Agreement between the Navy, USEPA, and state regulatory agencies. The regulatory agencies will require implementation of this remediation program regardless of whether the project or any other development approvals is proceeding. Therefore, the remediation program is not part of the Project, so the "alternative" requested by the commenters is not an alternative to the Project but rather an alternative to the Navy's cleanup program. The law that mandates the Navy's cleanup action does not preclude, but neither does it intend or require, cleanup to allow unrestricted, residential use in all portions of HPS.CEQA requires assessment of alternatives that would reduce or avoid impacts associated with the Project while achieving all or most of the Project objectives. The Draft EIR identifies whether the Project would result in potentially significant impacts associated with hazardous materials and identifies mitigation measures to address impacts.

An unrestricted use alternative would not provide for a greater reduction in impacts than would be achieved with the identified mitigation measures, which already would assure that all development on the property is of a type that accords with restrictions placed in deeds. While an unrestricted use designation would eliminate the need for such use restrictions in deeds, cleaning property to a residential use standard and then using the property for open space or non-industrial uses does not result in a reduction of environmental impacts. As explained on page IV-106 of the Draft EIR, the Navy's cleanup plan is designed to remediate HPS to levels acceptable for the planned uses in the current HPS Redevelopment Plan adopted in 1997. The HPS Redevelopment Plan, which is discussed on pages I-2 and I-3 of the Draft EIR, calls for a mix of uses, including residential, mixed use, industrial, research and development, maritime industrial, cultural and educational, and open space/recreational. Likewise, the objectives of the Project, as set forth in Proposition G passed by the voters in June 2008 and described in the Draft EIR on pages II-5 through -7, can be met only through a mix of commercial, residential, and recreational uses. That is why one of the project objectives approved by the voters in Proposition G is to "transform the contaminated portions of the Shipyard property into economically productive uses, or public open space, as appropriate."

Although the Navy's cleanup program is oriented toward the reuses set forth in the 1997 Redevelopment Plan, its program will remediate the site to a level sufficient to allow the land uses contemplated by the Project and the variants analyzed in this EIR, with the exception of one of the variants, as discussed in Draft EIR on page IV-106. The Housing Variant (Variant 2) or the Housing/R&D Variant (Variant 2A) would place housing on Parcel G, where the Navy has planned to impose a deed restriction allowing residential use in the nonresidential areas of the 1997 Redevelopment Plan only if approved by USEPA, the Navy, and state regulatory agencies. As discussed on page III.K-33, Parcel G is presently being considered for an early transfer where the cleanup responsibility would be assumed by the Agency. If the Agency wishes to pursue the non-stadium housing alternative, it could seek approval from the regulatory agencies to implement a cleanup that would allow residential use. If Parcel G is not subject to an early transfer and the Agency wished to pursue the non-stadium housing alternative, the Agency or Project Applicant would perform the activities necessary to secure approval from USEPA, the Navy, and state regulatory agencies to allow residential use on the property, as described on page IV-106 of the Draft EIR.

Master Response 15: Proposition P and the Precautionary Principle

Introduction

Overview

Some commenters have asserted that the Project is inconsistent with Proposition P, a voter initiative passed in 2000 related to the cleanup of HPS. Many commenters raising this point have also asserted that the Project is inconsistent with the Precautionary Principle Policy Statement adopted by the Board of Supervisors in July 2003. The commenters' concern is that the Navy's cleanup of HPS would not allow for unrestricted, residential use of the entire Shipyard, or has the potential to result in residual contamination remaining on-site. Commenters are particularly concerned that the Parcel E-2 landfill would be capped in place rather than removed.

This response is organized by the following topics:

- Introduction
- Proposition P
- Precautionary Principle Policy Statement

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - Planning Commissioner Borden (SFPC-115, SFPC-118)
- Organizations
  - Arc Ecology (84-9, 84-27, 84-49, 85-19)
  - Breast Cancer Action (55-5, 55-6)
  - Green Action Health and Environmental Justice (58-2)
  - POWER (People Organized to Win Employment Rights) (52-1)
  - San Francisco Green Party (36-6, 36-8)
  - Technical Assistance For Communities (TASC) (68-2)
- Individuals
  - Carol Harvey (67-4)
  - Colleen Mohammad (72-2)
  - Dan Solberg (SFRA1-38)
  - Eric Brooks (SFPC-103)
  - Francisco Da Costa (105-1)
  - Juana Tello (66-7, SFRA1-57, SFRA1-60)
  - Karissa Cole (SFRA1-52, SFPC-15)
  - Michael E. Boyd (SFPC-39)
  - Nyese Joshua (65-1, 65-34)
  - Oscar James (SFPC-79)
  - Perry Matlock (74-3)

> Sam Lao (5-3, SFPC-69)
> Starr Miles (SFPC-75)
> Vivien Donahue (60-3, 60-5)

Comments received on the Draft EIR related to Proposition P and the Precautionary Principle were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials); therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 5-3, 36-6, 36-8, 52-1, 55-5, 55-6, 58-2, 60-3, 60-5, 65-1, 65-34, 66-7, 67-4, 68-2, 72-2, 74-3, 84-9, 84-27, 84-49, 85-19, 105-1, SFRA1-38, SFRA1-52, SFRA1-57, SFRA1-60, SFPC-15, SFPC-39, SFPC-69, SFPC-75, SFPC-79, SFPC-103, SFPC-115, SFPC-118.

Summary of Issues Raised by Commenters

- Proposition P requires the site to be cleaned for unrestricted use
- The City has a Precautionary Principle that should be applied to the Project

Response

Introduction

As indicated on Draft EIR page III.K-2 and in Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 14 (Unrestricted Use Alternative), the Navy is conducting the cleanup program at HPS under the supervision of USEPA and state regulatory agencies. The cleanup is required by federal law and the FFA that the Navy has entered into with USEPA, DTSC, and RWQCB. Cleanup of HPS will proceed irrespective of whether the Project development occurs. Concerns about the Navy's cleanup program, including consistency with any public policies such as Proposition P or the Precautionary Principle are appropriately addressed through the CERCLA process. Nevertheless, this Master Response 15 (Proposition P and the Precautionary Principle) provides information about Proposition P and the Precautionary Principle and discusses their relevancy to the assessment of Project impacts called for under CEQA.

Proposition P

As noted on page III.K-31 of the Draft EIR, Proposition P (approved by the voters of San Francisco on November 7, 2000) called upon the Navy to remediate HPS to the highest levels practical to ensure flexible reuse of the property. The Board of Supervisors subsequently passed Resolution 634-01, adopting Proposition P as official City policy and urging the Navy and USEPA to take actions to implement Proposition P. The Resolution (1) recognizes that the unrestricted cleanup standard called for in Proposition P identifies a cleanup level acceptable to the community; (2) urges the Navy and FFA regulatory agencies not to rely on barriers to protect future occupants and the public from exposure to pollution, unless other remedies are technically infeasible, and (3) urges the Navy to clean up the Shipyard in a manner fully consistent with the Reuse Plan and with remedies that do not make implementation of the Reuse Plan economically infeasible.

Proposition P states a desired result that the Navy and regulators achieve in carrying out the cleanup of the Shipyard. Because the Navy cleanup, and decisions made by the regulators about the cleanup, is not part of the Project, Proposition P and the subsequent Board resolution are not directly applicable to the Project. Adoption and implementation of the Project would not be inconsistent with, and would not change, the City's stated desire that the Navy clean up HPS in a manner that allows flexible reuse, does not rely on barriers to protect the public from exposure unless other remedies are technically infeasible, is consistent with the Reuse Plan and does not render the Reuse Plan economically infeasible to implement. Proposition P is a general statement of policy. Three years after the passage of Proposition P, the Redevelopment Agency Commission approved the Conveyance Agreement with the Navy (discussed on page I-2 of the Draft EIR). The Conveyance Agreement is a legally binding agreement that sets forth specific cleanup standards for each parcel, and requires the Navy to obtain concurrence from the regulators that the property is safe for its intended use, which the Agreement specifies as the uses set forth in the 1997 HPS Redevelopment Plan. As discussed in Master Response 14 (Unrestricted Use Alternative) and on pages I-2 and I-3 of the Draft EIR, the 1997 HPS Redevelopment Plan calls for a mix of uses, including residential, mixed use, industrial, research and development, maritime industrial, cultural and educational, and open space/recreational. The Conveyance Agreement was the product of substantial community input. The Conceptual Framework for the integrated planning of HPS and CP adopted by the Board of Supervisors in May 2007 (and discussed on page II-5 of the Draft EIR) reaffirmed the Conveyance Agreement cleanup standards, stating, "there is an urgent need for the Navy to fulfill *its obligations under the Conveyance Agreement to remediate and convey this land to the City as quickly as possible in a condition that is consistent with the City's reuse plan"* [emphasis added]. Eight years after the voters passed Proposition P related to the Shipyard, they passed Proposition G related to the redevelopment of the Project area, including the Shipyard. One of the stated objectives of the Project set forth in Proposition G is to "transform the contaminated portions of the Shipyard property into economically productive uses, or public open space, as appropriate" (refer to Draft EIR, pages II-5 through -7).

A commenter has suggested that if the Agency enters into an early transfer agreement with the Navy and agrees to assume responsibility for portions of the cleanup (refer to Master Response 13 [Post-Transfer Shipyard Cleanup] and Draft EIR pages III.K-31 through -34), Proposition P would apply directly to the Agency's cleanup decisions, rather than simply being a policy statement about how the Navy should make its decisions. Proposition P addresses the type of clean-up remedy that the Navy should select and the regulators should approve for HPS. The ROD for a parcel sets forth the selected remedy. See Draft EIR, page III.K-12. As explained in the Draft EIR page III.K-33, under the early transfers envisioned at the Shipyard, all radiological cleanup would be completed and RODs issued. The Navy already has issued RODs for Parcels B, D-1, UC-1, UC-2, and G. Draft EIR page III.K-12. Further, the Navy already has conducted substantial remediation. Thus, by the time the Navy offers parcels being considered for early transfer to the Agency (with concurrence of USEPA and the Governor of California) the remedy already will have been selected and significant remediation completed. In the case of the first early transfer being considered – for Parcels B and G, the Navy also will have prepared (and the regulators will have approved) the remedial design documents. If the Agency accepts the property under an early transfer, it would simply be contracting with the Navy to complete the implementation of the Navy's selected remedy, with funds provided by the Navy. Therefore, Proposition P does not apply any differently to early transfer parcels than to other parcels because in both instances the Navy is selecting and federal and state regulators are approving the remedy.

Commenters have also cited the fact that Proposition P was approved by 87 percent of the voters in reference to the provisions in CERCLA related to community acceptance as a criteria in determining which cleanup remedy to select, with some commenters mistakenly asserting that CERCLA requires the community to approve the selected remedy. Although this issue is not directly related to the Project (because it relates to the cleanup decisions being made by the Navy and the regulators independent of whether this project proceeds), it may be useful to explain how "community acceptance" is required to be factored into those decisions. The regulations that the Navy and regulators must follow in implementing CERCLA, which are collectively referred to as the National Contingency Plan (NCP), set forth nine criteria that must be considered in selecting a cleanup remedy: two "threshold criteria" (overall protection of human health and the environment, and compliance with other applicable or relevant legal requirements); five "balancing criteria" (long-term effectiveness and permanence; reduction in toxicity, mobility or volume through treatment; short-term effectiveness; implementability; and cost) and two "modifying criteria" (state acceptance and community acceptance).

Community acceptance is an important criterion considered in remedy selection, but it is only one of nine. Typically, this criterion is evaluated based on comments received from the public during the public comment period for the Proposed Plan. It would certainly be appropriate for members of the public to cite Proposition P (or Proposition G) as evidence of community sentiment in public comments submitted to the Navy and regulatory agencies on Proposed Plans during the remedy selection process. The issues required to be addressed by CEQA and those addressed by Proposition P are distinct. CEQA calls for a determination of whether the existing environment would be changed by the Project so as to result in an adverse impact to the environment. The Draft EIR examines in detail in Section III.K, how hazardous substances known to exist at the Shipyard could result in significant impacts during Project construction and operation. It identifies a series of mitigation measures to address identified potentially significant impacts. Proposition P calls for a high standard of cleanup at the Shipyard, in some cases, a higher standard than is required by the proposed development. As stated, there is nothing incompatible between Proposition P and the Project and full implementation of Proposition P by the Navy and regulators would facilitate, not conflict with the Project objective of transforming the Shipyard into new economically viable uses.

Precautionary Principle Policy Statement

The Precautionary Principle Policy Statement adopted by the Board of Supervisors in July 2003, states that "the Board of Supervisors encourages all City employees and officials to take the Precautionary Principle into consideration and evaluate alternatives when taking actions that could impact health and the environment, especially where those actions could pose threats of serious harm or irreversible damage." (Chapter 1 of the San Francisco Environment Code, Section 104.) The policy statement sets forth the key elements of the Precautionary Principle approach to decision-making as (1) Anticipatory Action to prevent harm; (2) Right to Know of the community about "potential human health and environmental impacts associated with the selection of products, services, operations or plans"; (3) Alternative Assessment designed to select the alternative with the least potential impact on human health and the environment; (4) Full Cost Accounting to consider all the reasonably foreseeable costs, including raw materials, manufacturing, transportation, use, cleanup, eventual disposal, and health costs; and (5) Participatory Decision Process, with decisions applying the Precautionary Principle being transparent, participatory, and informed by the best available science and other relevant information (Chapter 1 of the *San Francisco Environment Code*, Section 101).

The ordinance adopting the Precautionary Principle Policy Statement expressly provides, "This ordinance does not impose specific duties upon any City employee or official to take specific actions." (Chapter 1 of the *San Francisco Environment Code*, Section 104).

As indicated above, commenters referencing the Precautionary Principle appear to be concerned that the Navy's cleanup decisions are not consistent with this principle. Regardless of whether this concern is valid, the Precautionary Principle of the City by its terms applies only to City employees and officials and does not apply to the Navy or federal or state regulators overseeing the cleanup of the Shipyard. Further, as previously stated, the work of the Navy and oversight of regulators in carrying out the CERCLA process and FFA requirements at the Shipyard are not part of the Project. To the extent development decisions about the Project implicate the Precautionary Principle, the CEQA process evaluating those development decisions to a substantial degree serves the same purpose as the Precautionary Principle – it requires an evaluation of the impacts on human health and the environment of the Project and alternatives, and provides substantial opportunity for public input and transparent decision-making. The "right to know" aspects of the Precautionary Principle are addressed through the notification protocols and requirements discussed in Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues).

Master Response 16: Notification Regarding Environmental Restrictions and Other Cleanup Issues

Introduction

Overview

Comments have been raised to the effect that the EIR should require notice to future property owners and residents, adjacent property owners and residents, and neighboring schools of the type of restrictions that would be imposed on the property; the type of contaminants remaining in the property; any releases or potential releases of contaminants; and violations of environmental regulations or mitigation measures by the Project Applicant.

There are a number of legal mechanisms in place that would provide for notification to and communication with owners and residents of the Project site, owners and residents of adjacent property, residents, and schoolchildren on neighboring properties. This master response discusses these mechanisms, and where appropriate provides clarification in the text of mitigation measures in response to these comments.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - California State Parks (86-3)
- Organizations
  - Arc Ecology (82-7)
  - Breast Cancer Action (55-4, 55-5)
  - California State Parks Foundation (47-42)
  - POWER (People Organized to Win Employment Rights) (52-1, 52-3, 69-1)

  - San Francisco Green Party (36-6)
  - Technical Assistance For Communities (TASC) (68-1, 68-2)
- Individuals
  - Carl Harvey (67-4)
  - Daniel Landry (SFRA2-34)
  - Francisco Da Costa (105-1)
  - Juana Tello (66-8, 66-9, 66-10, 66-13)
  - Karissa Cole (SFPC-15)
  - Michael E. Boyd (SFPC-41)
  - Nyese Joshua (65-1, 65-34)
  - Perry Matlock (74-3)
  - Sam Lao (SFPC-69)
  - Vivien Donahue (60-2, 60-6)

Comments received on the Draft EIR related to residual contamination were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 47-42, 52-1, 52-3, 55-4, 55-5, 60-2, 60-6, 65-1, 65-34, 66-8, 66-9, 66-10, 66-13, 67-4, 68-1, 68-2, 69-1, 74-3, 82-7, 86-3, 105-1, SFPC-15, SFPC-41, SFPC-69, SFRA2-34.

Summary of Issues Raised by Commenters

- The Project should be required to notify future property owners, residents, and adjacent schools of any restrictions on the Project site, residual contaminants, releases or potential releases of contaminants, and all violations of restrictions or mitigation measures by the Project Applicant

Response

The Navy's cleanup program under the Federal Facilities Agreement requires the Navy to prepare and implement a Community Involvement Plan. This plan requires a number of activities designed to inform neighbors and other members of the public about the status of Shipyard cleanup activities. Although the Navy's cleanup program is not part of the Project, remediation activities that may be conducted on behalf of the Agency or Project Applicant as part of an early transfer are part of the Project, as are limited remediation activities that may need to be conducted on Navy property in conjunction with construction of project improvements. In the course of implementing those project remediation activities, the Agency and Project Applicant would be required to implement similar community relations and public information activities under the Administrative Order on Consent that would be entered into between the USEPA, Agency, and the Project Applicant. Community relations and public information requirements may also be incorporated into the requirements of cleanup decision documents, leases and transfer documents imposed on the Agency, Project Applicant and other subsequent purchasers and tenants.

As described on pages III.K-32 through -34, before the Navy transfers ownership of any property at HPS, it would prepare and circulate for public comment a document called a Finding of Suitability for Transfer (FOST), or, at parcels subject to early transfer, a Finding of Suitability for Early Transfer (FOSET). These documents would include detailed information about the nature and extent of contaminants and the measures that have been taken to address them, including any restrictions that would be imposed on the use of, or activities that may be conducted at, the property, and any notices required to be provided such as notices and notice requirements regarding the existence of lead-based paint and asbestos containing materials. Such restrictions would also be set forth in both the deed and a separate land use covenant, both of which would be legally recorded, and they would also be required to be provided to tenants and any subsequent property owner. In addition, general statutory and common law requirements applicable to transfers and leases of real property provide for disclosures of hazardous conditions, including releases of hazardous substances and hazardous materials to purchasers and tenants.

Notice of new discoveries of unknown contaminants is required by MM HZ-2a.1, which requires the development of an unknown contaminant contingency plan that must include appropriate notification and site control procedures. To further address these comments, this MM HZ-2a.1 has been modified to state that the "appropriate notification" shall include appropriate notification to nearby property owners, schools, and residents.

A particular notification issue of interest to a number of commenters relates to dust and naturally occurring asbestos. In recognition of the level of community interest in this issue, the Draft EIR (in MM HZ-15, page III.K-100) requires the Dust Control Plan for the Project to include establishing a hotline for surrounding community members who may be affected by dust and requires the contact person to take corrective action within 48 hours. The hotline number is required to be provided to adjacent residents, schools and businesses. In response to these comments, an additional community notification requirement has been added to MM HZ-15 by requiring appropriate protocols for providing notification to nearby property owners, schools and residents when air monitoring results show that asbestos levels exceed standards set forth in the Asbestos Dust Control Plan.

In response to these comments, the following mitigation measures in the Section III.K (Hazards and Hazardous Materials) have been revised.

The text in Section III.K, page III.K-56, has been revised as follows (new text is shown as underlined):

> *MM HZ-1b* Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. *(Applies only to HPS Phase II) Prior to obtaining a grading, 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 <u>notices, restrictions, and requirements</u> imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOST, FOSET or FOSL, including <u>notices, restrictions, and requirements</u> imposed in deeds, covenants, leases, easements, and LIFOCs, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, <u>Community Involvement Plans,</u> and health and safety plans.*

The text in Section III.K, pages III.K-58 and -59, has been revised as follows (new text is shown as underlined):

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 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 a requirement in the potential additions to Article 31 imposing requirements to parcels other than Parcel A (as required in mitigation measure MM HZ-1c) or through an equivalent process established by the City or Agency.*

The text in Section III.K, pages III.K-78 and -79 has been revised as follows (new text is shown as underlined):

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 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 requirement in the potential additions to Article 31 imposing requirements to parcels other than Parcel A (as described in the discussion of MM HZ-1c) or through an equivalent process established by the City or Agency.*

The text in Section III.K, pages III.K-87 and -88 has been revised as follows (new text is shown as underlined):

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 of Consent. This measure shall be implemented through a requirement in the potential additions to Article 31 imposing requirements to parcels other than Parcel A (as required in MM HZ-1c) or through an equivalent process established by the City or Agency.

The portion of the text describing the requirement to implement air monitoring to the extent required by the BAAQMD in Section III.K, page III.K-100 has been revised as follows (new text is shown as underlined):

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

…

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.

Master Response 17: Enforcement of Environmental Restrictions and Mitigation Measures

Introduction

Overview

Some commenters have asked how land use and activity restrictions and the hazardous material mitigation measures would be enforced.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - None
- Organizations
  - Breast Cancer Action (55-5)
  - POWER (People Organized to Win Employment Rights) (69-4)
  - Technical Assistance For Communities (TASC) (68-1, 68-2)
- Individuals
  - Carol Harvey (67-4)
  - Francisco Da Costa (105-1)
  - Juana Tello (SFPC-95)
  - Karissa Cole (SFPC-15)
  - Nyese Joshua (65-1, 65-34)
  - Sam Lao (SFPC-69)

Comments received on the Draft EIR related to hazardous materials were focused almost exclusively on issues addressed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR; therefore, this

master response provides further discussion to update and augment the analysis of the issues presented in Section III.K.

Comment Summary

This master response responds to all or part of the following comments: 55-5, 65-1, 65-34, 67-4, 68-1, 68-2, 69-4, 105-1, SFPC-15, SFPC-69, SFPC-95.

Summary of Issues Raised by Commenters

- Concern expressed regarding how the mitigation measures and land use restrictions would be enforced

Response

As described on pages III.K-38 to -39, Article 31 of the *San Francisco Health Code* presently establishes an administrative process related to the HPS Phase I development requiring the San Francisco Department of Public Health to verify compliance with EIR mitigation measures and other environmental restrictions and plans prior to issuance of construction or grading permits by the DBI or DPW. After such issuance, the Department of Public Health continues to monitor and enforce compliance. The City anticipates amending Article 31 to establish a similar process at HPS Phase II for property that is subject to City permitting authority. If Article 31 is not amended, the EIR requires the Agency to administratively establish an equivalent process. Further, for property that would be under United States Navy ownership when work is done for the project, for example, the installation of a road or infrastructure to serve the Agency property, the EIR requires the Agency to administratively establish an equivalent process to the Article 31 procedures administered by the Department of Public Health. Under the Redevelopment Plan process, all work done under the Redevelopment Plan must be approved by the Agency. Consequently, the Agency would need to determine that any proposed work would be done in compliance with mitigation measures [refer to MM HZ-9]. The Agency may at its discretion, enlist the assistance of the Department of Public Health through a memorandum of understanding or similar agreement for areas either not covered by City permits or for all areas in the event the Board does not amend Article 31 to establish a process similar to the Article 31 process in place for HPS Phase I.

In addition to being enforceable by the City, the hazardous material-related restrictions, notices and other requirements imposed as institutional controls pursuant to the environmental cleanup and property transfer process (Draft EIR, pages III.K-34 through -36) would be redundantly incorporated into two separate legally enforceable documents: the recorded deeds conveying ownership of the property and recorded covenants to restrict use of property. Violations of deed restrictions by a subsequent property owner are legally enforceable by the Navy and by any other predecessor owner in the chain of title (e.g., the Agency, the Project Applicant, or parties to whom the project Applicant conveys portions of the property). Violations of the recorded covenant to restrict use of property are enforceable by USEPA and DTSC.

The MMRP outlines detailed plans for monitoring and enforcing each mitigation measure identified in the Draft EIR, including those set forth in the Section III.K (Hazards and Hazardous Materials).

Master Response 18: Traffic Mitigation Measures

Introduction

Overview

This master response addresses comments made requesting additional detail and clarity regarding mitigation measures MM TR-21.1, MM TR-22.1, MM TR-23.1, MM TR-24.1, and MM TR-26.1.

This response is organized by the following topics:

- Mitigation Measure MM TR-21.1
- Mitigation Measure MM TR-22.1
- Mitigation Measure MM TR-23.1
- Mitigation Measure MM TR-24.1
- Mitigation Measure MM TR-26.1
- Implementation

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > Planning Commissioner Antonini (SFPC-120, SFPC-138)
  - > Redevelopment Agency Commissioner Breed (SFRA2-38)
- Organizations
  - > Green Action Health and Environmental Justice, Cecille Caterson (SFRA1-82)
  - > Neighborhood Parks Council (44-2)
  - > Parkmerced Resident's Organization (22-2)
  - > POWER (People Organized to Win Employment Rights) (50-28, 52-6)
- Individuals
  - > Ahimsa Porter Sumchai (SFRA1-19)
  - > Barbara Cavella (15-1)
  - > Esselene Stancil (54-1)
  - > Joshua Nyese (65-6, 65-11)
  - > Kristine Enea (21-1)
  - > Richard McRee (SFRA2-22)
  - > Simon Jefferson (59-1, 59-3)

Comment Summary

This master response responds to all or part of the following comments: 15-1, 21-1, 22-2, 44-2, 50-28, 52-6, 54-1, 59-1, 59-3, 65-6, 65-11, SFRA1-19, SFRA1-82, SFRA2-22, SFRA2-38, SFPC-120, SFPC-138.

Comments received on the Draft EIR related to the subject mitigation measures were focused almost exclusively on issues addressed in Section III.D (Transportation and Circulation) of the Draft EIR; therefore, this master response provides further discussion to update and augment the analysis of the issues

presented in Section III.D. Following publication of the Draft EIR, mitigation options were further developed in consultation with SFMTA and the Planning Department to define options and determine preliminary feasibility of the options for each mitigation measure.

Summary of Issues Raised by Commenters

- Timing of implementation of transit mitigation measures is unclear from the study
- Additional detail should be provided regarding scope of mitigation measures, feasibility of implementation, and extent of benefits offered

Response

Introduction

As described in the Draft EIR, traffic-related congestion associated with the Project and other long-term cumulative growth in the region would cause delays to transit vehicles serving the Project area. In a number of cases, this congestion would be severe enough to prevent SFMTA from maintaining proposed frequencies without either reducing the delays or acquiring additional vehicles. Mitigation measures MM TR-21.1, MM TR-22.1, MM TR-23.1, MM TR-24.1, and MM TR-26.1 each describe specific physical changes to the roadway network designed to reduce delays to transit such that proposed headways can be maintained. Each of these measures has a second part, which stipulates that if the Mitigation Measures are not adequate at reducing delays to the point that additional vehicles are no longer required, or if they are deemed infeasible, additional vehicles must be purchased. However, purchasing additional vehicles is a less desirable option because, although frequencies would be maintained, the overall travel times would be longer, and transit would be less desirable.

Some of the mitigation measures described in the Draft EIR recommended several optional treatments that should be considered for reducing transit impacts. These mitigation measures have been refined since publication of the Draft EIR based on further feasibility analysis and discussions with SFMTA. This master response provides additional detail and supporting graphics to illustrate the specific proposals for MM TR-21.1, MM TR-22.1, MM TR-23.1, MM TR-24.1, and MM TR-26.1, and the extent to which they would reduce the Project's transit impacts to less than significant levels. In some cases, more specific proposals than what has been identified in the Draft EIR are not available.

Mitigation Measure MM TR-21.1: Maintain the Proposed Headways of the 9-San Bruno

Mitigation measure MM TR-21.1 would generally provide so-called "queue-jump" lanes (i.e., short transit-only lanes near intersections to allow buses to bypass queues stopped at intersections), traffic signal priority treatments, and short segments of transit-only lanes to provide improved transit travel times on San Bruno Avenue, between Mansell Street and Silver Avenue. These measures would benefit the 9-San Bruno, 9X-San Bruno Express, and 9AX-San Bruno "A" Express routes, and a short portion of the 29-Sunset. Although these treatments were not assumed in the impact analysis, SFMTA has indicated that a number of similar investments are currently planned for the San Bruno Corridor, although the specific plan is currently under development. Project-specific mitigation measures would be implemented in addition to what is ultimately constructed by SFMTA, and may include implementation of corridor-wide transit signal priority treatments. The precise measures to be implemented, if feasible, would be designed to compliment recommendations currently under development by SFMTA. However, because of uncertainty regarding

feasible improvements, and their ability to mitigate Project impacts to less than significant levels, as noted in the Draft EIR, Impact TR-21 would remain significant and unavoidable.

Mitigation Measure MM TR-22.1: Maintain the Proposed Headways of the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy

Mitigation measure MM TR-22.1 included a number of optional improvements to the Palou Avenue corridor aimed at reducing Project-generated transit delays. Subsequent to publication of the Draft EIR, the Project Applicant and SFMTA conducted a feasibility study. The fifth bulleted item in MM TR-22.1 was determined to be the most desirable of the optional measures because it would provide continuous transit-only lanes along the entire length of Palou Avenue between Crisp Avenue and Third Street, the transit-only lanes could be in operation at all times, and this option would retain on-street parking along the primarily residential corridor.

Specifically, as currently envisioned, mitigation measure MM TR-22.1 would add a transit-only travel lane in each direction on Palou Avenue between Crisp Avenue and Third Street. To accomplish this without removing existing on-street parking along Palou Avenue, existing sidewalks would be narrowed from 15 to 12 feet, allowing a 7-foot on-street parking lane, an 11-foot transit-only lane, and a 10-foot auto travel lane in each direction. The resulting 12-foot sidewalk widths would remain consistent with the City's Draft Better Streets Plan. Further, so-called "bus bulbs" could be provided at corners with bus stops, to provide additional passenger waiting areas and amenities, reduce pedestrian crossing distances, and eliminate the need for buses to pull over to the curb at stops. There would be no additional loss of on-street parking associated with this mitigation measure.[74] Because Palou Avenue between Keith Street and Third Street already has two westbound lanes, mitigation measure MM TR-22.1 would convert one of the two auto travel lanes to transit-only. Levels of service for westbound traffic on Palou Avenue between Keith Street and Third Street may deteriorate due to the reduced auto capacity. Otherwise, intersections along Palou Avenue would not experience an associated degradation in auto level of service.

Mitigation measure MM TR-22.1 would benefit the 23-Monterey, the 24-Divisadero, and the 44-O'Shaughnessy. Figure C&R-3a (Mitigation Measure MM TR-22: Palou Avenue from Third Street to Crisp Road) and Figure C&R-3b (Mitigation Measure MM TR-22: Palou Avenue from Third Street to Crisp Road) illustrate the proposed mitigation measure, as well as the anticipated benefits to transit travel times on each of the impacted transit routes. The figures indicate the increases to transit travel times associated with project-generated contributions to traffic congestion for each affected route along the subject corridors (as presented in Table 76 in the *Transportation Study*). Because the mitigation measures do not fully mitigate the Project's increases to transit travel times in all cases, the figures also indicate how much the Project (with implementation of the mitigation measures) would increase transit travel times and whether the remaining increases would remain significant impacts or whether they would be reduced to less-than-significant levels. Finally, the figures also provide some description of other effects of the mitigation measures, including increases to pedestrian crossing distances, parking, and traffic congestion.

[74] Although some parking on Palou Avenue would be displaced as part of the Project via the implementation of curbside bus stop areas or bus bulbs, no additional parking loss would occur due to the mitigation measure.

	Route	East Bound AM	East Bound PM	West Bound AM	West Bound PM
Travel Time Increase Due to Project	23	0:41	0:56	3:51	1:57
	24	4:56	8:25	4:21	5:53
	44	5:53	6:05	6:16	7:18
Travel Time Changes Due to Project Post Mitigation	23	-3:19	-3:04	-0:52	-6:19
	24	2:55	3:41	-0:19	4:17
	44	1:53	2:05	1:50	2:35
Significant Impact Post Mitigation?	23	No	No	No	No
	24	No	Yes	No	Yes
	44	No	Yes	No	Yes

Parking Spaces Removed: 0

Crossing Distance Increase: 6' *

Cost: TBD

Bulbouts Removed: 0

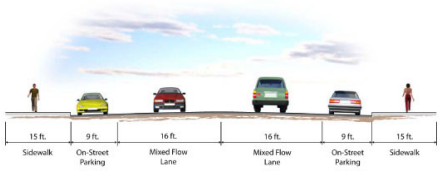
Notes:
* Sidewalk on north side of Palou Avenue between Third Street and Lane Street to be narrowed from 20' to 12'. All other sidewalks on Palou Avenue between Third Street and Crisp Road to be narrowed from 15' to 12'.

LEGEND

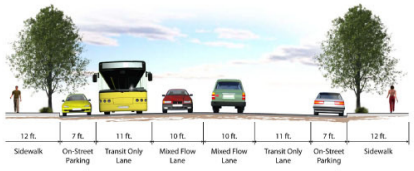
- Transit Only Lane
- Edge of Existing Curb
- Bus Stop
- Transit Signal Priority Installed as Part of Project
- Bus Bulb-out

Note: Mitigation Measures are reflective of those described in the CP-HPS Phase II DEIR. SFMTA may favor near-side bus stops, in which case traffic signals may not be necessary as part of Palou Avenue Transit Preferential Treatment.

EXISTING CONDITIONS



MITIGATED CONDITIONS



NOT TO SCALE

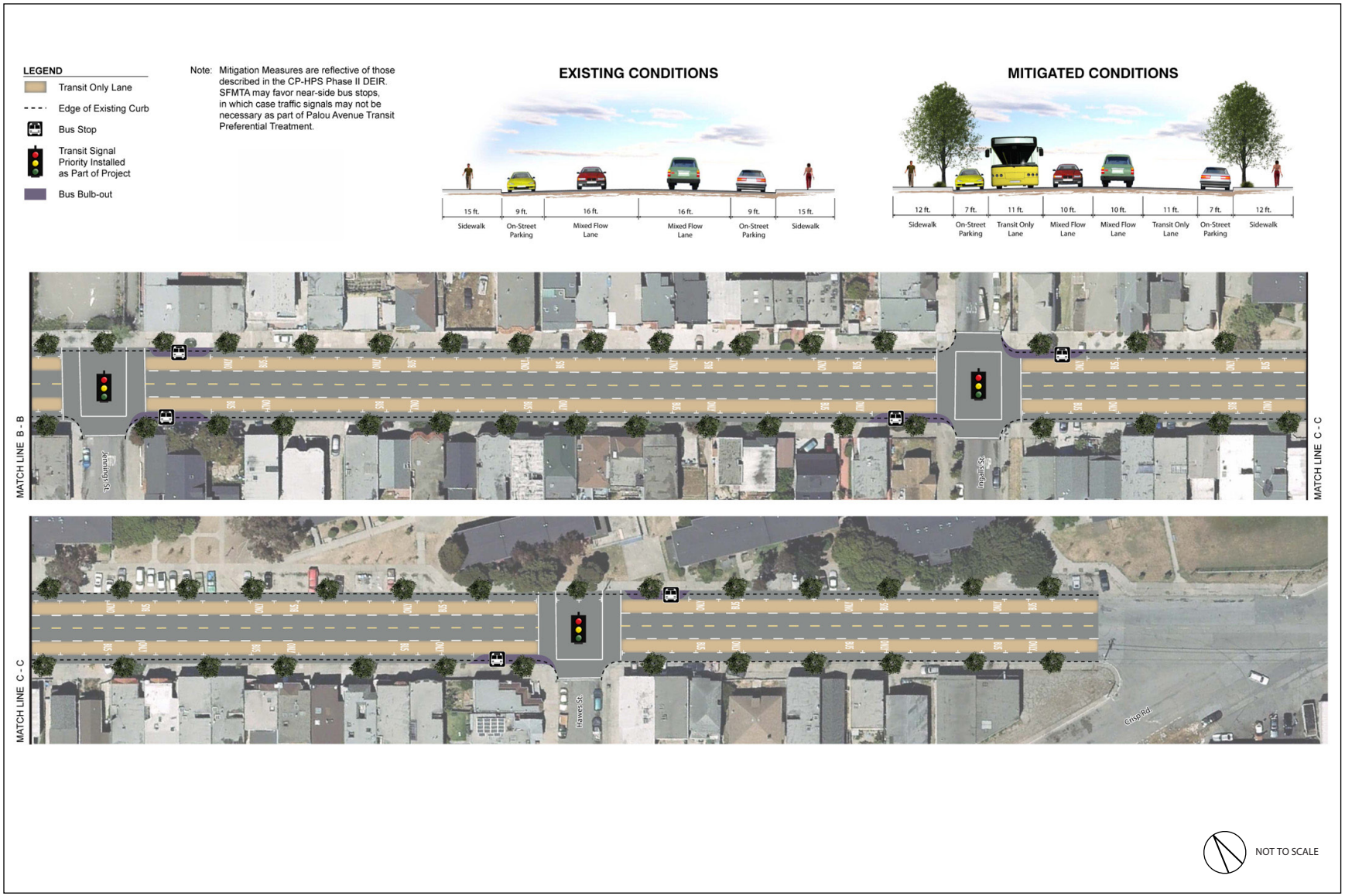
SOURCE: Fehr & Peers, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-3a

Candlestick Point — Hunters Point Shipyard Phase II EIR

MITIGATION MEASURE MM TR-22: PALOU AVENUE FROM THIRD STREET TO CRISP ROAD



SOURCE: Fehr & Peers, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE C&R-3b

Candlestick Point — Hunters Point Shipyard Phase II EIR

MITIGATION MEASURE MM TR-22: PALOU AVENUE FROM THIRD STREET TO CRISP ROAD

Although reducing sidewalk widths is generally considered undesirable based on the City's Transit First policy, in this case, the resulting sidewalks would still meet minimum dimensional requirements specified in the Draft Better Streets Plan, and transit circulation would be substantially improved. Based on the additional review of this mitigation measure, it appears technically feasible.

Although SFMTA has generally indicated support for this measure, as noted in the Draft EIR, implementation of this mitigation measure requires additional evaluation by the City and the impacts to transit remain significant and unavoidable.

Mitigation Measure MM TR-23.1: Maintain the proposed headways of the 29-Sunset

Mitigation measure MM TR-23.1 included a number of optional improvements to the Gilman Avenue corridor aimed at reducing Project-generated transit delays. Subsequent to publication of the Draft EIR, the Project Applicant and SFMTA conducted a feasibility study. The third bulleted item in MM TR-23.1 was determined to be more desirable than the first two bulleted optional measures because it would provide continuous transit-only lanes along the entire length of Gilman Avenue between Arelious Walker Drive and Third Street, the transit-only lanes could be in operation at all times, and this option would retain on-street parking along Gilman Avenue at all times.

A portion of the third bullet in the Draft EIR included widening the Gilman Avenue roadway and narrowing the sidewalks from 15 feet to 12 feet to accommodate a second travel lane in each direction, similar to the recommendations for Palou Avenue in mitigation measure MM TR-22.1. However, the dimensional changes to Gilman Avenue are proposed as part of the Project; therefore, accommodating a transit-only lane in each direction while maintaining on-street parking does not require roadway widening as originally proposed in MM TR-23.1. Language to this effect has been removed from MM TR-23.1.

Specifically, as currently envisioned, MM TR-23.1 would convert one of the two automobile travel lanes in each direction into a transit-only travel lane on Gilman Avenue between Arelious Walker Drive and Third Street. Additionally, westbound Paul Avenue, between Third Street and Bayshore Boulevard, provides one westbound travel lane and on-street parking. The on-street parking along this route is currently converted to a second westbound travel lane following San Francisco 49ers games at Candlestick Park. Mitigation measure MM TR-23.1 also calls for converting this on-street parking/travel lane to a transit-only lane during weekday morning and evening peak periods. This would temporarily reduce the on-street parking supply on the north side of Paul Avenue during peak periods only. As noted in the Draft EIR, implementation of this mitigation measure would exacerbate levels of service (LOS) F conditions for autos along the corridor; however, the effective prioritization of transit circulation over automobile circulation would be consistent with the City's "Transit First" policy. Based on the additional review of this mitigation measure, it appears technically feasible.

Mitigation measure MM TR-23.1 would benefit the 29-Sunset. Figure C&R-4a (Mitigation Measure MM TR-23: Gilman Avenue and Paul Avenue from Arelious Walker Drive to Bayshore Boulevard) and Figure C&R-4b (Mitigation Measure MM TR-23: Gilman Avenue and Paul Avenue from Arelious Walker Drive to Bayshore Boulevard) illustrate the proposed mitigation measure, as well as the anticipated benefits to transit travel times on the impacted transit routes. Although SFMTA has generally indicated support for this measure, as noted in the Draft EIR, implementation of this mitigation measure requires additional evaluation by the City and the impacts to transit remain significant and unavoidable.

	Route	East Bound AM	East Bound PM	West Bound AM	West Bound PM
Travel Time Increase Due to Project	29	**8:04**	**15:00**	**10:21**	**21:07**
Travel Time Changes Due to Project Post Mitigation	29	**2:05**	**14:00**	**5:04**	**14:42**
Significant Impact Post Mitigation?	29	**No**	**Yes**	**Yes**	**Yes**

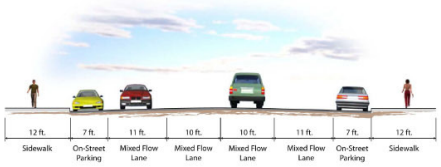
Parking Spaces Removed:	**0***
Crossing Distance Increase:	**0**
Cost:	**TBD**
Bulbouts Removed:	**0**

Gilman Ave. Cross-Street	Intersection Volume/Capacity: With Project AM	With Project PM	With Mitigation AM	With Mitigation PM
Third St.	2.00	3.36	>5.0	>5.0

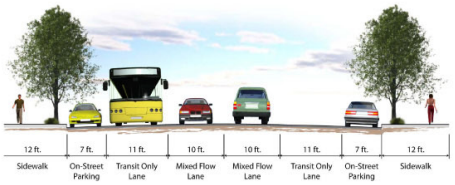
Notes:
* Parking on the north side of Paul Avenue would be prohibited during morning and evening peak periods.
** Project would narrow existing sidewalks from 15' to 12'.

LEGEND
Transit Only Lane
Bus Stop

PROPOSED CONDITIONS**
(WITHOUT MITIGATION)



MITIGATED CONDITIONS



NOT TO SCALE

SOURCE: Fehr & Peers, 2010.

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FIGURE C&R-4a

Candlestick Point — Hunters Point Shipyard Phase II EIR

MITIGATION MEASURE MM TR-23: GILMAN AVENUE AND PAUL AVENUE FROM ARELIOUS WALKER DRIVE TO BAYSHORE BOULEVARD

SOURCE: Fehr & Peers, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-4b

Candlestick Point — Hunters Point Shipyard Phase II EIR

MITIGATION MEASURE MM TR-23: GILMAN AVENUE AND PAUL AVENUE FROM ARELIOUS WALKER DRIVE TO BAYSHORE BOULEVARD

Mitigation Measure MM TR-24.1: Maintain the Proposed Headways of the 48-Quintara-24th Street

Mitigation measure MM TR-24.1 would convert one of the two automobile travel lanes in each direction into a transit-only travel lane on Evans Avenue between Napoleon Street and Jennings Street. There may be a small loss of on-street parking as a result of implementing this mitigation measure if curbside bus zones or bus bulbs are implemented as part of the measure.[75] As noted in the Draft EIR, implementation of this mitigation measure would exacerbate LOS F conditions for autos along Evans Avenue; however, the effective prioritization of transit circulation over automobile circulation would be consistent with the City's "Transit First" policy.

Mitigation measure MM TR-23.1 would benefit the 48-Quintara-24th Street. Figure C&R-5 (Mitigation Measure MM TR-24: Evans Avenue from Jennings Street to Napoleon Street) illustrates the proposed mitigation measure, as well as the anticipated benefits to transit travel times on the impacted transit routes. Although SFMTA has generally indicated support for this measure, as noted in the Draft EIR, implementation of this mitigation measure requires additional evaluation by the City and the impacts to transit remain significant and unavoidable.

Mitigation Measure MM TR-26.1: Maintain the Proposed Headways of the T-Third

Mitigation measure MM TR-26.1 would provide exclusive right-of-way for the T-Third Street light rail on Third Street for the nine-block segment between Thomas Avenue and Kirkwood Avenue where it currently operates in mixed-flow travel lanes. The result would be that the T-Third Street light-rail line would operate in exclusive right-of-way for its entire route, since this nine-block segment is the only area where the T-Third Street shares the right-of-way with autos. To accomplish this, the City would either prohibit autos from using the lane that the T-Third Street travels in and maintain existing on-street parking (resulting in a single travel lane for autos in each direction for the nine-block segment), or to eliminate on-street parking along the segment to maintain two travel lanes in each segment. In either case, left turns on Third Street would likely need to be prohibited.

Mitigation measure MM TR-26.1 would benefit the T-Third Street. However, because of the more severe effects associated with either removing on-street parking or eliminating one travel lane in each direction along Third Street compared to other mitigation measures aimed at improving transit travel times described in the Draft EIR, various City agencies, including SFMTA, have expressed concern regarding the feasibility of implementing this measure. Because of this, and the need for additional study, the impacts to transit remain significant and unavoidable.

[75] This design detail would be determined at the time of implementation.

	Route	East Bound AM	East Bound PM	West Bound AM	West Bound PM
Travel Time Increase Due to Project	48	**0:51**	**8:03**	**2:38**	**3:37**
Travel Time Changes Due to Project - Post Mitigation	48	**-2:59**	**-5:28**	**0:54**	**2:39**
Significant Impact Post Mitigation?	48	**No**	**No**	**No**	**No**

Parking Spaces Removed:	**0**
Crossing Distance Increase:	**0**
Cost:	**TBD**
Bulbs Removed:	**0**

Evan Ave. Cross-Street	Intersection Volume/Capacity: With Project AM	With Project PM	With Mitigation AM	With Mitigation PM
Jennings St.	<1.0	<1.0	1.15	1.36
Third St.	1.43	1.53	1.64	1.76
Napoleon St.	1.50	1.61	1.58	1.85

NOT TO SCALE

SOURCE: Fehr & Peers, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-5

Candlestick Point — Hunters Point Shipyard Phase II EIR

MITIGATION MEASURE MM TR-24: EVANS AVENUE FROM JENNINGS STREET TO NAPOLEON STREET

Implementation

As noted throughout this master response and in the Draft EIR, each of the mitigation measures described herein presents a series of trade-offs, where transit circulation is prioritized over other modes of travel. The analysis conducted in the Draft EIR that identified the need for these mitigation measures was based on an appropriately conservative set of traffic forecasts that identifies a reasonable worst-case scenario for potential long-term traffic congestion in the area. However, because of inherent uncertainty in traffic forecasts, particularly in areas such as southeastern San Francisco, which are expected to undergo substantial change over the forecasting horizon period, it is possible that the significant impacts to transit identified in the Draft EIR may not materialize to the extent forecasted. To avoid unnecessarily implementing mitigation measures that carry some negative effects to other modes of travel (e.g., narrower sidewalks or reduced auto capacity), monitoring of transit travel times and traffic conditions would be conducted on a regular basis to determine whether the combination of Project traffic and background traffic growth has indeed resulted in significant transit impacts. If not, the mitigation measures (and their associated effects to other modes) would not be implemented. If so, those mitigation measures described above that are ultimately determined to be feasible would be implemented.

Master Response 19: Proposed BAAQMD Guidelines

Introduction

Overview

As reported under the "Regional" discussion in Section III.H.3 (Regulatory Framework) of the Draft EIR, as of the date of the Draft EIR (November 12, 2009), the Bay Area Air Quality Management District (BAAQMD) was in the process of revising their CEQA guidelines, which recommend air quality significance thresholds, analytical methodologies, and mitigation measures for local agencies to use when preparing air quality impact analyses under CEQA. The BAAQMD released draft guidelines and significance thresholds in September 2009,[76] October 7, 2009[77] (thresholds only), and November 2, 2009.[78] The BAAQMD also released accompanying documents that support the basis for the significance thresholds presented in the guidelines in October 2009 and November 2, 2009. In October[79] and November 2009,[80] the BAAQMD released draft tables of Staff Recommended CEQA Thresholds of Significance, upon which the Draft EIR's analysis was based.

After the Draft EIR was released for public comment in November 2009, the BAAQMD released its December 2009 proposed CEQA Air Quality Guidelines[81] (proposed BAAQMD guidelines) and its December 7, 2009, CEQA Guidelines Update: Proposed Thresholds of Significance (proposed thresholds document).[82] These documents include a number of changes, including changes to certain thresholds of significance compared with the earlier versions of these documents that were available when the Draft EIR

[76] BAAQMD. 2009. *California Environmental Quality Act Draft Air Quality Guidelines*. September.
[77] BAAQMD. 2009. *Staff Recommended CEQA Thresholds of Significance*. October 7.
[78] BAAQMD. 2009. *California Environmental Quality Act Draft Air Quality Guidelines*. November.
[79] BAAQMD. 2009. *Staff Recommended CEQA Thresholds of Significance*. October 7.
[80] BAAQMD. 2009. *California Environmental Quality Act Draft Air Quality Guidelines*. November.
[81] BAAQMD. 2009. *California Environmental Quality Act, Air Quality Guidelines*. December.
[82] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.

was prepared. Since the release of these updated documents, the BAAQMD has held workshops and taken comments on its proposals, and issued updated advice regarding the revised methodologies for performing the analyses required by its proposed guidelines. This master response presents additional analyses of the Project's emissions under these updated documents and more recent guidance.

As of the date of this Final EIR, the BAAQMD continues in their process of revising their CEQA guidelines and is currently planning for their Board of Directors to consider the proposed BAAQMD guidelines in June 2010. Given that the proposed BAAQMD guidelines have not been adopted by the BAAQMD's Board of Directors, and would only constitute recommendations to lead agencies other than BAAQMD even if adopted, the Project is not subject to these draft requirements. Nonetheless, the San Francisco Planning Department generally looks to the BAAQMD CEQA guidelines in determining the significance of air quality impacts in its CEQA evaluations. Therefore, a brief analysis of the Project's emissions relative to these proposed guidelines, which are difference from the current, approved requirements, is included in this master response.

For the purpose of this analysis, the December 2009 proposed guidelines and proposed thresholds document are used to make significance determinations, along with materials released during public workshops in April 2010.[83] In some cases, the currently proposed significance thresholds are different from those in the previously proposed guidelines on which the Draft EIR relied.

In addition to addressing air quality impacts consistent with the currently proposed BAAQMD guidelines, this master response reports the results of further analysis of cumulative conditions requested by the San Francisco the Planning Department to assess how the Project might also affect off-site residential receptors. Because the BAAQMD estimates that average background risk levels in the San Francisco Bay Area Air Basin (SFBAAB) may exceed the 100-in-a-million level, the Planning Department requested this additional analysis to assess how the Project might also affect off-site residential receptors. For this analysis, cumulative risks (cancer risks, acute and chronic non-cancer hazard indices, and $PM_{2.5}$[84] concentrations) for off-site residential receptors within the 1,000-foot radius of the project area were calculated assuming a 70-year exposure beginning in 2030. The methodology used for this evaluation was the same as that used to evaluate the on-site residential receptors.

This response is organized by the following topics:

- Analysis under the Proposed BAAQMD Guidelines
  - > Construction
  - > Operational
  - > Cumulative
- Cancer Risks and Non-cancer Hazards to Off-site Receptors Estimated for Stationary and Vehicular Sources of Toxic Air Contaminants (TACs)[85] and $PM_{2.5}$

[83] Bay Area Air Quality Management District, CEQA Guidelines Update, Oakland Public Workshop Slides, April 26, 2010.
[84] $PM_{2.5}$ are air pollutants with a diameter of 2.5 micrometers or less, small enough to invade airways. These particles generally come from activities that burn fossil fuels, such as traffic, smelting, and metal processing.
[85] TACs are a regulatory designation that includes a diverse group of air pollutants that can adversely affect human health.

Commenters

Commenters who addressed this issue include:

- Federal, State, Regional, Local Agencies, Boards, and Commissions
  - > California State Parks (86-1, 86-11)
- Organizations
  - > Arc Ecology (83-3, 84-47, 84-48)
  - > California State Parks Foundation (47-42, 47-43)
- Individuals
  - > Jesse Tello (70-2)

Comment Summary

This master response responds to all or part of the following comments: 47-42, 47-43, 70-2, 83-3, 84-47, 84-48, 86-1, 86-11.

Comments received on the Draft EIR related to the potential application of BAAQMD's proposed (but not yet adopted) air quality guidelines and proposed thresholds of significance; therefore, this master response provides further discussion to update and augment the analysis presented in Section III.H (Air Quality).

Summary of Issues Raised by Commenters

- As previously noted, comments received on the Draft EIR related to the potential application of BAAQMD's proposed (but not yet adopted) air quality guidelines and proposed thresholds of significance, but particularly as they relate to fugitive dust emissions during construction activities, mass criteria pollutant emissions, and toxic air contaminants.

Response

Analysis under the Proposed BAAQMD Guidelines

The BAAQMD's December 2009 draft table of Staff-Recommended CEQA Thresholds of Significance includes a number of modifications to existing guidelines, including changes to the maximum daily emissions thresholds for criteria pollutants emissions from operational sources as well as requirements for the quantification of criteria pollutant and TAC and $PM_{2.5}$ emissions from construction activities and comparison to mass emission or risk thresholds, respectively. In developing these thresholds, the BAAQMD considered relevant federal, state, and local air quality standards as documented in the staff report accompanying its proposed guidelines, which provides the substantial evidence in support of its proposed thresholds of significance.[86]

Among other changes, BAAQMD is recommending assessment of community-scale impacts of TACs and $PM_{2.5}$. The proposal to address community-scale impacts is an outgrowth of BAAQMD's Community Air Risk Evaluation (CARE) Program. Through the CARE Program, BAAQMD has identified communities that are disproportionally impacted from high concentrations of TACs, which the proposed BAAQMD

[86] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.

guidelines and the proposed Thresholds document refer to as "impacted communities." BAAQMD has identified eastern San Francisco, including the Project site, as such an impacted community.

According to the BAAQMD, "compelling evidence suggests that $PM_{2.5}$ is by far the most harmful air pollutant in the SFBAAB in terms of the associated impact on public health."[87] As discussed in Section III.H.3 of the Draft EIR, although $PM_{2.5}$ is a criteria pollutant, its human health impacts are also of concern as these particles can deposit deep in the lungs and can contain substances that are particularly harmful to human health. Extended exposure to particulate matter can reduce lung function, aggravate respiratory and cardiovascular disease, increase mortality rate and reduce lung function growth in children. Motor vehicles are currently responsible for about half of the particulates in the SFBAAB and wood burning in fireplaces and stoves is another large source.[88] Many scientific studies link fine particulate matter and traffic-related air pollution to respiratory illness. California ARB has established that $PM_{2.5}$ is associated with dose-dependent adverse health effects below existing federal and state air quality standards and in a 2008 study that a 10 percent increase in $PM_{2.5}$ concentrations increased the non-injury mortality by 10 percent.[89]

Construction

Modifications from Existing Requirements

The proposed guidelines differ from the existing guidelines in two main areas:

1. Mass emission limits for reactive organic gases (ROG), nitrogen oxides (NO_X), respirable particulate matter (PM_{10}—exhaust), and fine particulate matter ($PM_{2.5}$—exhaust) are proposed
2. A cancer risk of 10 in one million, non-cancer Health Index (HI) of 1.0, and a $PM_{2.5}$ concentration threshold of 0.3 $\mu g/m^3$ have been proposed

Impact Conclusion Based on Draft Guidelines

As stated in Section III.H (Air Quality) of the Draft EIR, the Project's construction-related emissions would be less than significant with mitigation in accordance with the current BAAQMD CEQA Guidelines in effect at the time the Draft EIR was released, which do not require quantification of construction-related emissions. However, in anticipation of the future implementation of proposed new BAAQMD CEQA quantitative thresholds of significance for construction-related emissions, a quantitative analysis of the Project's construction emissions is presented to determine whether they would exceed the proposed thresholds. Worst-case, construction related emissions of criteria air pollutants and precursors were modeled in accordance with BAAQMD-recommended methodologies. Emissions of criteria air pollutants and precursors were modeled based on Project specifications (e.g., amount and type of equipment) described previously and default and BAAQMD-recommended settings and parameters attributable to the activity period and site location.

Draft EIR Table III.H-7 (Construction Criteria Pollutant Emissions) summarizes the modeled Project-generated, construction-related emissions of each criteria air pollutant and precursor. As shown in the table, construction-related emissions of ROG and NO_X would have potentially significant and unavoidable impacts on air quality in accordance with the proposed BAAQMD thresholds of significance.

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[87] BAAQMD. 2009. *California Environmental Quality Act, Air Quality Guidelines*. December.
[88] BAAQMD. 2009. *California Environmental Quality Act, Air Quality Guidelines*. December.
[89] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.

Table III.H-7 Construction Criteria Pollutant Emissions

Emission Source	*ROG (lbs/day)*	*NO_X (lbs/day)*	*Exhaust PM_{10} (lbs/day)*	*Exhaust $PM_{2.5}$ (lbs/day)***
Candlestick Point*	527 (2019)	453 (2106)	2.8 (2016)	2.6 (2016)
HPS Phase II*	639 (2016)	1,036 (2016)	8.5 (2016)	7.8 (2016)
Project*	724 (2016)	1,490 (2016)	11.2 (2016)	10.3 (2016)
Proposed BAAQMD Significance Threshold*	54	54	82	54
Project Exceeds Proposed BAAQMD Threshold?	Yes	Yes	No	No

SOURCE: ENVIRON, 2009. Based on URBEMIS 2007 Version 9.2.4.
* Values in parentheses represent year of construction when maximum daily emissions occur.
** Per URBEMIS 2007, exhaust $PM_{2.5}$ is calculated as 92% of exhaust PM_{10}.

The analysis for cancer risk and non-cancer HIs associated with construction activities considers both exhaust diesel particulate matter (DPM) and soil dust. As discussed in Impact AQ-2 (exhaust DPM) and Impact AQ-3 (soil dust) in the Draft EIR, the estimated cancer risk and non-cancer HIs associated with Project-related construction activities are below the current significance thresholds and would similarly fall below the proposed significance thresholds.

BAAQMD does not currently have a threshold of significance for $PM_{2.5}$ associated with fugitive dust from construction activities and it is not clear in the proposed guidelines whether the evaluation of $PM_{2.5}$ should only look at exhaust $PM_{2.5}$ (as is specified for the mass threshold evaluation discussed in Table III-H.7, above) or whether $PM_{2.5}$ from fugitive dust should also be included. As a conservative measure, $PM_{2.5}$ from both exhaust and fugitive dust is included in this analysis. Exhaust PM_{10} from construction activities is equivalent to DPM, which was evaluated in the risk assessment conducted as part of the Impact AQ-2 analysis in the Draft EIR. Based on the literature, $PM_{2.5}$ represents approximately 92 to 97 percent of DPM.[90] As shown in the Draft EIR's analysis of DPM under Impact AQ-2, Table 4-4 and Table 4-5 of Appendix H3, Attachment 1 show the highest annual DPM concentration of 0.083 $\mu g/m^3$, which, conservatively assuming 97 percent of DPM is $PM_{2.5}$, would result in a $PM_{2.5}$ concentration of 0.080 $\mu g/m^3$. Fugitive soil dust was evaluated as part of the Impact AQ-3 analysis in the Draft EIR. Based on the literature, $PM_{2.5}$ represents approximately 10 percent of soil dust.[91] Therefore, the analysis of soil dust under Impact AQ-3 includes impacts associated with $PM_{2.5}$. As shown in the analysis of soil dust under Impact AQ-3, Table 4-5 of Appendix H3, Attachment 2 show the highest annual PM_{10} concentration of 0.68 $\mu g/m^3$, which assuming 10 percent of soil dust PM_{10} is $PM_{2.5}$, would result in a $PM_{2.5}$ concentration of 0.068 $\mu g/m^3$. Adding the DPM

[90] URBEMIS 2007 assumes 92% of DPM is $PM_{2.5}$, as explained in SCAQMD 2009. USEPA NONROAD 2004 assumes 97% of diesel exhaust is $PM_{2.5}$:

- South Coast Air Quality Management District (SCAQMD). 2009. Review of the Draft Environmental Impact Report (Draft EIR) for the Villages of Lakeview Specific Plan No. 342, Change of Zone No. 07055, General Plan Amendment No. 720 &721. April.
- United States Environmental Protection Agency (USEPA). 2004. Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling – Compression-Ignition (Report No. NR-009c). April 28.

[91] USEPA AP-42 (2006) recommends using 10% based on MRI (2006) study:

- Midwestern Research Institute (MRI), 2006. Background Document for Revisions to Fine Fraction Ratios Used for AP-42 Fugitive Emission Factors. Prepared for the WRAP by Midwest Research Institute, Project No. 110397, November 1.
- USEPA, 2006. AP-42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources.

and soil dust contributions to $PM_{2.5}$ together (which is extremely conservative, as these maxima occur at different locations) yields a composite concentration of 0.15 $\mu g/m^3$, which is well below the proposed threshold of 0.3 $\mu g/m^3$. Therefore, potential impacts from construction activities associated with the Project would be less than significant when judged against the proposed standard.

Operational

Modifications from Existing Requirements

The proposed guidelines differ from the existing guidelines in two main areas:

1. Mass emission limits for ROG, NOx, PM_{10} (exhaust) are changed and a mass emission rate is proposed for $PM_{2.5}$ (exhaust)[92]
2. A community-scale analysis of risks and hazards (TACs and $PM_{2.5}$) for siting a new source or receptor is proposed

Impact Conclusion Based on Draft Guidelines

Mass Emission Limits

The proposed mass emission limits for ROG, NO_X, PM_{10} (exhaust), and $PM_{2.5}$ (exhaust) are shown in parentheses next to the existing mass emission limits and in Draft EIR Table III.H-8 (Operational Criteria Pollutant Emissions [Year 2030]). As shown in the table, the criteria pollutant emissions from mobile and area sources would continue to be above the proposed significance thresholds and would remain significant and unavoidable, as they are under the existing guidelines.

Community-Scale TAC and $PM_{2.5}$ Analyses

These analyses address the community-scale impacts of TACs and $PM_{2.5}$. In the December 2009 proposed BAAQMD guidance[93] and accompanying proposed Threshold basis document,[94] the BAAQMD proposed a single-source cancer risk, non-cancer hazard, and $PM_{2.5}$ thresholds, considering both whether new single-source emissions associated with the Project would expose sensitive receptors to excessive TAC and $PM_{2.5}$ concentrations, and whether new sensitive receptors would be exposed to excessive TAC and $PM_{2.5}$ concentrations exceeding thresholds from any single source within 1,000 feet.

The thresholds are:

- An excess cancer risk level of more than 10 in one million, or a chronic or acute HI greater than 1.0 for TACs
- An incremental increase of greater than 0.3 $\mu g/m^3$ annual average $PM_{2.5}$

Siting a New Source. The single-source cancer risk and non-cancer hazards associated with the Project's new sources are discussed in the Draft EIR in Impact AQ-6, and found to be less than significant.

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[92] Fugitive dust analysis was removed from the proposed Guidelines.
[93] BAAQMD. 2009. *California Environmental Quality Act, Air Quality Guidelines*. December.
[94] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.

Table III.H-8 Operational Criteria Pollutant Emissions (Year 2030)

Scenario/Emission Source	*ROG (lbs/day)*	*NO_X (lbs/day)*	*CO (lbs/day)*	*PM_{10} (lbs/day)*	*$PM_{2.5}$ (lbs/day)*
Candlestick Point					
Area*	449	70	53	4	4
Motor Vehicles (External)	217	195	2,224	1,026	193
Subtotal	***666***	***265***	***2,276***	***1,029***	***197***
HPS Phase II					
Area*	166	38	30	1	1
Motor Vehicles (External)	88	80	916	423	80
Subtotal	***255***	***119***	***947***	***424***	***81***
Project					
Area*	616	108	83	5	5
Motor Vehicles (External)	305	275	3,140	1,449	273
Motor Vehicles (Internal)	24	11	184	36	7
All Sources (Project)	***945***	***394***	***3,406***	***1,490***	***285***
Proposed BAAQMD Significance Threshold**	54	54	None	82	54
Project Exceeds Proposed BAAQMD Threshold?	Yes	Yes	—	Yes	Yes

SOURCE: PBS&J, 2009. Based on URBEMIS 2007 Version 9.2.4.

Daily emissions of ROG and NO_X were calculated under summer conditions when ambient ozone concentrations are highest. Daily emissions of CO, PM_{10}, and $PM_{2.5}$ were calculated under winter conditions when associated ambient concentrations are highest. http://www.baaqmd.gov/Divisions/Communications-and-Outreach/Air-Quality-in-the-Bay-Area/Air-Pollutants.aspx

* Area emissions are from sources located on the Project site, such as natural gas combustion for heating/cooling, maintenance equipment, consumer product use, etc.

** Represent mass daily emissions thresholds reflected in draft Staff-Recommended CEQA Thresholds of Significance table released by the BAAQMD on December 7, 2009.

— BAAQMD significance threshold for CO is based on air concentration and not mass emission rates.

The new single source $PM_{2.5}$ emissions from the Project have been analyzed for the R&D areas (e.g., diesel-fueled emergency generators for backup power at biotech facilities).[95] The $PM_{2.5}$ concentrations associated with the R&D areas can be derived from the analysis conducted for Impact AQ-6 in the Draft EIR. That analysis indicates that, with the implementation of mitigation measures MM AQ-6.1 and MM AQ-6.2, cancer risk and non-cancer HIs would not exceed thresholds at any sensitive-receptor locations. Conservatively assuming the total cancer risk is attributable to DPM from diesel generators (which means there would be no other sources of TACs is the R&D area), the annual DPM concentration corresponding to a lifetime cancer risk of 10 in a million is approximately 0.03 $\mu g/m^3$. Conservatively assuming that 100 percent of the DPM is $PM_{2.5}$, the maximum $PM_{2.5}$ concentration would not exceed the proposed standard of 0.3 $\mu g/m^3$ at any sensitive-receptor location.[96]

[95] BAAQMD. 2009. *California Environmental Quality Act, Air Quality Guidelines*. Section 5.2. December.

[96] The draft BAAQMD guidelines indicate that for certain types of sources, non-permitted sources of $PM_{2.5}$ emissions should also be considered, such as projects that would "attract high numbers of diesel-powered on-road trucks or use off-road diesel equipment on site, such as a distribution center, a quarry, or a manufacturing facility." As the Redevelopment Plan prohibits these types of uses in the R&D areas, non-permitted sources of $PM_{2.5}$ are not expected to contribute significantly overall and would not cause the single-source $PM_{2.5}$ impacts to exceed the proposed standard.

Siting a New Receptor. When siting a new receptor, the proposed BAAQMD guidance recommends the Lead Agency examine existing or future proposed sources of TAC and/or $PM_{2.5}$ emissions that would adversely affect new receptors. These impacts include impacts from existing individual stationary sources and impacts from individual freeways or major roadways. The BAAQMD has provided more recent guidance regarding how to conduct these single-sources analyses.

According to the BAAQMD database, there are a total of three listed sources of TAC and $PM_{2.5}$ emissions within 1,000 feet of the Project boundary, all of which are diesel-fueled generators. These sources include the Griffith pump station, UCSF/Hunters Point facility, and Bayview Greenwaste facility. ENVIRON requested and received from the BAAQMD the daily emissions estimates and source parameters for use in modeling of these three sources. For these stationary sources (diesel generators), ENVIRON conservatively assumed that $PM_{2.5}$ emissions can be represented by DPM emissions. Table C&R-8 (New Receptor Exposures: Screening Level Single-Source Cancer Risk, Non-cancer HI and $PM_{2.5}$ Concentration from Off-Site Sources within 1,000 Feet of Project-Sensitive Receptors) reports the results of this analysis (refer to Appendix H4).

Table C&R-8 New Receptor Exposures: Screening Level Single-Source Cancer Risk, Non-cancer HI and $PM_{2.5}$ Concentration from Off-Site Sources within 1,000 Feet of Project-Sensitive Receptors

Source	*High-End Cancer Risk (in a million)*	*Single-Source Cancer Risk Threshold (in a million)[a]*	*Chronic Non-Cancer HI (-)*	*Single-Source Chronic Non-Cancer HI (-)[a]*	*Annual Average $PM_{2.5}$ Concentration ($\mu g/m^3$)*	*Single-Source $PM_{2.5}$ Threshold ($\mu g/m^3$)[a]*
Griffith Pump Station	0.003		$2.2*10^{-6}$		$1.1*10^{-5}$	
UCSF/Hunters Point	0.02		$1.5*10^{-5}$		$7.6*10^{-5}$	
Bayview Greenwaste—Current	**135**	10	$8.5*10^{-2}$	1.0	**0.42**	0.3
Bayview Greenwaste—ATCM Compliant	1.2		$7.7*10^{-4}$		$3.8*10^{-3}$	

SOURCE: a. ENVIRON, Community Hazards and San Francisco Health Code Article 38 Analyses, May 2010.
Sources exceeding the indicated thresholds are highlighted in **bold**.

As the table demonstrates, only the Bayview Greenwaste facility's emissions currently exceed the cancer risk and $PM_{2.5}$ thresholds. It is reasonable to expect, however, that by the time new sensitive receptors will be located next to the facility (by 2013, at the earliest), this facility will be operating in compliance with ARB's Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition Engines Rule.[97] As the table indicates, with compliance with the ATCM, the estimated cancer risks, non-cancer hazards, and annual average $PM_{2.5}$ concentration from this facility would be below these indicated thresholds.

In their proposed guidelines and as discussed in public workshops, the BAAQMD recommends the evaluation of all roadways with daily traffic greater than 10,000 vehicles within 1,000 feet of the Project

[97] BAAQMD's reported emissions are consistent with a source operating as a prime engine. The ARB's ATCM Rule requires prime engines to come into compliance by 2012.

boundary as single sources of $PM_{2.5}$.[98] The roadways evaluated for the single-source on-site residential receptor analysis are portions of Carroll Avenue; Innes Avenue; Arelious Walker Avenue; Gilman Avenue; Jamestown Avenue; and Harney Way. The Project boundary is shown on Figure II-4 (Proposed Land Use Plan). The results of this analysis are presented in Table C&R-9 (New Receptor Exposures: Screening Level Single-Source $PM_{2.5}$ Concentration from Roadways with Traffic >10,000 Vehicles per Day within 1,000 Feet of Project-Sensitive Receptors) (refer to Appendix H4). As the table demonstrates, concentrations of $PM_{2.5}$ at the minimum screening distance (100 feet) from these roadways would be below the indicated thresholds. It is recognized that Project receptors could be located less than 100 feet from roadways, which is not addressed by the BAAQMD screening tables. However, compliance with Article 38 will ensure no cumulative exposures above 0.2 $\mu g/m^3$ would be experienced by new receptors in the Project site (refer to Appendix H4) and, therefore, that the BAAQMD threshold is not exceeded.

Table C&R-9 New Receptor Exposures: Screening Level Single-Source $PM_{2.5}$ Concentration from Roadways with Traffic >10,000 Vehicles per Day within 1,000 Feet of Project-Sensitive Receptors

Roadway	*Future Cumulative Traffic Volume (vehicles per day)[a]*	*Location of Roadway Relative to On-site Sensitive Receptor*	*Minimum Distance to Sensitive Receptor (feet)[c]*	*BAAQMD Screening $PM_{2.5}$ Concentration ($\mu g/m^3$)[c]*	*Single-Source $PM_{2.5}$ Threshold ($\mu g/m^3$)[c]*
Harney Way	36,400	West	100	0.26	0.3
Arelious Walker	25,300	West	100	0.21	
Jamestown	15,000	North	100	0.16	
Gilman	25,000	North	100	0.25	
Carroll	10,300	South	100	0.16	
Innes	24,000	West	100	0.21	

SOURCE: a. CHS Consulting Group et al., 2009
b. ENVIRON, Community Hazards and San Francisco Health Code Article 38 Analyses, May 2010
c. BAAQMD, CEQA Guidelines Update, Public Workshop Slides, Oakland, CA, April 26, 2010

With the exception of Harney and Arelious Walker, all streets run in a northwest/southeast configuration. As a conservative measure, it was assumed that the roadways were east-west directional, which correspond to the maximum impacts in the BAAQMD screening tables.

Cumulative

Modifications from Existing Requirements

The proposed BAAQMD guidelines differ from the existing guidelines in proposing to add a zone of influence analysis for any operational or construction source of TACs or $PM_{2.5}$ within 1,000-foot radius of the Project fenceline. A project would have a cumulative significant impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fenceline of a source, or from the location of a receptor, plus the contribution of the Project, exceeds any of the following:

- An excess cancer risk level of more than 100 in one million, or a chronic or acute HI greater than 1.0 for TACs
- 0.8 $\mu g/m^3$annual average $PM_{2.5}$

[98] To date, the BAAQMD has only provided screening level guidance for $PM_{2.5}$ in their CEQA Guidelines Update, Public Workshop Slides, Oakland, CA, April 26, 2010.

The BAAQMD's existing approach to analyzing the cumulative impacts of criteria air pollutants and precursors would be unchanged under the proposed BAAQMD guidelines.

Impact Conclusion Based on Draft Guidelines

Mass Emission Limits

As discussed earlier, Project operational emissions of the ozone precursors, ROG and NO_X, and of criteria pollutants PM_{10} and $PM_{2.5}$ would exceed the BAAQMD project-specific significance thresholds. Therefore, these emissions would be considered to have a significant and unavoidable cumulative impact. However, these emissions are typically addressed through the BAAQMD Clean Air Plan so that Project emissions, in combination with all adjacent projects, will be addressed at a regional level.

Community-Scale TAC and $PM_{2.5}$ Analyses

This analysis evaluates the cumulative sources within 1,000 feet of the Project with the proposed cumulative $PM_{2.5}$ standard of 0.8 $\mu g/m^3$ in accordance with direction from BAAQMD.[99] According to BAAQMD, "emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of $PM_{2.5}$ from any source would result in an average annual increase greater than 0.8 $\mu g/m^3$."[100]

In December 2009, BAAQMD Staff provided guidance to the City of San Francisco Planning Department with respect to the sources to consider in a cumulative analysis, including a list of facilities in southeastern San Francisco with currently permitted sources of TAC emissions, and additional guidance on how to conduct the cumulative analysis envisioned by the BAAQMD in its proposed guidelines. As a result, the Planning Department requested ENVIRON to undertake an additional cumulative impact analysis under the proposed BAAQMD guidelines identified above.

As explained above, according to the BAAQMD database, there are a total of three listed sources of TAC and $PM_{2.5}$ emissions within 1,000 feet of the Project boundary, all of which are diesel-fueled generators. ENVIRON requested and received from the BAAQMD the daily emissions estimates and source parameters for use in modeling of these three sources. For these stationary sources (diesel generators), ENVIRON conservatively assumed that $PM_{2.5}$ emissions can be represented by DPM emissions. In their proposed guidelines, the BAAQMD recommends the evaluation of all roadways with daily traffic greater than 10,000 vehicles within 1,000 feet of the Project boundary as sources of TACs and $PM_{2.5}$. The roadways evaluated for the cumulative on-site residential receptor analysis include portions of Egbert, Carroll, Thomas, Revere, Palou, and Innes Avenues east of 3rd Street; Arelious Walker Avenue between Harney Way and Van Dyke Avenue; Ingalls Avenue between Palou and Egbert Avenues; Gilman, Jamestown and Ingerson Avenues; and Harney Way. The Project boundary is shown on Figure II-4 (Proposed Land Use Plan).

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[99] During a meeting attended by ENVIRON, the City of San Francisco Planning Department, and BAAQMD on January 13, 2010, the District stated that the cumulative impacts analysis described in the proposed BAAQMD guidelines consist of an evaluation of cancer risk, non-cancer hazard, and $PM_{2.5}$ associated with off-site sources within 1,000-foot radius of the Project and potential impacts of those sources on on-site residents only, assuming 70 years of exposure.

[100] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7. page 45.

The analysis assumed a 70-year lifetime exposure, beginning in 2030 with full project build-out. The analysis assumed also that the Bay-View Greenwaste facility would operate its existing diesel generator located near the intersection of Carroll Avenue and Hawes Street, on the property line on the side closest to the Project's residential area. Under these assumptions, the maximally exposed individual receptor (MEIR) would be a resident living in the Project area near the corner of Carroll Avenue and Hawes Street. With these assumptions, the estimated cancer risks to the residential development on the northwest corner of Carroll Avenue and Hawes Street would be 148 in a million. Approximately 97 percent of the cancer risk, or 143 in a million, can be attributed to the existing diesel generator located at the Bay-View Greenwaste facility. The chronic (0.1) and acute (0.23) non-cancer hazard indices and $PM_{2.5}$ concentration (0.5 $\mu g/m^3$) at the MEIR attributable to stationary and vehicular sources would not exceed the proposed thresholds of significance in the proposed BAAQMD guidelines. However, under this assumed scenario, the cumulative excess cancer risk estimated at some on-site locations on the northwest corner of the residential development would be above the BAAQMD's proposed thresholds of significance.

However, as previously explained, it is reasonable to expect that Bayview Greenwaste facility will come into compliance with the ATCM requirements by 2013. Under the scenario in which the Bayview Greenwaste facility operates in compliance with the ARB's ATCM, the estimated cancer risk for the on-site MEIR (which is at Gilman Avenue and Arelious Walker Drive, a different location than under the existing operating scenario) would be 43 in a million and would occur primarily from vehicle emissions. This cumulative excess cancer risk would not exceed the proposed thresholds of significance in the proposed BAAQMD guidelines. The chronic (0.06) and acute (0.23) non-cancer hazard indices and $PM_{2.5}$ concentration (0.4 $\mu g/m^3$) at the on-site MEIR attributable to stationary and vehicular sources also would not exceed the proposed thresholds of significance in the proposed BAAQMD guidelines.[101] Therefore, the impacts would be less than significant under these proposed guidelines.

As discussed earlier, the BAAQMD estimates the average background risk in the SFBAAB to be approximately 500 to 700 in one million. In December 2009, the BAAQMD released a technical memorandum with results of refined modeling where cancer risks were predicted to be between 600 and 1,000 in one million in southeastern San Francisco,[102] the area of the Project. These estimates reflect all regional sources of TACs (e.g., freeways, ports, general combustion sources such as boilers) and not individual sources in the immediate vicinity of the Project. As this background risk exceeds 100 in a million (as the background risk does virtually everywhere in the Bay Area), any contribution to these existing levels could be considered significant and unavoidable. Various emissions reductions measures currently in process will reduce this regional risk over time, though regional risks will likely always exceed 100 in a million in most urban areas.

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[101] As discussed previous under Impact AQ-7 (Traffic $PM_{2.5}$), there are proposed residential areas of the Project where cumulative traffic $PM_{2.5}$ concentrations could exceed the *San Francisco Health Code* Article 38 threshold of 0.2 $\mu g/m^3$. However, Article 38 requires implementation of fresh air filtration or the siting of residential buildings outside areas which exceed the Article 38 threshold and these requirements would assure residents are not exposed to $PM_{2.5}$ levels in excess of the Article 38 threshold.

[102] Bay Area Air Quality Management District. 2009. *Technical Memorandum: Applied Method for Developing Polygon Boundaries for CARE Impacted Communities*. December.

Cancer Risks and Non-cancer Hazards to Off-site Receptors Estimated for Stationary and Vehicular Sources of TACs and $PM_{2.5}$

The Project-specific analysis explained above indicates that cumulative conditions in the area of future Project residents would not be expected to exceed the BAAQMD cumulative excess cancer risk of 100 in a million, non-cancer HIs of 1.0, or $PM_{2.5}$ threshold of 0.8 $\mu g/m^3$. However, because the BAAQMD estimates that average background risk levels in the SFBAAB may exceed the 100-in-a-million level, the Planning Department requested an additional analysis of cumulative conditions to assess how the Project might also affect off-site residential receptors.

For this analysis, cumulative risks (cancer risks, acute and chronic non-cancer hazard indices, and $PM_{2.5}$ concentrations) for off-site residential receptors within the 1,000-foot radius of the project area were calculated assuming a 70-year exposure beginning in 2030. The methodology used for this evaluation was the same as that used to evaluate the on-site residential receptors. The roadways evaluated for the cumulative off-site residential receptor analysis include portions of Egbert, Carroll, Thomas, Revere, Palou, and Innes Avenues east of 3rd Street; Arelious Walker Avenue between Harney Way and Van Dyke Avenue; Ingalls Avenue between Palou and Egbert Avenues; Gilman, Jamestown, and Ingerson Avenues; and Harney Way.

Under this off-site receptor analysis, the estimated cancer risk associated with all stationary and traffic/vehicular sources for the maximally exposed individual receptor (MEIR) under the scenario in which the Bay-View Greenwaste Management facility operates as it does today would be 88 in a million. Assuming the Bay-View Greenwaste Manufacturing facility replaces the existing generator with one that complies with the ARB ATCM rule, the estimated cancer risk for the MEIR would be 80 in a million. In either case, the risk level would not exceed the BAAQMD's proposed 100-in-a-million risk level. The estimated chronic and acute non-cancer HIs for all off-site residents would be 0.11 and 0.31 under the existing scenario with the current diesel generator operating at the Bay-View Greenwaste facility; these levels would be reduced slightly if the diesel generator were replaced with a generator that complies with the ARB ATCM rule. In both cases, the exposures would be less than the BAAQMD's proposed threshold levels. Under the scenario with the existing diesel generator, the concentration of cumulative $PM_{2.5}$ at the off-site MEIR would be 0.74 $\mu g/m^3$, which would be below the BAAQMD proposed $PM_{2.5}$ cumulative threshold of 0.8 $\mu g/m^3$.

Although the analysis explained above indicates that the identifiable sources of emissions within the Project area and within 1,000 feet of the Project area, when combined with Project emissions, would not be expected to exceed the BAAQMD cumulative risk levels for TACs, the Project would contribute to regional sources of TACs and $PM_{2.5}$. As indicated, because average SFBAAB emissions exceed the proposed BAAQMD thresholds, it is possible that the Project would contribute considerably to a cumulative impact from such sources and, therefore, may result in a significant cumulative air quality impact to sources of TAC emissions. If such an impact were to exist, this impact would be considered significant and unavoidable at this time, given the inability to determine the nature of such an impact accurately and, therefore, to determine whether any mitigation measures would be effective to reduce the impact to a less-than-significant level.

E.2 Individual Responses

The following section contains the written comments received on the Draft EIR or the oral comments received during the public hearings on the Draft EIR followed by the responses to those comments. They are presented in the order they were received by the City and/or the Agency, and they are presented with consecutive numbering (e.g., Letter 1, Letter 2, Letter 3, etc.).

Consistent with Sections 15088(a) and 15088(b) of the CEQA Guidelines, comments that raise significant environmental issues are provided with responses. Comments that are outside the scope of CEQA review will be forwarded for consideration to the decision-makers as part of the Project approval process. All comments will be considered by the Lead Agencies when making a decision on the Project.

Responses to Written Comments

The following are written comment letters received, followed by their responses.

Letter 1: Sierra Club (11/25/09)

1 of 1

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Letter 1: Sierra Club (11/25/09)

Response to Comment 1-1

The comment period was extended by the Agency and the Planning Commission of the City and County of San Francisco from 45 days to 60 days, which extended the end of the public review period from December 28, 2009, to January 12, 2010. The public review period began on November 12, 2009, and ended on January 12, 2010, beginning approximately two weeks before Thanksgiving, and ending approximately two weeks after New Year's Day. While both agencies considered a longer review period, they ultimately decided that a 60-day review period would be adequate, which is two weeks longer than required by CEQA or customarily provided by the City and/or the Agency.

In terms of opportunity for public input, formal public hearings were held on December 15 (Redevelopment Agency), December 17 (Planning Commission), and January 5 (Redevelopment Agency), which provided more opportunities for the public to present oral comments than required under CEQA, which, in fact, does not require a formal hearing. Section 15202(a) of the CEQA Guidelines states that:

> CEQA does not require formal hearings at any stage of the environmental review process. Public comments may be restricted to written communications.

Irrespective of the requirements of CEQA, as required by Section 31.14(d)(3) of Chapter 31 of the *San Francisco Administrative Code*, the City requires that a public hearing shall be held to receive comments on the Draft EIR and the Agency requires the same by virtue of their standard practice. Even still, more public hearings were provided than required by either the City or the Agency.

Further, refer to the responses to Letter 75, which is the comment letter from the Sierra Club dated January 12, 2010.

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Letter 2: POWER (People Organized to Win Employment Rights) (12/14/09)

1 of 1

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Letter 2: POWER (People Organized to Win Employment Rights) (12/14/09)

Response to Comment 2-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 3: Hunters Point Shipyard Citizen's Advisory Committee and Southeast Campus of City College of SF (12/16/09)

1 of 1

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Letter 3: Hunters Point Shipyard Citizen's Advisory Committee and Southeast Campus of City College of SF (12/16/09)

Response to Comment 3-1

Comment noted. No response is required.

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Letter 4: Neighborhood Parks Council (12/17/09)

1 of 2

2 of 2

Letter 4: Neighborhood Parks Council (12/17/09)

Response to Comment 4-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 5: Loa, Sam (12/17/09)

1 of 2

2 of 2

Letter 5: Loa, Sam (12/17/09)

Response to Comment 5-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 5-2

In response to the comment, Figure III.B-1 (Existing Land Use), Draft EIR page III.B-3, has been revised to switch the label colors between Residential and Commercial/Industrial. The text in this section is correct regarding these land uses.

Response to Comment 5-3

Refer to Master Response 15 (Proposition P and the Precautionary Principle) regarding cleanup of HPS.

SOURCE: San Francisco Planning Department; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING LAND USE

FIGURE III.B-1

Letter 6: Jackson, Espanola (12/17/09)

1 of 1

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Letter 6: Jackson, Espanola (12/17/09)

Response to Comment 6-1

As stated in Response to Comment 85-5, in terms of the planning process for the Project, Section I.B (History of the Planning Process), which is presented on pages I-1 through I-6 of the Draft EIR, describes a planning process that has occurred over three decades and has included hundreds of community meetings and other forms of public outreach.

As stated in Response to Comment 96-1, the EIR process officially began on August 31, 2007, with issuance of a Notice of Preparation indicating that an EIR would be prepared. The Draft EIR public review period ended on January 12, 2010, and the Project is not expected to go before the decision-making bodies until April 2010, almost three years after beginning the process. Section 15108 of the CEQA Guidelines requires a much shorter process, stating:

> With a private project, the lead agency shall complete and certify the final EIR as provided in Section 15090 within one year after the date when the lead agency accepted the application as complete. Lead agency procedures may provide that the one-year time limit may be extended once for a period of not more than 90 days upon consent of the lead agency and the applicant.

Therefore, the EIR process for this Project has not been fast-tracked.

Impacts related to flooding are fully addressed in Section III.M (Hydrology and Water Quality) of the Draft EIR, and impacts related to liquefaction and seismic-related events are fully addressed in Section III.L (Geology and Soils) of the Draft EIR. Further, the first page of the Executive Summary, page ES-1, as well as page II-7 of Chapter II (Project Description), states that "Specifically, the Project proposes development of 10,500 residential units with an associated population of 24,465 residents." The population associated with the Project is also fully disclosed and analyzed in Section III.C (Population, Employment, and Housing) of the Draft EIR. Refer also to Master Response 6 (Seismic Hazards), Master Response 7 (Liquefaction), and Master Response 8 (Sea Level Rise).

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Letter 7: City of Brisbane (12/18/09)

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3 of 3

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Letter 7: City of Brisbane (12/18/09)

Response to Comment 7-1

The comment is acknowledged. Figure II-12 (Proposed Roadway Improvements) has been revised to clarify the two separate proposed projects at the new US-101 interchange. In response to the comment, the labels in Figure II-12, page II-37, and Figure II-13 (Proposed Transit Improvements), page II-40, have been revised: "US-101/Harney Way Interchange Improvements" has been changed to "Candlestick Point Interchange Improvements/US-101 Auxiliary Lanes" on Figure II-12, and "Geneva Avenue Extension" has been changed to "proposed Geneva Avenue Extension (pending City of Brisbane approval)" on both Figure II-12 and Figure II-13.

Response to Comment 7-2

Refer to Response to Comment 7-1.

Response to Comment 7-3

In response to the comment, text in Section III.B (Land Use and Plans) on page III.B-2, last paragraph, fourth sentence, has been changed as follows:

> Other uses in the Baylands include building supply businesses, lumberyards, the Kinder Morgan Energy tank farm, and the Bayshore Sanitary ~~water~~ Sewer pump station.

Response to Comment 7-4

Text in Section III.D (Transportation and Circulation), text on page III.D-4, last paragraph, first sentence, was revised as follows:

> **Bayshore Boulevard** is a north/south arterial that generally parallels US-101. Bayshore Boulevard has two to three travel lanes in each direction, separated by a median.

Response to Comment 7-5

Text in Section III.D (Transportation and Circulation), Draft EIR page III.D-8, seventh paragraph, was revised as follows:

> **Tunnel Avenue** is a two-way north/south roadway that extends south of Bayshore Boulevard and merges into Bayshore Boulevard at Old County Road. The roadway has one lane in each direction with sidewalks and unrestricted on-street parking on both sides of the street north of Sierra Point Lumber. On-street parking is prohibited on Tunnel Avenue south of Sierra Point Lumber. Tunnel Avenue provides access to Bayshore Caltrain Station and to the US-101 ramps at Alana/Beatty. Tunnel Avenue is part of Bicycle Route #905.

Response to Comment 7-6

This comment on the existing SF bicycle route system will be forwarded to Damon Curtis, the SFMTA Program Manager of the Bicycle Program.

SOURCE: Fehr & Peers; AECOM, 2010.

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FIGURE II-12

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED ROADWAY IMPROVEMENTS

SOURCE: Fehr & Peers; AECOM, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED TRANSIT IMPROVEMENTS

FIGURE II-13

Response to Comment 7-7

Text in Section III.D (Transportation and Circulation), page III.D-36, second bullet, last sentence, was revised as follows:

> ■ **Geneva Avenue/Harney Way Extension**— … The lead agency for this Project is the City of Brisbane, with the Caltrans Project Study Report (PSR) expected to be completed in ~~early~~ 2010.

Response to Comment 7-8

Text in Section III.D (Transportation and Circulation), page III.D-36, third bullet, first paragraph, and second paragraph, first sentence, was revised as follows:

> ■ **New US-101 Interchange at Geneva/Harney**—In conjunction with the extension of Geneva Avenue east, the existing Harney Way interchange ~~would~~ is proposed to be redesigned as a typical diamond interchange, subject to review and approval by Caltrans. …
>
> ~~The~~ At the time the analysis was completed, Geneva Avenue/Harney Way crossing of US-101 ~~would~~ was proposed to have six lanes eastbound (three left-turn lanes and three through lanes) and six lanes westbound (three left-turn lanes and three through lanes), for a total of twelve lanes (refer to Appendix L of the Transportation Study). …

Response to Comment 7-9

Mitigation measure MM TR-16 requires construction of Harney Way to its ultimate configuration (either five or six through travel lanes) prior to degradation in intersection levels of service past mid-LOS D (45 seconds of delay per vehicle). The most recent analysis conducted of Harney Way indicates that to maintain acceptable operations, the roadway should ultimately be constructed as follows:

- Three lanes each direction west of Thomas Mellon Circle, with one eastbound lane becoming an eastbound left turn lane onto Thomas Mellon Circle
- Three westbound and two eastbound lanes plus a center turn lane between Thomas Mellon Circle and Arelious Walker Drive

This long-term configuration would ensure acceptable operations along this section of Harney Way during the weekday and weekend peak hours.

Response to Comment 7-10

The comment is acknowledged. No response is required.

Response to Comment 7-11

In response to the comment, the text in Section III.D (Transportation and Circulation), page III.D-84 (and Table ES-2, page ES-15) was revised as follows:

> *MM TR-6* Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts. *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 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 Interchange Project.

In response to the comment, the text in Section III.D (Transportation and Circulation), page III.D-86 (and Table ES-2, page ES-16), second paragraph of MM TR-8, was revised as follows:

MM TR-8 …

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 Geneva Avenue Extension Project.

Response to Comment 7-12

The comment is acknowledged. No response is required.

Response to Comment 7-13

The analysis considered the travel demand generated by the Project and other planned or proposed development in the area, including the proposed Brisbane Baylands project. As indicated by the commenter, the City of Brisbane would likely require mitigations for development within the City of Brisbane that would maintain intersection LOS C for the intersection of Bayshore/Old County and LOS D elsewhere in the City. It would be reasonable to assume that development of the Brisbane Baylands would include improvements to these intersections to accommodate the vehicle trips associated with that development. However, since those potential improvements are not known, no changes to Bayshore Boulevard/Old County Road and Sierra Point/Lagoon Way were assumed for the future year analysis.

The commenter also requests clarification regarding the determination of significant contributions to intersections operating at unacceptable levels of service in year 2030. The year 2030 analysis considers traffic from many sources, not just the project. At the intersection of Bayshore/Old County, Project contributions to the growth between existing conditions and 2030 Cumulative traffic volumes would be 3.4 percent during the AM peak hour, and 8.0 percent during the PM peak hour. At the intersection of Sierra Point/Lagoon Way, Project contributions to the growth between existing conditions and 2030 Cumulative traffic volumes would be less than one percent during both the AM and PM peak hours.

The metric and calculations for determination of the cumulative contributions is provided in the transportation study. At intersections that would operate at LOS E or LOS F under 2030 No Project conditions, and would continue to operate at LOS E or LOS F under Project conditions, the increase in Project vehicle trips were reviewed to determine whether the increase would contribute considerably (i.e., 5 percent or more) to critical movements operating at LOS E or LOS F. Appendix E of the Transportation Study, in Draft EIR Appendix D, provides the cumulative contribution calculations.

Response to Comment 7-14

As noted above, the traffic forecasts include traffic associated with the Project and other planned or proposed development in the area, including the Brisbane Baylands project; however, the analysis does not include the roadway improvements that would likely be required of said development. Although the project's contribution to this impact would be cumulatively considerable, the proposed Brisbane Baylands project would also be a substantial contributor.

The Draft EIR does not identify specific improvements for this facility because they are currently being developed as part of the Bi-County Study. The Project would contribute a fair share contribution to these improvements as determined as part of the Bi-County study.

Response to Comment 7-15

Mitigation measure MM TR-8 establishes the requirement that the Project Applicant contribute its fair share toward construction of the Geneva Avenue Extension Project. Mitigation measure MM TR-27 would require the design of the Geneva Avenue Extension Project to include transit preferential treatments. Therefore, the requirement suggested by the commenter is accounted for in mitigation measure MM TR-8. Refer to Response to Comment 7-11 for changes to mitigation measure MM TR-8.

It should be noted that the San Francisco portion of the Transit Preferential Streets (TPS) treatments for the Geneva Corridor are already recommended and estimated in SFMTA's Capital Improvement Program and related studies.

Response to Comment 7-16

Comment noted. Due to physical constraints on Bayshore Boulevard within San Francisco City limits, there are limited opportunities to implement transit priority treatments. To the extent that opportunities for reducing cumulative impacts on regional transit are identified by San Mateo County Transit Districts (SamTrans) or San Francisco, San Francisco will coordinate with SamTrans.

Response to Comment 7-17

The disconnected transit-only lane was an error on the figure and has been revised. Refer to revised Figure III.D-13 (Stadium Game Day Traffic Control Plan), Draft EIR page III.D-128.

Response to Comment 7-18

The second western "Muni service" was an error in the figure and was revised. Refer to revised Figure III.D-14 (Stadium Game Day Ingress Routes), Draft EIR page III.D-129.

SOURCE: Fehr & Peers, 2010.

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FIGURE III.D-13

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY TRAFFIC CONTROL PLAN

SOURCE: Fehr & Peers, 2010.

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FIGURE III.D-14

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY INGRESS ROUTES

Letter 8: Indian Canyon Nation/Costanoan Indian Research Inc. (1/12/10)

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Letter 8: Indian Canyon Nation/Costanoan Indian Research Inc. (1/12/10)

Response to Comment 8-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18 and to Master Response 2 (Potential Native American Burial Sites) regarding the Project's potential impacts on Burial Sites.

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Letter 9: POWER (People Organized to Win Employment Rights) (12/21/09)

1 of 1

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Letter 9: POWER (People Organized to Win Employment Rights) (12/21/09)

Response to Comment 9-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

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Letter 10: San Francisco Bay Trail (12/18/09)

1 of 1

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Letter 10: San Francisco Bay Trail (12/18/09)

Response to Comment 10-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 11: Alice Griffith Public Housing Tenant Association (11/3/09)

1 of 2

2 of 2

Letter 11: Alice Griffith Public Housing Tenant Association (11/3/09)

Response to Comment 11-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 12: Asian Pacific Democratic Club (12/17/09)

1 of 1

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Letter 12: Asian Pacific Democratic Club (12/17/09)

Response to Comment 12-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 13: Toxic Chem Handout—PC Hearing (12/17/09)

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Letter 13: Toxic Chem Handout—PC Hearing (12/17/09)

Response to Comment 13-1

The article on toxic chemicals does not directly comment upon the adequacy of the Draft EIR or the information contained therein. The information provided will be forwarded to the decision-makers.

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Letter 14: Positive Directions Equals Change (12/17/09)

1 of 1

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Letter 14: Positive Directions Equals Change (12/17/09)

Response to Comment 14-1

The comment is acknowledged. No response is required.

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Letter 15: Cavella, Barbara (12/12/09)

1 of 1

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Letter 15: Cavella, Barbara (12/12/09)

Response to Comment 15-1

The Project does not propose changes to the segment of Evans Avenue adjacent to the 1650 and 1690 Evans Avenue properties (located between Phelps Street and Quint Street). Further, the Project does not propose changes to Evans Avenue, between Third Street and Jennings Street. The project does propose to re-stripe Hunters Point Boulevard and Innes Avenue from the Project boundary up to Evans Avenue to accommodate two travel lanes in each direction, a Class II bicycle lane in each direction, and on-street parking on the north side of the street. A 10-foot-wide sidewalk would be provided on the north side of the street and an 8-foot-wide sidewalk on the south side.

However, mitigation measure MM TR-24 would convert one travel lane in each direction on Evans Avenue, from Jennings Street to Napoleon Street, to transit-only, leaving one mixed-flow lane in each direction. This mitigation measure would affect the number of available mixed-flow travel lanes on the segment adjacent to 1650 and 1690 Evans Avenue. Refer to Master Response 18 (Transit Mitigation Measures) for clarity on the proposed physical changes to the roadway network.

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Letter 16: Birkelund, James (12/19/09)

1 of 2

2 of 2

Letter 16: Birkelund, James (12/19/09)

Response to Comment 16-1

The comment is acknowledged. Background documents were made available at the Agency and the San Francisco Planning Department. All documents requested under Section 6253 of the Public Records Act were provided to the commenter.

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Letter 17: Dale-LeWinter, Marcia (1/4/10)

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Letter 17: Dale-LeWinter, Marcia (1/4/10)

Response to Comment 17-1

These comments regarding the benefits of having a permanent full-time auto-use bridge over the slough do not pertain to the technical adequacy of the environmental analysis of the Project. The commenter is correct that year-round auto use of the bridge could not be approved because the EIR does not analyze this as part of the Project, variants, or alternatives. Year-round auto use of the bridge would require additional environmental review.

For the bridge to be open for public use, the City would need to formally accept the bridge as a public right-of-way through a legislative process. Upon acceptance, the City would designate the bridge as a "for transit only" facility closed to private vehicular traffic except for specified days and times. The Project's Infrastructure Plan will establish conceptual parameters and regulatory guidance that will require that the entrance to the bridge approach streets on both sides of Arelious Walker have facilities that prevent traffic from accessing the bridge on non-game days, but allow traffic on football game days. A barrier in the form of a gate, retractable bollards, or removable barriers would be required to be installed to block the transit-only lanes such that only authorized buses and emergency vehicles can gain access, except as allowed on football game days. Photo enforcement at the bridge approach streets would also be used to monitor and restrict access. The Infrastructure Plan is an exhibit to the Interagency Cooperation Agreement (ICA) between the City and the Agency. The purpose of the ICA is to facilitate the implementation of the Project's redevelopment plans, Proposition G, and the development of the Project Site. The detailed design of the bridge will be further defined in the Developer's Major Phase and Sub-Phase planning documents that are submitted to the Agency for review, as well as the public improvement plans that are reviewed by the City.

Further, the State Parks Reconfiguration, Improvement, and Transfer Agreement, authorized under Senate Bill 792, between State Parks, State Lands, and the Agency will contain a restriction on use of the bridge, requiring that the bridge function primarily for transit, bicycle, and pedestrian use and be closed to private vehicular traffic except on football game days. Private vehicular traffic will be permitted on football game days, and, at all other times, the bridge will serve as a pedestrian, bicycle, and open space amenity.

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Letter 18: Bay Access (12/28/09)

1 of 1

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Letter 18: Bay Access (12/28/09)

Response to Comment 18-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 19: Whittle, Lola (12/14/09)

1 of 1

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Letter 19: Whittle, Lola (12/14/09)

Response to Comment 19-1

The comment is acknowledged. No response is required.

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Letter 20: Multiple Commenters (12/14/09)

1 of 1

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Letter 20: Multiple Commenters (12/14/09)

Response to Comment 20-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 21: Enea, Kristine (12/11/09)

1 of 1

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Letter 21: Enea, Kristine (12/11/09)

Response to Comment 21-1

Existing Conditions, Project-Only traffic volumes, and Year 2030 With Project Conditions traffic volumes are depicted on Figures 16, 31, and 32, respectively, in the Candlestick Point–Hunters Point Shipyard Phase II Development Plan Transportation Study (LCW Consulting, Fehr & Peers, and CHS Consulting Group, November 2009) ("Transportation Study"), which is included in Appendix D of the Draft EIR. Table 9 and Table 45 through Table 47 in the Transportation Study depict Existing Conditions and Year 2030 With Project Conditions intersection operating conditions along Innes Avenue.

Refer to Master Response 18 (Transit Mitigation Measures) for details regarding proposed roadway configuration and mitigation measures.

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Letter 22: Parkmerced Residents' Organization (12/9/09)

1 of 2

2 of 2

Letter 22: Parkmerced Residents' Organization (12/9/09)

Response to Comment 22-1

Impact RE-2, Draft EIR pages III.P-15 to -31, provides the requested analysis of the amount of open space and parkland on the Project site in comparison to the new population. This analysis concludes that the Project area will include sufficient parkland to meet residents' and employees' recreational needs without leading to overuse or physical degradation of facilities.

Response to Comment 22-2

Transit is an essential component of the Project and the transit plan proposed in the Draft EIR is the product of a great deal of analysis and collaboration between key stakeholders. The following deficiencies have been identified as top community concerns in the extensive local and citywide planning efforts for the Project - and across southeastern San Francisco more generally:

- Comprehensive transit coverage, with more direct and faster service to Downtown and other San Francisco neighborhoods, and better access to regional transit (BART, Caltrain) serving regional employment centers and destinations
- Safer, more walkable streets with complete sidewalks and neighborhood traffic-calming
- Connected, safe bicycle routes connecting to the citywide bicycle network
- Area-wide traffic management to ensure access to regional highways and arterials without overwhelming residential and commercial streets
- Comprehensive parking management coordinated with the traffic network to ensure neighborhood livability in a balanced transportation system
- Clear and managed truck routes and good movement corridors to sustain local businesses without exacerbating congestion and street safety concerns

To upgrade the transportation networks in this area and address these deficiencies, various City agencies (including SFMTA, the Planning Department, the DPW, and others) have worked with the Project Applicant and other key transportation providers to ensure that the Project includes the following key improvements:

- A BRT network bringing fast, clean and quiet bus service on transit-exclusive lanes (designed for potential conversion to light rail) that link the area with the Bayview, Executive Park and Visitacion Valley neighborhoods, and connect to Caltrain, BART and the T-Third light rail and numerous Muni bus lines
- The Yosemite Slough bridge, directly connecting Candlestick Point and Hunters Point Shipyard with permanent, dedicated BRT lanes and pedestrian and bicycle paths. The bridge would reduce transit travel times throughout Southeast San Francisco and provide fast, reliable connections to BART and Caltrain. On game days, the bridge would accommodate four lanes of auto traffic for egress to and from the proposed 49ers Stadium, reducing stadium traffic delays and congestion in residential neighborhoods. During the rest of the year, these lanes would convert to a park amenity with additional pedestrian and bicycle paths.
- Extensions of key cross-town Muni trolley and motor coach lines to directly serve every quadrant of San Francisco from this area, and increasing capacity and frequency on these lines to benefit the

Project and the surrounding areas of the Bayview, Visitacion Valley, Dogpatch, the Central Waterfront, the Mission and Potrero Hill

- Two new express bus routes linking Candlestick Point and Hunters Point directly to Downtown
- Two transit transfer hubs in the Project, and a major Caltrain/light-rail/bus/BRT hub at Bayshore Station
- Design of streets within the Project to the City's new "Better Streets" standards of accessible sidewalks, sustainable "green" infrastructure, traffic calming, landscaping, lighting and safe intersection design
- Extensive, continuous bicycle connections within the Project to connect to existing city bicycle paths, lanes and routes, as well as the Bay Trail and the Blue Greenway network
- Pedestrian improvements along main corridors between the Project and surrounding neighborhoods, including streets such as Gilman Avenue, Palou Avenue, Innes Avenue and Harney Way
- Coordinated parking and goods movement strategies to ensure high standards of livability for residents and visitors/employees coming to the area
- On-site Traffic Demand Management program for the entire Project area to maintain a balanced transportation system and ensure that transit, carpool, and other options remain viable and attractive. This includes parking management, resident and employee transit passes, and carsharing and bikesharing facilities.
- Full accommodation of game-day traffic and transit for the proposed 49ers stadium to secure both faster automobile ingress/egress than current conditions, and more frequent, reliable transit access to the rest of San Francisco, the South Bay, and the rest of the Bay Area
- State-of-the-Art "green" sustainable infrastructure innovations that adapt year-round amenities with specific game-day transportation needs, including the Yosemite Slough bridge (described above) and the green play/sports areas that would convert to game-day parking
- A phasing and monitoring plan of these transportation services, coordinated with SFMTA, to ensure the cost-effective, sustainable provision of services matching each development phase of the Project

Page III.D-37 of the Draft EIR describes the transit improvements expected to occur in the area as part of SFMTA's TEP. Page III.D-48 of the Draft EIR describes the additional transit improvements that are proposed as part of the Project.

Refer also to Master Response 18 (Transit Mitigation Measures) for details regarding proposed roadway configuration and mitigation measures designed to reduce transit delays.

The commenter suggests that new Muni routes to Downtown should be required. As described above and in the Draft EIR, the Project would implement two new express bus routes from the Project to Downtown San Francisco, as well connections to regional transit (BART, Caltrain, and the T-Third Light Rail) all of which would provide connections to Downtown San Francisco.

The commenter also suggests that a new "loop" transit route should be created around the entire site to improve connections within the site. The proposed BRT route would travel from the center of the Hunters Point Shipyard development through the center of the Candlestick Point development, providing easy connections between the two sites, as well as to other regional transit connections.

The commenter also notes that the cumulative effects of all development currently proposed in the area should be considered, particularly with respect to capacity of the T-Third light rail line. Potential capacity impacts to transit are analyzed under Impacts TR-18, TR-19, and TR-20 on Draft EIR pages III.D-100 to -104 state that under year 2030 cumulative conditions with the Project, transit service within the project study area cordons, downtown screenlines, and regional screenlines would all operate within capacity standards. The 2030 cumulative conditions include cumulative development projected for the Bayview area and for the rest of San Francisco. Based on the analysis, the Draft EIR concluded that the Project's impacts to transit capacity would be less than significant with implementation of the Project's transit operating plan.

Finally, the commenter notes that the Draft EIR does not mention high-speed rail as a necessary component for implementation of the Project nor does it discuss potential transit connections. Although high-speed rail is currently under study by the High-Speed Rail Authority (HSRA), its funding is not certain and the analysis does not assume it would be in place. The California high-speed rail project is proposed to connect Los Angeles with San Francisco, with stops in major metropolitan areas. The trains would have travel speeds of up to 220 mph, and the journey between Los Angeles and San Francisco would be made in less than 2 hours and 40 minutes. In order to meet the desired travel times between Los Angeles and San Francisco, the train would make limited stops. In the segment between San Jose and San Francisco, three stations are preferred (in San Jose, at the San Francisco International Airport [SFO], and at the San Francisco Transbay Terminal). A potential station at either Mountain View, Palo Alto or Redwood City is also being considered. Given the proximity of the project site to the downtown San Francisco terminus, it is unlikely that a stop at CP-HPS would be provided. If high speed rail were to be implemented with a stop in downtown San Francisco, residents, employees and visitors to CP-HPS would be able to take advantage of high speed intercity rail travel between major metropolitan areas (e.g., instead of taking a plane to Los Angeles, they would take the high speed train). If implemented, the high-speed rail project itself would not likely change the travel modes to and from the project site, and the transportation impacts of the project identified in the Draft EIR would not be affected.

If, independently from or in conjunction with the high-speed rail project, a downtown extension and electrification of Caltrain were implemented (a proposal that is also not funding certain and therefore not assumed or analyzed), additional transit ridership from the Project-enhanced Bayshore Caltrain station and surrounding area would likely be generated. This could have the effect of supplementing and complementing transit ridership between the Visitacion Valley/Executive Park area, and of inducing more automobile-to-transit trips along this corridor. If so, this would likely somewhat relieve both traffic congestion in the corridor and the demand for transit service on parallel existing and proposed lines, such as the T-Third, the 9-San Bruno, and the proposed Candlestick Point Express bus, and, therefore, result in no additional potential impacts.

Response to Comment 22-3

The commenter expresses concern about the balance of rental versus for-sale housing in the Project. Of the Project's below-market housing, approximately 49.2 percent will be rental-only units, and the remainder will be for-sale or rental, consisting of the following:

- 256 Alice Griffith Public Housing replacement units to be rented at rates affordable to households earning between 0 and 60 percent of Area Median Income, as defined by the US Department of

Housing and Urban Development (HUD) for the HUD Metro Fair Market Rent Area (HMFA) that contains San Francisco

- 1,388 Agency Affordable Units to be developed by the Redevelopment Agency and rented to households earning between 0 and 60 percent of Area Median Income (AMI)
- 809 Units to be privately developed as either for-sale or rental units and sold or leased to households earning between 80 and 120 percent of AMI
- 892 Units to be privately developed as either for-sale or rental units and sold or leased to households earning between 121 and 160 percent of AMI

Refer to Response to Comment 50-13 for specific information regarding the income distribution for San Francisco.

Letter 23: Winter, Rhonda (12/8/09)

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Letter 23: Winter, Rhonda (12/8/09)

Response to Comment 23-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 24: City of Brisbane (11/18/09)

1 of 1

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Letter 24: City of Brisbane (11/18/09)

Response to Comment 24-1

The Draft EIR is available for public review by appointment at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, San Francisco, CA 94103, or at the City Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103. The EIR will be posted for public review at http://www.sfplanning.org and www.sfgov.org/sfra. Additionally, the City of Brisbane received a copy of the Draft EIR and provided comments as evidenced by Letter 7 (City of Brisbane).

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Letter 25: Golden Gate Audubon Society (11/16/09)

1 of 1

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Letter 25: Golden Gate Audubon Society (11/16/09)

Response to Comment 25-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 26: Dodt, Dan (11/13/09)

1 of 1

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Letter 26: Dodt, Dan (11/13/09)

Response to Comment 26-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

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Letter 27: Da Costa, Francisco (1/12/10)

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Letter 27: Da Costa, Francisco (1/12/10)

Response to Comment 27-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 27-2

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

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Letter 28: Hamman, Michael (1/4/10)

1 of 1

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Letter 28: Hamman, Michael (1/4/10)

Response to Comment 28-1

Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) was included in the Draft EIR to analyze an alternative with preservation of all five historically eligible structures (Buildings 208, 211, 224, 231, and 253).[103] Although the text of Alternative 4 in the Draft EIR inadvertently omitted reference to Buildings 208 and 231, this was a typographical error and the text has been revised in the Draft EIR (Section F [Draft EIR Revisions]) to clarify that four buildings would be retained and/or rehabilitated according to the Secretary of the Interior's Standards. (Building 208 is included in the Project, so Alternative 4 has been clarified to indicate that it includes Buildings 211, 224, 231, and 253.) That Alternative 4 includes a reduced development plan compared to the Project does not affect the analysis of the historic preservation component in Alternative 4.

When considering Project approval, the Lead Agencies have the flexibility to approve all or any portion of the Project. This flexibility extends to approving all or any portion of an alternative as well. Therefore, the Lead Agencies could adopt the Project *and* the historic preservation component of Alternative 4 without the EIR providing a separate analysis of such an option. Both the Project's land use plan and the historic preservation option were thoroughly analyzed in the Draft EIR. The Project ultimately approved by the Lead Agencies could include a combination of components of the Project, any of the variants, and/or any of the alternatives.

The analysis of the historic preservation component of Alternative 4 would not change regardless of whether that element is combined with a variant, another alternative, or the Project. While not required, a subalternative to Alternative 4—Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation)—has been included in the Final EIR to fully respond to comments. This is not a substantially different alternative, 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 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.

Refer to Section F (Draft EIR Revisions) of this document, which discusses Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) that would retain the structures in the California Register of Historical Resources (CRHR)-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. As discussed therein, Subalternative 4A would retain and rehabilitate the structures in the CRHR historic district, including structures in this National Register of Historic Places (NRHP)-eligible Hunters Point Commercial Drydock Historic District: Drydocks Nos. 2 and 3, and Buildings 104, 204, 205, and 207. The larger CRHR-eligible historic district would encompass the boundaries and the contributory structures in the NRHP district. Subalternative 4A would avoid significant adverse effects on historic resources.

[103] It should be noted that, since publication of the Draft EIR, the decision has been made to retain Building 208 under all development scenarios

Draft EIR Section III.J (Cultural Resources and Paleontological Resources) discusses the NRHP-eligible Hunters Point Commercial Drydock Historic District, as identified in 1998. The Hunters Point Commercial Drydock Historic District is shown in Figure III.J-2 (Potential Historic District), page III.J-23. As discussed in Draft EIR Chapter II (Project Description), page II-7, the Project would retain structures in this NRHP-eligible Hunters Point Commercial Drydock Historic District, including Drydocks Nos. 2 and 3, and Buildings 104, 204, 205, and 207. Impact CP-1b (Impact of Hunters Point Phase II), pages III.J-33 to -34, notes that that the Project would have less-than-significant impacts on the NRHP-eligible district. Section III.J also identified a larger CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, shown on Figure III.J-2, that would include Buildings 208, 211, 224, 231, and 253. The Project would demolish those buildings, and, as stated in the Draft EIR, this would be an unavoidable significant adverse impact on the CRHR-eligible district. The NRHP-eligible resources would remain and would continue to be part of the NRHP-eligible Hunters Point Commercial Drydock Historic District.

As noted in the comment, mitigation measure MM CP-1b.1, pages III.J-34 to -35, requiring documentation of the CRHR-eligible resources before demolition, would reduce but would not avoid the Project's significant effects on CRHR-eligible resources. To clarify this comment, the differences between the NRHP and CRHR are also provided. The CRHR is a listing of State of California resources that are significant within the context of California's history. The CRHR criteria are modeled after NRHP criteria; however, the CRHR focuses more closely on resources that have contributed to the development of California. All resources listed in or formally determined eligible for the NRHP are eligible for the CRHR. In addition, properties designated under municipal or county ordinances are also eligible for listing on the CRHR. The primary difference between the NRHP and the CRHR is that the latter allows for a lower level of integrity for a resource to be considered historically significant.

Alternative 4 and Subalternative 4A would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Letter 29: Bay Area Council (1/4/10)

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Letter 29: Bay Area Council (1/4/10)

Response to Comment 29-1

The comment is acknowledged. No response is required.

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Letter 30: San Francisco Planning + Urban Research Association (1/4/10)

1 of 1

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Letter 30: San Francisco Planning + Urban Research Association (1/4/10)

Response to Comment 30-1

The comment is acknowledged. No response is required.

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Letter 31: San Francisco Bay Trail (1/12/10)

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Letter 31: San Francisco Bay Trail (1/12/10)

This letter is identical to Letter 87. Both letters are dated January 12, 2010, and both were jointly submitted to the Agency and the San Francisco Planning Department.

Response to Comment 31-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 31-2

In response to the comment, the text in Section III.D (Transportation and Circulation), under the San Francisco Bay Trail heading, third sentence, page III.D-19 has been revised as follows:

> … At various locations, the Bay Trail consists of paved multi-use paths, dirt trails, and in some cases, bike lanes~~,~~ and sidewalks~~, or city streets signed as bike routes~~. …

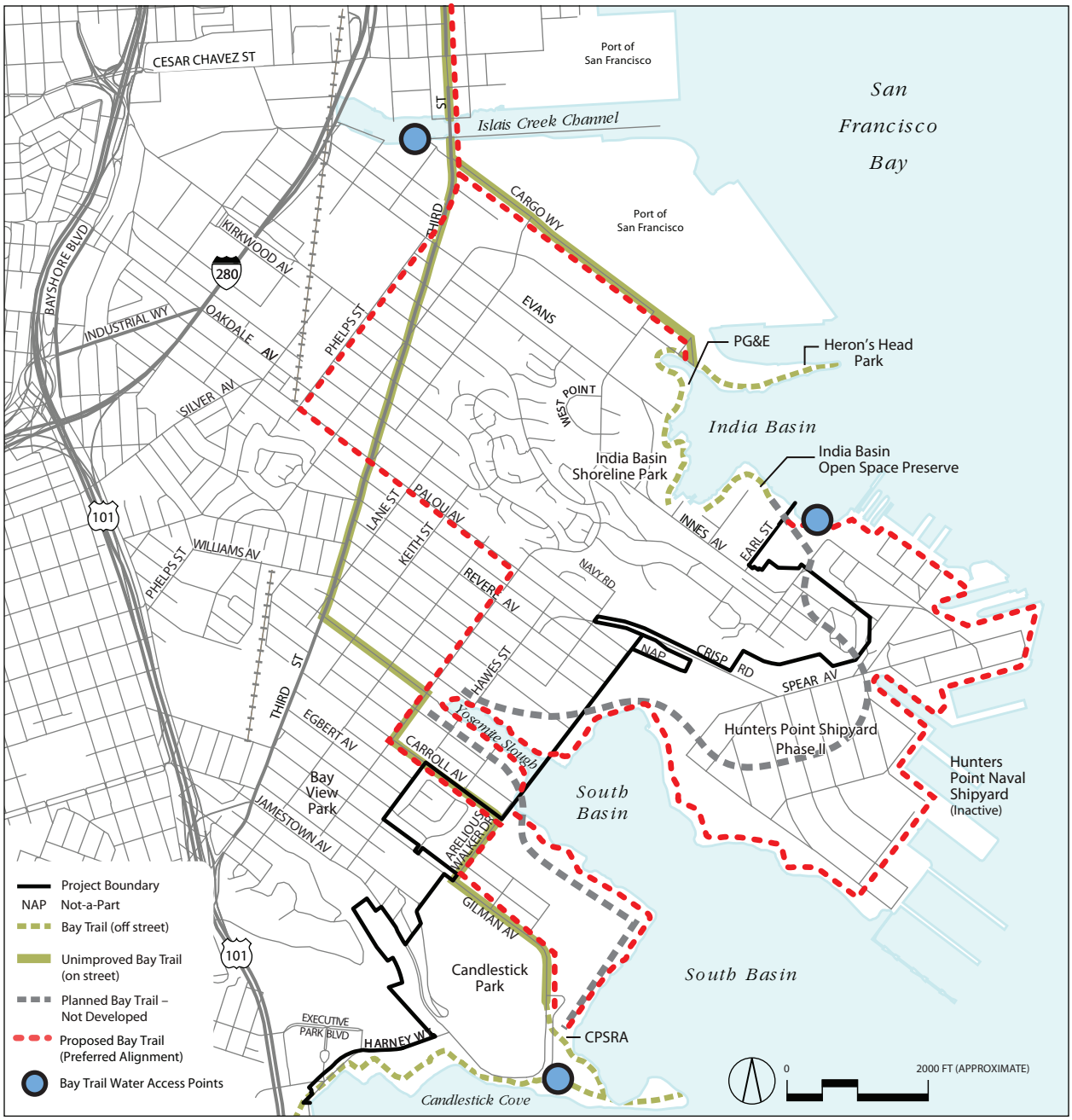
Response to Comment 31-3

In response to the comment, Figure III.B-3 (Existing San Francisco Bay Trail Route) has been revised to show the Bay Trail in the preferred alignment, along the Yosemite Slough shoreline.

Response to Comment 31-4

All proposed streetscape improvements would be designed to improve the safety and experience of pedestrians and bicyclists in the area. Improvements to the pedestrian realm are discussed on Draft EIR pages III.D-50 to -52. Generally, streetscape improvements for internal streets as well as improvements to external streets are consistent with the City Planning Department's Draft Better Streets Plan.

As shown on Figure III.D-10 (Project Bicycle Network and Bay Trail Improvements), the Project would provide a combination of new Class I, Class II, and Class III bicycle facilities throughout the project site, as well as connections to the City's bicycle network outside of the Project site. Specifically, the Project would connect to and extend existing City Bicycle Routes on Innes Avenue (Route #68), Palou Avenue (Route #7), Carroll Avenue (Route #805), and would create a new Class III route along Gilman Avenue, which would connect the Candlestick Pont development to Third Street and Paul Street, both of which are part of the City's bicycle network. The Project would also improve and connect to the Class I shared bicycle/pedestrian facility along Harney Way. Further, the Project would include a number of internal bicycle facilities, including Class I, Class II, and Class III, as shown on Figure III.D-10.



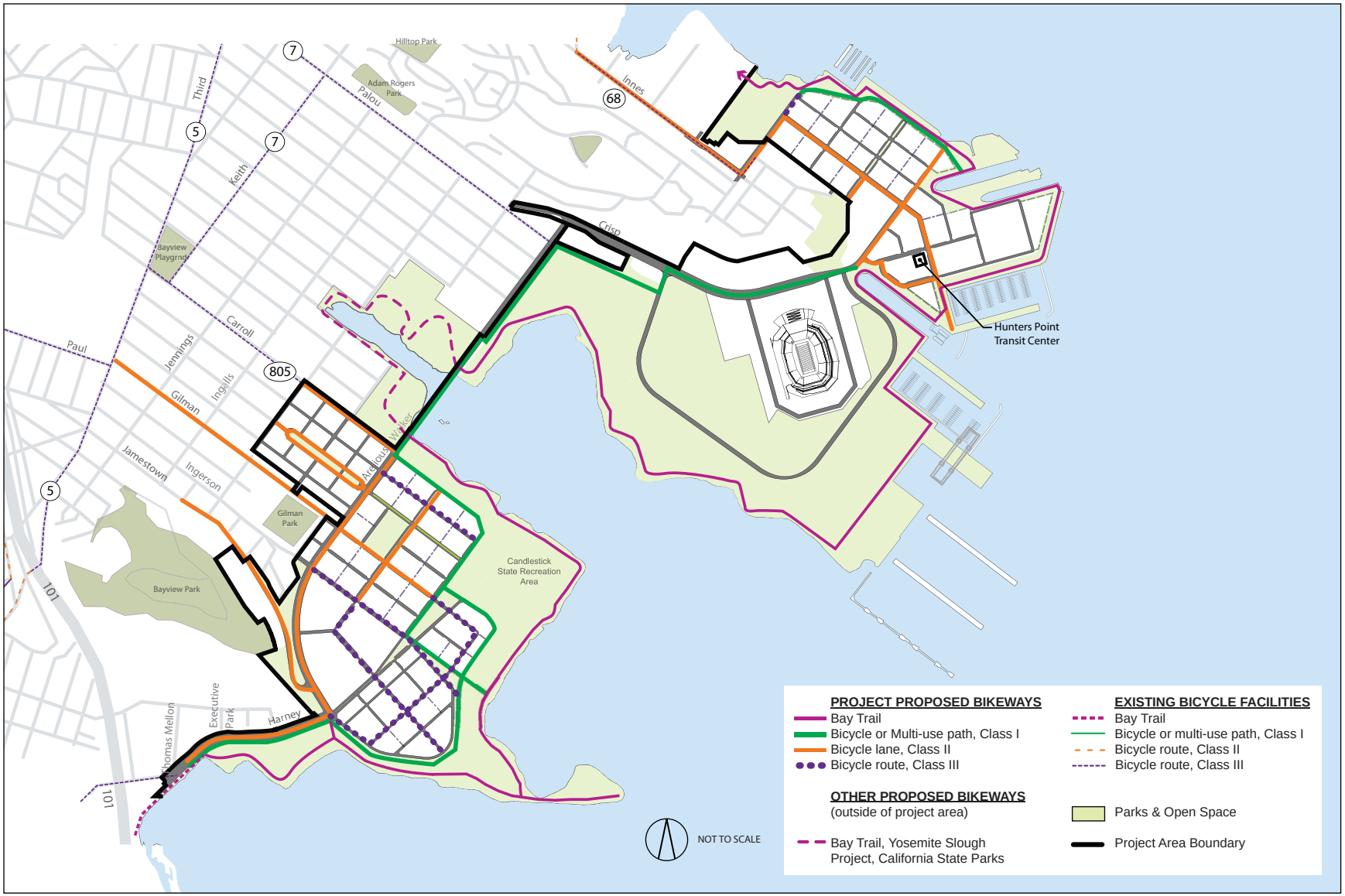
SOURCE: San Francisco Bay Trail Plan; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING SAN FRANCISCO BAY TRAIL PLAN ROUTE

FIGURE III.B-3



SOURCE: Fehr & Peers, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE III.D-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT BICYCLE NETWORK AND BAY TRAIL IMPROVEMENTS

Response to Comment 31-5

The Bay Trail alignment proposed in the Draft EIR has been amended in response to public comments. The amended alignment traces the slough shoreline and connects with the proposed Bay Trail alignments on Candlestick Point and Hunters Point. The Bay Trail must cross Arelious Walker Street on both sides of the slough. On the north side, the crossing will be possible without substantial deviation from the shoreline alignment. On the south side, visitors walking the Bay Trail will need to walk along Arelious Walker for a block inland (southward) in order to cross the street, then return to the shoreline. The trail alignment along Arelious Walker will be clearly marked. The Bay Trail will remain a continuous shoreline trail.

Response to Comment 31-6

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) with regard to Project boundary determinations.

Chapter VI of the Draft EIR presents the alternatives and includes discussion of the impacts of a "no bridge" alternative (Alternative 2). Chapter VI includes a discussion of the transportation-related impacts associated with Alternative 2.

Under conditions without the new NFL stadium, the bridge would serve the same users as it would serve under conditions with the stadium on non-game days, including transit passengers, bicyclists, and pedestrians. The bridge would be part of the Project and constructed by Project Applicant. Therefore detailed analysis of subsidy per rider is neither appropriate nor required for this EIR.

Response to Comment 31-7

The commenter requests that Table III.D-6 (Projected Football Game Day Trip Generation by Mode) be revised to reflect the number of spectators arriving by bike or by foot, and what tools the project applicant would employ to actively encourage spectators to arrive by non-motorized modes.

The game day trip generation forecasts used in the analysis are based on actual auto and transit usage at the existing stadium, with modest increases to transit use likely to occur with the robust transit improvements proposed to serve the stadium. While information on the number of patrons that currently walk or bicycle to games is not known, it is reasonable to expect an increase in the number of game day patrons who walk and bicycle to the stadium. Sufficient data is not available to estimate trips by walk and bicycles for special events at the proposed stadium, such as NFL games. However, the potential that some patrons would arrive by bicycle or walking are accounted for in the game day conditions.

The Project would improve bicycle access to the area in terms of new bicycle lanes on existing and reconfigured roadways, and bicycle access within and in the vicinity of the Project site would be maintained on game days. The Project would include a number of wider sidewalks near the stadium connecting to the adjacent neighborhoods and to transit connections to accommodate pedestrians. Further, the game day traffic control plan calls for maintenance of Class II bicycle lanes on several streets that would be reconfigured to increase peak directional auto capacity during pre- and post-game periods. For stadium patrons arriving by bicycle, the proposed stadium would provide improved amenities such as bicycle lockers at stadium entrances and a bicycle valet similar to the service operate at AT&T Park for the San Francisco Giants baseball games.

As described on page III.D-132 and III.D-133 of the Draft EIR, the stadium operator would be required to prepare a Transportation Management Plan (TMP) which would address all modes. Actions included in the TMP to encourage non-motorized modes include:

- The use of charter buses to the stadium shall be encouraged and expanded.
- 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 Travel Demand Management (TDM) plan for employees of the stadium and concessionaries, to reduce number of employees and concessionaries that arrive by auto.

Response to Comment 31-8

Chapter IV of the Draft EIR describes the transportation improvements that would occur under Variants 1 and 2, which would not include a new stadium. As noted on pages IV-18 and IV-87, which describe the transportation improvements associated with Variants 1 and 2, respectively, in the absence of stadium, the proposed Bay Trail alignment would not change from what is proposed as part of the Project.

Alternative 1 (No Project) would not include any Bay Trail improvements. Alternative 2 (CP-HPS Phase II Development, No Bridge), Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Alternative 5 (Reduced CP-HPS Phase II Development) which do not include the Yosemite Slough Bridge, and Alternative 3 (Reduced CP-HPS Phase II Development, 49ers stay at Candlestick Park) which includes the Yosemite Slough Bridge, would also have the same Bay Trail alignment as the Project.

Response to Comment 31-9

Revised Figure III.D-10 (Project Bicycle Network and Bay Trail Improvements) presents the location of the proposed bicycle improvements, including proposed Class II bicycle lanes. Note that Figure III.D-10 has been revised such that the improvements to Gilman Avenue are proposed to be Class III bicycle route rather than a Class II route, as shown in the Draft EIR. Major roadways include the streets that provide access through the Project site.

As stated in Response to Comment 44-1, Figure III.B-3 (Existing San Francisco Bay Trail Route) has been revised to include Bay Area Water Trail access points in the Project vicinity. The Bay Area Water Trail Plan, which is still in draft form, shows an existing launch site in the Project area at CPSRA. The development of shoreline parks and open space under the Project will provide access for personal non-motorized watercraft. While the precise location of access points within the Project site will be determined through future public processes, including the CPSRA General Plan Amendment process, the Project would provide access for small non-motorized recreational watercraft and, therefore, would advance the purposes of the Bay Area Water Trail.

Response to Comment 31-10

The comment is acknowledged. No response is required.

Response to Comment 31-11

In response to the comment, Figure III.B-3 (Existing San Francisco Bay Trail Route) has been revised to show the Bay Trail in the preferred alignment, along the Yosemite Slough shoreline. Refer to Response to Comment 31-9 for the revised figure.

Response to Comment 31-12

The City parkland noted on Figure III.P-3 (Proposed CPRSRA Reconfiguration) consists of Candlestick Park stadium and its associated parking lots; these facilities are under the jurisdiction of the City through the SFRPD. (Figure III.P-3 has been revised and is presented in Response to Comment 50-23 to correct the legend and clarify the park boundaries around the stadium site.) These facilities do not provide public outdoor recreation opportunities beyond the stadium use. Therefore, the development of these areas as part of the Project will not cause significant environmental impacts related to recreational opportunities. The impacts of construction and operation of the Project in this area are analyzed throughout the Draft EIR.

Further, Proposition G, approved by the San Francisco voters, authorizes removal of this land from SFRPD jurisdiction provided that the Project as a whole meets several conditions. It must include new park or open space land at least as large as the approximately 77-acre stadium site. The Project must also be consistent with the following goals:

- Produce tangible community benefits for the Bayview and the City
- Reunify the Project Site with the Bayview and should protect the character of the Bayview for its existing residents
- 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
- Incorporate environmental sustainability concepts and practices
- 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
- Be fiscally prudent, with or without a new stadium

The Project advances each of these goals and, as shown in Table III.P-3 (Residential Units and Park Acreage Provided during Each Stage of Development); it includes approximately 216 acres of new park and open space land. Thus, the Project meets Proposition G's requirements. The transfer of the stadium area out SFRPD jurisdiction is thus authorized by Proposition G, reinforcing the conclusion that such transfer would not constitute a significant environmental impact. (Table III.P-3 has been revised in Section F (Draft EIR Revisions) to reflect that development activities would occur 1 to 2 years later than originally planned.)

Response to Comment 31-13

CPSRA will remain open and accessible throughout the phases of the Project, although construction associated with the proposed improvements will require closures of some areas at some times.

The specific improvements to be provided within CPSRA, including permanent and potential interim Bay Trail alignments, will be identified by the CDPR during the CPSRA's General Plan Amendment process. Outside CPSRA, the City, Agency, and Lennar Urban are committed to working with Bay Trail planners

and stakeholders to develop plans for the specific Bay Trail alignment and to seek safe, feasible interim alignments.

Refer to Response to Comment 31-4 for a discussion of development of a "complete, open and accessible Class I multi-use Bay Trail."

Response to Comment 31-14

In general, individual responses to aesthetics and changes in aesthetics are subjective and cannot be quantified. Section III.E (Aesthetics) of the Draft EIR analyzes whether the Project would have a substantial effect on a scenic view or substantially degrade the visual character or quality of the site or its surroundings. These statements are taken directly from Appendix G (Environmental Checklist Form) of the CEQA Guidelines. In accordance with the CEQA Guidelines, the key word in determining whether an aesthetic impact is significant or not is "substantial." Substantial is generally accepted to mean fairly large, or a considerable amount, size, or quantity. This determination is a subjective evaluation based on an analysis of facts. The analysis in the Draft EIR considers the magnitude of the change relating to existing conditions in determining the significance of the impact. The Draft EIR analysis does not determine there would be *no* impact on views or the visual character or quality of the site; it determined the impact would be *less than significant* (that is, not substantial) for the reasons stated in Section III.E.

Views of the Bay and the remainder of the slough would be retained from numerous other vantage points, including along the shoreline, from the view corridors within the Project site, the CPSRA, and the bridge itself. The Project would not interfere with the Bay Trail proposed around the slough. The bridge would be constructed at the periphery of the CPSRA and slough. On the north side, it would be at the CPSRA boundary and would not encroach within the CPSRA. On the south side, it would impinge on the CPSRA for a length of about 270-280 feet (less than 300 feet). The Project would improve access to the entire area, allowing a greater number of people to take advantage of the scenic resources at CPSRA and the slough. Inclusion of a bridge into a natural setting does not necessarily degrade the character or quality of the setting or substantially block views, depending on its design. The final design of the bridge would include maximum consideration for its aesthetic appeal, integration into the natural environment, and view conservation. The bridge has also been designed with a low profile that would not protrude significantly above grade. Views of the slough and the Bay would be offered from the bridge itself, as well as from the improved shoreline areas that would be included as part of the Project, which would provide additional viewing opportunities not currently available. Additional visual simulations are provided in Response to Comment 47-46 of various viewpoints of the Yosemite Slough bridge are provided to help the reader visualize how the bridge would look in its surroundings. Refer to Responses to Comments 47-34, 47-36, 47-46, 47-58, 47-73, and 47-76 regarding aesthetic impacts relative to the bridge, slough, and CPSRA.

The traffic along the bridge would obstruct views of the Bay from only certain vantage points along the slough, and interruptions in view would occur only intermittently and for very brief periods of time when the BRT is operating. The bridge would be open to automobile traffic only on game days (10 to 12 NFL games per year).

Response to Comment 31-15

Refer to Response to Comment 31-13 regarding the City, Agency, and Lennar Urban's commitment to working with Bay Trail planners and stakeholders to develop plans for safe, feasible interim alignments during the construction phasing of the project.

Letter 32: Docomomo/US, Northern California Chapter (1/11/10)

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2 of 2

Letter 32: Docomomo/US, Northern California Chapter (1/11/10)

Response to Comment 32-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 32-2

Refer to Response to Comment 39-1, for a discussion of the adequacy of the evaluation of historic resources at Hunters Point Shipyard Phase II and 39-4 on the evaluation of Candlestick Park stadium under NRHP and CRHR criteria. As discussed in that Response, Candlestick Park stadium would not meet NRHP or CRHR criteria as an historic resource.

Response to Comment 32-3

Refer to Response to Comment 39-2 with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) as a preservation alternative, and to Section F (Draft EIR Revisions) of this document, discussing Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Response to Comment 32-4

Refer to Response to Comment 28-1 with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources. Section F (Draft EIR Revisions) of this document discusses the reuse of historic structures and reconfiguration of adjacent blocks considered in Subalternative 4A, and the uses proposed in the structures that would be retained. Section F notes that all buildings in the historic district would be rehabilitated according to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Building 231 would be reused for parking. Buildings 211 and 253 would accommodate R&D uses. The rehabilitation would occur generally as recommended by Page & Turnbull's *Hunters Point Shipyard Feasibility Study* (July 1, 2009, included in the EIR as part of Appendix J) That feasibility study proposed parking uses for Building 231, to accommodate parking as part of the overall HPS Phase II land use program, and as a use appropriate for the large volume of Building 231. The Page & Turnbull report, page 16, states, with regard to Building 231 reuse:

> Pros
>
> - Existing building is re-used in its original location
> - New program makes relatively minor impact on the original structure
> - Minor upgrades and demolition required to existing structure to accommodate program
> - Additional floor plates help brace the existing structure
> - Parking levels and/or Mechanical floor can be exchanged for office space if desired (building as configured would still meet code)

- Retail use at lower level "activates" long edges of building, engaging pedestrians and creating a lively streetscape
- Large number of cars can be accommodated without any addition of height or density
- Large roof area conducive to alternative energy production, i.e. solar.
- Excellent views from upper floor

Cons

- Addition of a floor plate alters original open plan and volume
- Independent structure is required for new floor plates
- Cost per parking spot is relatively high
- Much of the glass at the upper level would need to be replaced due to breakage
- If alternative (office) use is preferred, not all offices would have direct access to natural light (based on the wide floor plate)

Letter 33: Antonini, Michael J. (1/11/10)

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Letter 33: Antonini, Michael J. (1/11/10)

Response to Comment 33-1

As noted in the comment, the stadium would be completed prior to build-out of the Project land uses within the Candlestick Point area. Between completion of the new stadium and build-out of the land uses and parkland at Candlestick Point, the parking supply for the existing stadium would be available for stadium parking. The number of parking spaces that would be available would depend on the Project phasing and construction plan for the Candlestick Point roadway infrastructure and building construction.

As indicated on page III.D-138 of the Draft EIR, it is anticipated that any parking shortfalls (i.e., game days where parking demand exceeds the supply of 17,415 spaces) would be met similar to existing conditions, where spectators park in satellite parking lots, on street, or within private lots in the area. Some spectators may also switch to alternative modes of transportation, such as transit or charter bus. The Transportation Management Plan (TMP) that would be required to be prepared by the stadium operator as part of mitigation measure MM TR-38 (TMP for the Stadium) on Draft EIR pages III.D-132 and -133, would include parking management strategies. The TMP has not yet been developed, however, would be developed in consultation with SFMTA.

Expansion of the proposed stadium to 80,000-person capacity is not proposed as part of the Project. If it were required as part of a special event such as a Super Bowl or if San Francisco were to be selected to host a future Olympic Games, the associated venue modifications and their configuration, along with regional transportation improvements and overall arrangement of the event, would require extensive planning, analysis, and approvals, all of which are beyond the scope of the Draft EIR.

Response to Comment 33-2

The commenter references a potential multi-modal bridge over India Basin, parallel to Innes Avenue. Such a facility is not proposed by the Project, nor is it required as a mitigation measure to lessen Project impacts. Therefore, no such facility was evaluated as part of this Draft EIR.

The commenter also references a light rail extension from Bayshore Caltrain station (the current terminus of the T-Third route is at Bayshore Boulevard/Sunnydale Avenue, near the Bayshore Caltrain station). The referenced extension would follow the proposed BRT alignment along Harney Way, across Yosemite Slough, through the Hunters Point Shipyard site, and extend along Innes Avenue back toward Third Street, essentially forming a loop around the Bayview neighborhood. Such a route extension is not proposed by the Project, nor is it required as mitigation measure to lessen project impacts. Further, funding for such as system has not been identified. Therefore, no such service modification was evaluated as part of this Draft EIR. However, provision of light rail in the future, as suggested by the commenter, is not precluded by the roadway network improvements proposed by the Project.

The commenter also notes that similar multi-use turf/parking field facilities are provided at the new Dallas Cowboys stadium. This is acknowledged. No response is required.

Response to Comment 33-3

Comment acknowledged. The grading plan for Hunters Point Shipyard will provide a stadium site that is approximately 60 inches above its current grade and the rest of the parking/playing fields areas will be raised about 55 inches. This will bring the site above the 55-inches-sea-level-rise-by-2100 scenario provided as guidance by the State.

Response to Comment 33-4

The commenter suggests that additional lanes be provided on the Yosemite Slough bridge, that an extension of Carroll Avenue be provided, and that the Yosemite Slough bridge be open to traffic at all times.

Additional Lanes on Yosemite Slough Bridge—The Yosemite Slough bridge has been designed to accommodate four lanes of traffic between Harney Way and the proposed stadium. The proposed stadium egress plan would achieve an over 40 percent increase in stadium exit capacity compared to the existing facility and would provide a typical post-game clearance time similar to other new NFL stadiums (approximately 1 hour).

Under conditions with the Yosemite Slough bridge, the primary exit constraint is the gates exiting the stadium parking lot. As a result, widening Yosemite Slough bridge would not increase stadium exit capacity unless additional exits from the stadium parking lot were provided and Crisp Road, Arelious Walker Drive, and Harney Way were all widened beyond their proposed configurations. Widening these roads would be inconsistent with the project's goals of creating a transit-oriented, pedestrian and bicycle-friendly neighborhood because they would increase roadway crossing distances and generally make transit less accessible. Therefore, a wider bridge was not considered since it would not be necessary in order to achieve acceptable stadium exit times and due to the general inconsistency with the Project's goals and the City's Transit First policy.

Carroll Avenue Extension—The commenter also suggests that Carroll Avenue be widened to increase traffic capacity, and that an extension of Carroll Avenue west of Third Street to the Paul Avenue/US-101 interchange be considered. The project proposes to widen Carroll Avenue between the Project and Third Street. The resulting cross section would provide 12-foot sidewalks on each side, a 7-foot on-street parking lane on each side, and two vehicular travel lanes on each side. Further widening to increase stadium egress, as suggested by the commenter, would result in sidewalks that would be inconsistent with the City's Draft Better Streets Plan (which recommends a minimum 12-foot width) or acquisition of private property, including Production, Distribution, and Repair (PDR) businesses and private residences, neither of which would be considered feasible or desirable.

An extension of Carroll Avenue to connect with the Paul Avenue/US-101 interchange was evaluated as part of the Bayview Transportation Improvement Projects (BTIP) Study, and at that time was determined to be difficult due to geometric constraints, costs associated with relocation of the spur tracks that are located adjacent to the main Caltrain tracks in the vicinity of Carroll Avenue, and overall costs even though it would provide some circulation options. Constructing Carroll Avenue to the west to connect with Egbert Avenue west of the Caltrain tracks would require an overcrossing or undercrossing of the Caltrain tracks and spur tracks that run parallel to Third Street. Going under the tracks was determined to be infeasible due to the large-capacity sewer line that runs parallel to the tracks, while an overcrossing was determined

to be challenging and expensive, as it would result in a very steep downgrade and would conflict with entrances to existing and planned development.

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 33-5

As noted on page II-50 of Chapter II (Project Description) of the Draft EIR, new development at HPS Phase II would begin with the construction of the 49ers stadium, scheduled for completion by 2017. It is possible that the stadium could be completed earlier than 2017 depending on availability of funding. If any substantive changes to Project phasing are made during the course of implementation of the Project, City and Agency staff would make a determination whether the changes materially affect the analysis in the EIR and whether additional environmental review is necessary.

As described in Section B (Project Refinements), since publication of the Draft EIR, the development schedule has been updated to reflect that site preparation activities would begin 1 to 2 years later than originally planned, and the completion of building construction would be extended from 2029 to 2031, with full occupancy by 2032. Refer to Section F (Draft EIR Revisions) for the updated text and figures (including page II-50).

Response to Comment 33-6

The parking structure at the Candlestick Point retail center has been proposed to accommodate approximately 2,300 parked vehicles. On game days, 1,000 of these spaces would be reserved for game-day patrons, leaving 1,300 parking spaces available for the retailers located in the 635,000 square foot regional retail center. It is not feasible to reserve additional spaces in this garage for game-day patrons and still provide adequate parking for businesses in the retail center. Further, expanding the proposed facility to 8,000 spaces as suggested by the commenter is not proposed as part of the Project.

Finally, the commenter references travel within the Candlestick Point site and travel to the stadium site by light rail. The transit service proposed would be BRT and not light rail. Although the BRT has been designed so as not to preclude potential conversion to light rail at a later date if deemed desirable by decision makers, it is important to note that light rail is neither proposed as part of the project nor proposed by SFMTA, and has not been considered in the Draft EIR.

Response to Comment 33-7

The comment is acknowledged. No response is required.

Response to Comment 33-8

As indicated on Figure III.D-17 in the Draft EIR, space for 44 RVs, 17 limousines, and 340 buses would be provided in the dual-use turf surface parking lots adjacent to the new stadium.

Response to Comment 33-9

The commenter notes that the term "South Bay" as used in the Draft EIR to describe the geographic distribution of 49er season ticket holders refers to the entire San Francisco Bay Area Peninsula (Peninsula) south of the City of San Francisco, including all of San Mateo County. In response to the comment, the text in Section III.D (Transportation and Circulation), third paragraph, third sentence (under Table III.D-6), page III.D-61, has been revised as follows:

> … The information obtained from the 49ers indicates that approximately 40 percent of the season ticket holders reside in the South Bay (including all of San Mateo County), 16 percent in the East Bay, 14 percent within San Francisco, and 10 percent in the North Bay counties. …

Additional detail regarding the location of 49ers season ticket holders (i.e., the percentage in San Mateo County versus counties to the south) was unavailable, but would not affect the transportation analysis since the ingress/egress routes would remain the same.

The commenter also suggests that roadways should be widened to improve stadium clearance times beyond those provided by the project. Refer to Response to Comment 33-4, above. Generally, widening existing roadways to provide increased vehicular exit capacities from the stadium beyond those proposed would involve acquisition and demolition of existing private property, affecting existing PDR uses and private residences.

Response to Comment 33-10

Alternative 3, discussed in Section VI.C in the Draft EIR, evaluates the environmental impacts associated with a project that would retain Candlestick Park and not construct a new stadium at the Hunters Point Shipyard. These other ideas (e.g., expanding the arena to 20,000 seats; building the arena at Hunters Point) were addressed in Chapter VI (Alternatives) (Table VI-11, pages VI-170 through VI-172). These ideas were rejected because operation of the arena could increase traffic-related impacts, would result in additional trips to HPS Phase II, and could increase impacts along the Third Street corridor.

These comments do not address the technical adequacy of the environmental analysis of the Project. The comments relate to policy issues that will be identified herein for review by decision makers during the Project approval process.

Response to Comment 33-11

Currently, there is no regularly scheduled transit service to Candlestick Park. On game days, special express and shuttle bus service is implemented connecting the stadium with regional transit. Despite the fact that transit service to Candlestick Park is very unique and not part of the City's regular transit system, approximately 19 percent of existing patrons opt to take transit to 49ers football games, based on data provided by the San Francisco 49ers.

According to the 49ers, patrons have consistently expressed a desire to see new and improved transit service to football games as an alternative to travel by auto. The Project would enhance transit service during game days, and would:

- Include substantial investment in regularly scheduled transit service to and from the new stadium (including extension of trolley and motor coach service and introduction of new Bus Rapid Transit service)
- Provide transit preferential treatments designed to improve transit travel time and reliability through exclusive transit right-of-way on Palou Avenue and along the BRT route
- Manage the provision of parking immediately adjacent to the stadium to accommodate multi-modal access and support realistic transit ridership goals

Given these factors, the familiarity and sophistication of Bay Area patrons with respect to using transit, and the demonstrated evidence from other NFL stadium locations that NFL patrons are interested and willing to use transit as a means to reach games, an increase in transit ridership of six percentage points from 19 percent to 25 percent would be within a reasonable range of increased transit utilization.

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Letter 34: San Francisco Architectural Heritage (1/11/10)

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Letter 34: San Francisco Architectural Heritage (1/11/10)

Response to Comment 34-1

This comment contains introductory information and refers to specific historic resource topics in the Draft EIR in subsequent paragraphs in the letter. Those comments are addressed below.

Response to Comment 34-2

Refer to Response 39-1 with regard to the Draft EIR evaluation of Hunters Point Shipyard, and the adequacy of conclusions on historic resources and potential historic districts.

Response to Comment 34-3

Refer to Response to Comment 39-4 with regard to the evaluation of Candlestick Park stadium under NRHP and CRHR criteria. That response cites and summarizes a recent study that evaluates Candlestick Park Stadium, as a 50-year-old structure in 2010, for eligibility for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and San Francisco historic registers. As discussed in Response to Comment 39-4, Candlestick Park stadium would meet NRHP and CRHR criteria as an historic resource for association with events, the introduction of major league baseball on the West Coast; and for association with persons, the career of Willie Mays with the San Francisco Giants. But the stadium lacks integrity related to its period of significance under both associative criteria, due to the extensive alteration of the stadium in the 1970s. Therefore, the stadium would not be considered a historic resource.

Response to Comment 34-4

The Draft EIR found that the Project would not have a significant adverse effect on the NRHP-eligible Hunters Point Commercial Drydock District. As stated on Draft EIR pages III.J-33 to -34:

> The Project proposes to retain the buildings and structures in the potential Hunters Point Commercial Dry Dock District, identified in 1998 as eligible for listing in the NRHP. Drydocks 2 and 3 and Buildings 140, 204, 205, and 207 would be rehabilitated using the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Page & Turnbull, architects and historic resource consultants, reviewed the proposed treatment and rehabilitation of Drydocks 2, 3, and 4. The treatments would include repair of concrete surfaces of the drydocks and addition of guardrails along their perimeter. Page & Turnbull found that the proposed treatments would provide a methodology for resolving severe deterioration issues, and ultimately provide for the longevity of the historic resources; the treatments would be consistent with the *Secretary of the Interior's Standards for Rehabilitation*[266] (refer to Appendix J [Drydock Assessment]). Heritage Park is proposed at Drydocks 2 and 3 and would include interpretive display elements related to the history of HPS. Per CEQA Guidelines Section 15064.5(b)(3), these impacts would be mitigated to a less-than-significant level.

As discussed on in Section III.J, pages III.J-33 to -34, the Project would demolish structures identified as part of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District; this would be a significant and unavoidable adverse effect. Refer to Response to Comment 28-1 with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would

retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

The Draft EIR includes supplementary information on the historic treatment of the Drydocks 2, 3, and 4 as atypical structures. All buildings to be retained in the NRHP-eligible Hunters Point Commercial Drydock Historic District, would, as noted, be rehabilitated under the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The Draft EIR, page III.J-29, third full paragraph, notes:

> CEQA Guidelines Section 15064.5(b)(3) states that "generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings shall be considered as mitigated to a level of less than a significant impact on the historical resource.

Draft EIR Figure III.J-2 (Potential Historic District), page III.J-23, illustrates historic resources identified in the Draft EIR. The legend indicates the boundary of the NRHP-eligible Hunters Point Commercial Drydock Historic District, and the location of Drydocks 2 and 3, and Buildings 140, 204, 205, and 207 that are contributory to that district. Figure III.J-2 also indicates the boundary of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District (which encompasses the smaller NRHP district), and the locations of Buildings 208, 224, 211, 231, and 253 that are contributory to that district. (It should be noted that Building 208 would now be retained as part of the Project and all variants and alternatives.)

Response to Comment 34-5

Refer to Response to Comment 28-1 with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources. As discussed therein, Subalternative 4A would retain and rehabilitate the structures in the CRHR historic district, including structures in the National Register of Historic Places (NRHP)-eligible Hunters Point Commercial Drydock Historic District: Drydocks Nos. 2 and 3, and Buildings 104, 204, 205, and 207. Subalternative 4A would maintain the land use program at HPS Phase II and avoid significant adverse effects on historic resources.

Response to Comment 34-6

The Project would develop interpretive materials and displays related to the history of the site at appropriate locations, including Heritage Park—the Hunters Point Commercial Drydock Historic District—and other locations related to the nineteenth and twentieth century history of the Shipyard.

The following underlined text changes on Draft EIR page III.J-21, paragraph two, note that the Navy is completing the National Register process for the Hunters Point Commercial Drydock Historic District identified in 1998:

> The HPS Phase II site contains buildings and structures identified historic significance. Since Shipyard decommissioning in 1974, two studies evaluated historic resource at the Shipyard. In 1988, a report concluded that four properties were eligible for listing on the NRHP: Drydock 4; Building

253; the 450-ton Re-gunning crane, and the Hunters Point Commercial Dry Dock Historic District (including Drydock 2, Drydock 3, remnants of Drydock 1 and Buildings 140, 204, 205, and 207).[252] The Deputy State Historic Preservation Officer (SHPO) concurred with the findings of the 1988 report. In 1997, JRP Historical Consulting Services completed an updated report for HPS and concluded that Drydock 4 and the potential Hunters Point Commercial Dry Dock Historic District appeared eligible for listing in the NRHP. The JRP report concluded that Building 253 and the Re-gunning crane, identified in the 1988 study, were not eligible due to integrity issues. In 1998, the SHPO concurred with findings that the Drydock 4 and the potential Hunters Point Commercial Dry Dock Historic District appeared eligible for inclusion in the NRHP.[253] The Navy is currently completing National Register nominations and Historic American Engineering Records documentation for the Hunters Point Commercial Dry Dock Historic District, pursuant to the Memorandum of Agreement with SHPO and the Advisory Council on Historic Preservation, discussed under "Regulatory Framework," below.

Response to Comment 34-7

This comment contains concluding information and refers to preceding specific historic resource topics in the Draft EIR. Those comments are addressed above.

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Letter 35: Hamman, Michael (1/12/10)

Response to Comment 35-1

The commenter notes that the transportation analysis is based on full build-out of the project, which includes a mix of uses that reduce the external vehicle traffic generation, since many trips can be made within the project site. The commenter suggests that the residential component of the project would be constructed prior to construction of essential neighborhood-serving retail services and that the reductions taken in the transportation analysis are not valid until those retail services are constructed.

While the commenter is correct that the Project would be built out over many years, it is important to note that each major phase of development would include a mix of uses, including residential units and neighborhood-serving retail. In addition, transit lines serving the development phases would be extended and increased in frequency to support transit-oriented travel behavior. This would be matched with street and sidewalk improvements to support increased walking and bicycle trips.

As described in Section B (Project Refinements), since publication of the Draft EIR, the development schedule has been updated to reflect that site preparation activities would begin 1 to 2 years later than originally planned, and the completion of building construction would be extended from 2029 to 2031, with full occupancy by 2032. Section F (Draft EIR Revisions) contains updated text and figures (including Table II-15). As shown in Table II-15 on page II-79 of the Draft EIR, the first phase of development includes 2,160 residential dwelling units, 583,000 square feet of research and development space, and 84,000 square feet of neighborhood-serving retail space at the Hunters Point Shipyard site. Ultimately, as shown on the table, all of the neighborhood-serving retail in HPS and Candlestick Point (a total of 250,000 square feet) would be constructed by the third development phase (out of four). The fourth development phase consists of additional residential development at Candlestick Point, such that the retail referenced by the commenter would be constructed prior to the full residential program.

Therefore, even in early phases, when the overall trip generation would be less than it would be under full build-out, the Project would contain a mix of uses that would offer essential neighborhood serving retail trips that could be made within the project site. The analysis presented in the transportation study, which is based on full project build-out, presents a worst-case analysis, since the trip generation would be less during interim years.

Response to Comment 35-2

The commenter states that residents of the Project would live far away from retail, which would cause them to be more likely to travel by auto than by transit. Refer to Response to Comment 35-1, above, which describes that the retail component of the Project would actually be fully built out prior to build-out of the residential component.

The commenter also questions the validity of the transit mode share forecasts. The predicted transit usage is based on a statistical regression analysis developed from travel patterns currently made by travelers within other neighborhoods of San Francisco. The forecasting model accounts for type of trip (work vs. non-work), parking costs, and travel times as influential predictors of transit use. Other variables were considered but found to not be statistically significant (i.e., they were not useful predictors of transit use).

The commenter also notes that if large amounts of development occur prior to implementation of transit services, auto-oriented travel patterns would develop that are difficult to change making transit less successful once implemented. The transit phasing plan has been designed with this concept in mind, such that transit services would be implemented earlier in the Project schedule, and transit-oriented travel patterns would be encouraged from the early stages. New transit service would be established at approximately 20 percent of completion of the first major development phase, and transit services to each development area would largely be fully in place by the time approximately 50 percent of completion of build-out of each of the Candlestick Point and Hunters Point Shipyard sites.

Response to Comment 35-3

As described on page III.D-63 of the Draft EIR, parking demand was estimated based on the SF Guidelines methodology. The parking demand rates in the SF Guidelines were based on citywide average demand surveyed throughout the City. As described on pages II-34 and II-35, the Project would include a number of Transportation Demand Management (TDM) strategies designed to reduce automobile travel and encourage residents, employees, and visitors to the Project to walk, bicycle, and use transit. These strategies, in addition to the robust transit service planned for the new neighborhoods, should reduce automobile dependence, thereby reducing parking demand. The parking demand analysis presented in the Draft EIR does not include any reduction or credit for the TDM strategies described above, and is thus considered conservatively high.

The project's forecasted parking demand, supply, and projected parking shortfall is discussed as part of Impact TR-35, presented on pages III.D-120 through III.D-125. As described, in San Francisco, parking supply is not considered a permanent physical condition, and changes in the parking supply would not be a significant environmental impact. Therefore, the parking shortfall associated with the Project is considered a less than significant environmental impact.

Response to Comment 35-4

As noted on page III.D-125, Impact TR-36 discusses the impact of removing on-street parking. The provision of a bicycle lane on Innes Avenue would result in removal of 51 parking spaces on the south side of the street. Parking would still be available on the north side of Innes Avenue, adjacent to residential development. In addition, off-street parking would likely be provided as part of any new development along Innes Avenue (i.e., new development not part of this Project). Project-related parking impacts discussed in Impact TR-36 are considered less than significant because the parking demand could be accommodated along other portions of Innes Avenue and other streets in the study area. At some locations, residents and visitors would have to walk further between their parking space and destination. In addition, the City of San Francisco does not consider loss of parking supply to be a significant impact.

Finally, the commenter suggests that removal of public on-street parking spaces would be considered a taking. On-street parking spaces are publicly owned and not for the sole use of adjacent uses, and are therefore, not considered a taking.

The commenter suggests that BRT and/or light rail is proposed for Innes Avenue. Neither BRT nor light rail is proposed for Innes Avenue. Further, the commenter suggests that bicycle lanes adjacent to truck routes would be dangerous. While Innes Avenue is identified as an existing route with substantial truck

traffic, redevelopment of the Shipyard would transform the roadway's character from primarily industrial traffic to traffic from residential and office uses, which would be less truck-intensive.

A Class II bicycle lane, as proposed for Innes Avenue, is consistent with the bicycle lanes for Innes Avenue included in the San Francisco Bicycle Plan, which was cleared in its own environmental review process. Further, the proposed roadway design would meet City of San Francisco design standards. These standards were developed to safely accommodate all roadway users, including transit, bicycles, trucks, pedestrians, and private automobiles.

Although there is a separate planning study underway contemplating potential future development along Innes Avenue, there is no planning that identifies that a separate driveway would be provided for each 25-foot-wide parcel on Innes Avenue. The existing and potential future conditions on Innes Avenue would not be unlike other streets in San Francisco. However, even if there were driveways for each 25-foot-wide parcel, they would be designed according to City standards and exiting vehicles would be visible to bicyclists.

As shown on Figure III.D-5 in the Draft EIR, the Bay Trail is not proposed to extend on Innes Avenue. The Project would not affect the Bay Trail west of Earl Street.

The commenter suggests an alignment of the Bay Trail through the India Basin site along Hudson Street be considered as a mitigation measure. As discussed above, no impact to bicycles was identified and therefore no mitigation is required. Further, the Project Applicant does not have control over the Hudson Avenue alignment, which is part of a separate development project. However, the Project would not preclude the use of Hudson Avenue as a continuation of a recreational Bay Trail, and such a use could be studied as part of the planning for redevelopment of India Basin. The analysis of bicycle impacts on Innes Avenue is therefore adequate and additional analysis for the EIR is not required.

Response to Comment 35-5

Continued analysis of the low-pressure water systems since issuance of the Draft EIR has confirmed no off-site modifications to the City system are required and that the systems will meet or exceed the City's pressure requirements.[104] Specifically, an analysis of the low-pressure water system has shown that no improvements to the City water system are required between the Project site and the University Mound water storage/supply (located in the vicinity of the intersection of Bacon Street and Bowdoin Street), as existing piping will provide the required pressure and flow without any modifications. The Draft Low Pressure Water Analysis for CP-HPS Phase II has been reviewed by the SFPUC and the SFPUC has not required any improvements to the existing system outside of the Project site.

Response to Comment 35-6

The scientific evidence suggesting that electromagnetic field exposures pose any health risk is weak, according to a report published by the National Institutes of Health.[105] According to the World Health

[104] *Candlestick Point/ Hunters Point Shipyard Infrastructure Concept Report* (2007) prepared by Winzler & Kelly Consulting Engineers.
[105] NIEHS Report on Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields, NIH Publication 99-4493, May 1999.

Organization (WHO),[106] some individuals have reported a variety of health problems that they relate to exposure to electromagnetic fields (EMF). This reputed sensitivity to EMF has been generally termed "electromagnetic hypersensitivity" or EHS. EHS is characterized by a variety of non-specific symptoms that differ from individual to individual. EHS has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem. Not only has there been no accepted link between EHS symptoms and EMF exposure, there has been no determination of a threshold of exposure, expressed in length of exposure or magnitude of the field, beyond which there are substantiated adverse health effects. There is no demonstrable impact related to EMF exposure as a result of the Project, and this impact does not require further analysis.

Overhead power lines exist all over the City, and could represent a safety hazard if a vehicle collides with a power pole with sufficient force or a seismic event causes power lines to break. These events could cause interruption in service. However, interruption in service is not an identified CEQA threshold and requires no further analysis. While traffic would increase on Innes Avenue as a result of the Project, there is no measurable increased risk of collisions with power poles that independently warrants undergrounding of the power lines along Innes Avenue. The undergrounding of utility lines is within the purview of Department of Public Works: Utility Undergrounding Program. Within the Bayview, major corridors contain undergrounded utilities, including 3rd Street, Mendell Avenue, and Evans Avenue.[107]

The Project has not yet selected an electricity provider. The electricity provider may service the project via new extensions of the 12KV distribution and or 115KV transmission lines into the Project site and improvements could include a new substation within HPS Phase II (page III.Q-61 of the Draft EIR). Because the exact connection is unknown, it is also unknown what voltage increases would occur along the High Capacity Trunk Line on Innes Avenue as a result of Project connections. Page III.Q-61 of the Draft EIR states:

> … all utility connections would be constructed in accordance with the Uniform Building Code, City ordinances, and Department of Public works standards to ensure an adequately sized and properly constructed electrical transmission and conveyance system.

Thus, voltage increases along this distribution line, if any, are regulated, and would not represent a substantial safety risk to area residents. With regard to reliability of the power supply, that is within the purview of the utility providers. PG&E and California Public Utilities Commission (CPUC) have indicated there is sufficient capacity to accommodate the needs of the Project.

Response to Comment 35-7

The reliability of telecommunications services are outside the scope of the CEQA process. There are no known safety problems associated with existing telecommunications service in the City. Further, no evidence is provided by the commenter to substantiate that there are safety problems associated with existing telecommunications service in the City, and there is no reason to believe that there would be any safety concerns arising as a result of the Project.

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[106] World Health Organization, "Electromagnetic Fields and Public Health," Fact Sheet No. 296, December 2005.
[107] http://www.sfgov.org/site/sfdpw_page.asp?id=32694. Accessed March 12, 2010.

Response to Comment 35-8

Whether overhead power lines would be the subject of a terrorist attack is speculative and outside the scope of the CEQA process. Comment is noted.

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Letter 36: San Francisco Green Party (1/12/10)

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Letter 36: San Francisco Green Party (1/12/10)

Response to Comment 36-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 36-2

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 57-1 and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Thousands of journal articles, newspaper stories, and publications on the topic of climate change, and associated sea level rise, have been published in the past 20 years, and no document of reasonable size could summarize them all. Instead, the EIR selected eight peer-reviewed documents that are not only widely recognized as very credible sources in the scientific community, but are also accepted as the most relevant to the specific subject of sea level rise.

Additional documents that are either not refereed (peer-reviewed) or are less high-profile, but are illustrative of ongoing development in the scientific, engineering, and planning communities, were also reviewed. Most of these publications do not include specific analysis of sea level rise; instead, they present observations of ice sheet melt rates, carbon dioxide (CO_2) levels, temperature changes, etc. along with empirical or hypothetical Projections of sea level rise. For example, the recent *Copenhagen Diagnosis—Updating the World on the Latest Climate Science* report was a summary of ongoing literature rather than new analysis. A few quotes from the report that are specific to sea level rise are reproduced below:

> Future sea level rise is highly uncertain, as the mismatch between observed and modeled sea level already suggests.
>
> Based on a number of new studies, the synthesis document of the 2009 Copenhagen Climate Congress (Richardson et al. 2009) concluded that "updated estimates of the future global mean sea level rise are about double the IPCC Projections from 2007."
>
> Although it is unlikely that total sea level rise by 2100 will be as high as 2 meters (Pfeffer et al. 2008), the probable upper limit of a contribution from the ice sheets remains uncertain.

Additionally, commentaries on the methods which have been used to determine sea level rise estimates have been published by individuals such as James Hansen. Hansen's commentary states:

> As an example, let us say that ice sheet melting adds 1 centimetre to sea level for the decade 2005 to 2015, and that this doubles each decade until the West Antarctic ice sheet is largely depleted. This would yield a rise in sea level of more than 5 metres by 2095.
>
> Of course, I cannot prove that my choice of a 10-year doubling time is accurate but I'd bet $1000 to a doughnut that it provides a far better estimate of the ice sheet's contribution to sea level rise than a linear response.

These types of articles do not provide fact-based scientific analysis of sea level rise, but rather provide illustrative cases. As such, they have not been reviewed or included in our sea level rise estimates.

Also, it is recognized that recent reports published by NASA scientists show that there is active ice sheet melting which has the potential to impact estimates of sea level rise. However, the reports referenced by the commenter provide no scientific analysis of the relation of this ice sheet's melting rate to the estimate of sea level rise by 2100, or over the next century.

The EIR recognizes that the science related to climate change and sea level rise rates will continue to evolve into the future; therefore, Project plans do not include a specific upper limit of sea level rise. Rather a risk-based analysis was conducted, based on development elevations, setbacks, and a Project-specific Adaptation Strategy was prepared for the Project. The Adaptation Strategy includes preparing an Adaptive Management Plan which outlines an institutional framework, monitoring triggers, a decision-making process, and an entity with taxing authority that would pay for infrastructure improvements necessary to adapt to higher than anticipated sea levels.

With respect to the effects of sea level rise on the design of Yosemite Slough bridge, Draft EIR Appendix N2 (MACTEC, Yosemite Slough Bridge Drawings—Stadium and Non-Stadium Options) states that 55 inches of sea level rise are incorporated into the design to the bridge clearance over the existing 100-year flood elevation.

Response to Comment 36-3

Refer to Master Response 8 (Sea Level Rise) for a discussion of the potential effect of sea level rise on liquefaction potential and potential interaction with and leaching of hazardous materials.

Response to Comment 36-4

Refer to Master Response 6 (Seismic Hazards), Master Response 7 (Liquefaction), Master Response 8 (Sea Level Rise), as well as Impacts GE-5, GE-7, and HY-12, and mitigation measures MM GE-5a and MM HY-12a.1 for discussions on the interrelationship between potential liquefaction and sea level rise. Liquefaction occurs in loose, non-plastic soils below the groundwater table. The comment presents a concern that sea level rise will cause a subsequent rise in the groundwater table, thereby increasing the amount of soil susceptible to liquefaction. As indicated in Master Response 7, design-level liquefaction analysis will factor in a 36-inch rise in groundwater elevation to account for the impacts of predicted sea level rise on liquefaction susceptibility of site soils. Site-specific final design geotechnical studies will be performed to determine what engineering and construction measures need to be implemented to mitigate liquefaction potential if present.

Response to Comment 36-5

Refer to Master Response 8 (Sea Level Rise) for a discussion of the potential effect of sea level rise interaction with hazardous materials and a discussion of sea level rise considered and how the Project will deal with higher levels of sea level rise should they occur.

Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the residual contaminants that may remain at the Hunters Point Shipyard site after transfer of Shipyard property from the Navy.

Response to Comment 36-6

Refer to Master Response 9 (Status of CERCLA Process for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of landfill investigation and cleanup. Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of the asbestos monitoring and control measures that would be implemented during soil-disturbing activities. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials. Refer to Master Response 15 (Proposition P and the Precautionary Principle) regarding concerns about toxins. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of the notice that will be given to property owners, residents, and neighbors on the environmental restrictions and other cleanup issues.

Response to Comment 36-7

Refer to Master Response 9 (Status of the CERCLA Process) and Master Response 13 (Post-Transfer Shipyard Cleanup) regarding ionizing radiation.

Response to Comment 36-8

Refer to Master Response 12 (Naturally Occurring Asbestos) and Master Response 15 (Proposition P and the Precautionary Principle) regarding removing toxins.

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Letter 37: San Francisco Bay Herring Fisherman's Association (1/12/10)

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Letter 37: San Francisco Bay Herring Fisherman's Association (1/12/10)

This letter is identical to Letter 95. To avoid duplication, all responses are provided to Letter 37, which is the first occurrence of these two letters in this C&R document.

Response to Comment 37-1

The Draft EIR identifies known herring spawning areas near the project site, as discussed on page III.N-34 of the Draft EIR and depicted in Figure III.N-4:

> According to NMFS, known herring spawning areas within the area immediately adjacent to the Project site include several piers and areas of shoreline both north and south of the proposed marina (refer to Figure III.N-4 [Pacific Herring Spawning Habitat]).

With respect to the type of piles to be used, as discussed in Impact BI-9b, page III.N-82 (and Table ES-2, page ES-104) , the current design for the Yosemite Slough bridge would have columns supported by steel piles. Nevertheless, unsheathed creosote-soaked pilings are not proposed and will not be used. In response to the comment, the text in mitigation measure MM BI-9b, to add a third design measure, has been revised as follows:

MM BI-9b …

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.*

…

With respect to the placement of pilings during the herring spawning season (December through February), mitigation measure MM BI-9b also requires installation of steel piles during the June 1 to November 30 work window, or as otherwise recommended by National Marine Fisheries Services (NMFS). However, in response to the comment, the text in mitigation measure MM BI-9b has been revised to add the following construction measure:

MM BI-9b …

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.*

~~3~~4. *If steel piles must be driven with an impact hammer, an air curtain shall be installed to 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.*

~~4~~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.*

~~5~~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.*

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Letter 38: Da Costa, Francisco (1/11/10)

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Letter 38: Da Costa, Francisco (1/11/10)

Response to Comment 38-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 38-2

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

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Letter 39: City and County of San Francisco, Historic Preservation Commission (1/12/10)

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Letter 39: City and County of San Francisco, Historic Preservation Commission (1/12/10)

All of the comments provided in this letter are substantially similar to the comments provided in Letter 77; however, where this letter was submitted as a "final" letter by the Historic Preservation Commission, Letter 77 represents their "draft" letter. For that reason, full responses are provided in this letter.

Response to Comment 39-1

Draft EIR Section III.J (Cultural Resources and Paleontological Resources), pages III.J-8 through III.J-15 describes the historic context of the HPS from nineteenth century development of private shipyards, Navy involvement in the early twentieth century, the World War II period of Navy control and expansion, to the post-World War II activities of nuclear testing support and the Naval Radiological Defense Laboratory (NRDL). The Draft EIR context and analysis is based on Circa: Historic Property Development *Bayview Waterfront Project Historic Resources Evaluation: Volume II, Historic Resource Survey and Technical Report*, October 2009, as cited on p. III.J-1 ("Circa Report"). The CIRCA Report is also included as Appendix J2 (CIRCA, Historic Resources Survey, October 2009) of this C&R document.

Citing the Circa Report, Draft EIR pages III.J-21 through III.J-25 evaluate the buildings and structures at HPS. The Draft EIR notes that some structures at HPS have been previously identified as significant historic resources as part of the NRHP-eligible Hunters Point Commercial Drydock Historic District (refer to Draft EIR page III.J-21). Additionally, Drydock 4 was previously identified as individually eligible for the NRHP. On pages III.J-22 through III.J-25, the Draft states that the Circa Report identified the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. As stated in the Circa Report and on Draft EIR pages III.J-24 through III.J-25, the proposed Hunters Point Commercial Drydock and Naval Shipyard Historic District represents the broad history of HPS. The potential Hunters Point Commercial Drydock and Naval Shipyard Historic District is comprised of a collection of buildings, structures, and objects associated with the area's transition from early commercial drydock operation through its period of radiological research. The district encompasses a range of buildings from each of the three primary periods of significance for HPS: early drydocks, Navy use in World War II, and radiological research in the World War II and post-war periods. Related site features associated with the district include light standards, rail spurs, crane tracks, drydock perimeter fencing, bollards, and cleats.

The potential Hunters Point Commercial Drydock and Naval Shipyard Historic District encompasses a cross section of buildings, structures and objects, varying in age and function from the early commercial drydock operations (1903), through the Shipyard's function as a high tech naval ship repair and decontamination facility in World War II, and as a ship repair and radiological research facility in the post-war period (1946-1969). The industrial buildings (140, 204, 205, 207, 208, 211, 231, 224, and 253), Drydocks 2 and 3, and other related site features represent a microcosm of the historical development and context of HPS. The potential district contains the previously determined National Register eligible buildings (automatically listed as a district on the CRHR) as well as recommended contributors to an expanded, potential CRHR historic district (including Drydock 2, Drydock 3, and Buildings 140, 204, 205, 207, 208, 211, 224, 231, and 253). The proposed contributors to the CRHR-eligible district include the previously eligible NRHP district contributors plus Buildings 208, 211, 224, 231, and 253. Though the condition of the buildings ranges from good to fair, the Circa Report found that the potential CRHR

district as a whole retains a high degree of integrity of location, design, setting, workmanship, materials, association, and feeling.

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. While Buildings 208, 211, 224, 231, and 253 may not be individually eligible for listing on the CRHR, when combined with the historic drydocks and associated buildings, the district is a physical representation of the broad history of HPS. Draft EIR Figure III.J-3 (Potential Historic Structures), page III.J-26, illustrates views of buildings 211, 231, and 253. Figure III.J-3 has been revised in Section F (Draft EIR Revisions) to include a photograph of building 224. Draft EIR Figure III.J-2, page III.J-23, depicts the boundaries and location of structure in the CRHR-eligible district.

Among the structures identified as part of CRHR-eligible district, Circa found, as stated on Draft EIR pages III.J-9 to -10:

> The first building built by the Navy in World War II was Building 321 (1942-1945), the Inside Machine Shop. Constructed in 1942 by the San Francisco-based firm of Barret & Hilp and situated adjacent to Drydock 2, the curtain-wall building was for a brief period the only major functional shop at the Shipyard as the United States headed into the war. Building 211 was also one of the first erected by the Navy. The building was the original Shipfitters Shop and is a good representation of the typical semi-permanent, monitor-room shop building constructed throughout the Shipyard during the World War II era. Building 224, a concrete air raid/bomb shelter building built in 1944, and later used as an annex for the NRDL, is a unique representative of its type at the Shipyard. The only building within the district completed after World War II is the Optical, Electronics and Ordinance Building, Building 253, finished in 1947 and attached to the west elevation of Building 211. This concrete frame curtain-wall building, designed for the Navy by local architect Ernest J. Kump, was a highly specific repair and research facility.

Buildings 208, 211, 231, 224, and 253 thus represent important range of structures from the World War II and post-war era in terms of Navy history at HPS (Building 231), design (Building 211), uniqueness (Building 224), and a specific research and repair facility by a noted architect (Building 253).

The Circa Report evaluated other World War II– and post-war-era structures at HPS, and concluded that those structures would not meet criteria for eligibility for the CRHR or NRHP as individual resources, or as part of an historic district. The Circa Report includes individual discussions of World War II–era buildings and structures, Buildings 101, 110, 134, 214, 215, 351/351A, 400, 404, 405, 406, 407, 505, and 809, and Drydocks 5, 6, and 7 (Circa Report, pages 77–84). The Circa Report discusses the design historic associations, condition, and, if known, the architect of each of these structures. The Circa Report provides conclusions on lack of eligibility for National, California, or local historic registers. The Circa Report also describes the design, historic associations and, if known, the architect of four post-war era buildings, Building 411, 521, 707, and 709 (Circa Report, pages 84–88). The report provides conclusions as to their lack of eligibility for National, California, or local registers. In addition, the Circa Report includes Table 1 (Remaining World War II Buildings Not Found to Be Significant) and Table 2 (Remaining Post World War II Buildings Not Found to be Significant) (Circa Report, pages 91–93).

Overall, the Circa Report evaluates every structure extant at the HPS as of 2008, with regard to eligibility for National, California, and local historic registers. Information on each structure was compiled in a CDPR Primary Naval Forms (DPR 523a). The forms provide the basis for initial screening of the potential significance of each structure. As presented in the Circa Report and the Draft EIR, the Hunters Point Shipyard, while a

large site, currently includes only a limited number of structures that meet criteria for listing on the NRHP or the CRHR, and does not contain resources that would meet criteria for a larger historic district.

The Circa Report found that the extant buildings located outside of the proposed Hunters Point Commercial Drydock and Shipyard Historic District do not qualify as contributors to a larger historic district because (1) better examples of these types of buildings are found within the proposed district, within the Bay Area, and on military bases throughout the United States; (2) inclusion of these Shipyard buildings within the proposed historic district would not expand or augment the historic context or architectural value of the proposed historic district; and (3) the site does not retain enough integrity as a whole to justify an expansion of the proposed district. The Circa Report, as cited in the Draft EIR and as discussed above, includes substantial information to support those conclusions.

In addition, with regard to the "rarity" of the World War II–era military/industrial buildings at Hunters Point Shipyard, Circa conducted additional research and site visits of such buildings at other military bases in the Bay Area ("Circa Memo," also provided as Appendix J3 [CIRCA, Historic Resources Evaluation for Candlestick, April 2010] of this C&R document).[108] The Circa Memo reported on research and site visits for bases that had (1) proximity, (2) reasonably similar historic context, and (3) similar building typologies. The site visits were conducted at Mare Island Naval Shipyard, Richmond Shipyards, Alameda Naval Air Station, and Oakland Army. The Circa Memo noted that selected former military sites with similar World-War-II shipyard context were compared to identify the extent to which a "common" building typology was represented. The general building types at HPS outside the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District once considered common with the potential to now be considered rare due to the extent of base closures and redevelopment are (1) warehousing, supply and industry support, (2) shops, shipbuilding and repair (large machine/assembly shops, wood clad shops and metal-clad shops), and (3) residential/personnel services.

The Circa Memo found that, in most cases, the HPS buildings (for example, Buildings 117, 251, 274, 400, 404, and 810) were inferior to similar buildings at other bases in regard to physical integrity and condition. Most, if not all, of the similar buildings at the other bases retain their original cladding materials and windows, among other character defining features. Many of these similar buildings types are being retained and are planned for reuse. Portions of many of these former bases have been found eligible for the NRHP or are listed as NRHP historic districts. Circa reported that Mare Island Naval Yard has a superior and more comprehensive collection of similar shop, storehouse, and residential and related building types from the World War II period, and that these buildings have a higher level of physical integrity than those at Hunters Point Shipyard. The Circa Memo includes an appendix with comparative photographs of buildings at HPS, Mare Island, Oakland Army Base, and Alameda Naval Air Station. The appendix documents the occurrence and general condition of similar buildings at those other bases.

The Circa Memo therefore concluded that the boundaries of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District encompass a district that is contiguous, with buildings, structures, and objects that are representative of all phases of historic development at Hunters Point Shipyard (through the period of significance) and retain a high level of integrity. The same cannot be said

[108] Circa: Historic Property Development, *Memorandum on Comparative Rarity of World-War-II Era Buildings at Hunters Point Shipyard*, April 2010 (refer to Appendix J4 [CIRCA, Draft HPS Rarity Memorandum (April 2010)]).

of the remaining portions of HPS given the extent of loss of integrity and lack of rarity compared to other intact military installations in the Bay Area.

With regard to architects associated with HPS buildings, the Circa Report includes information where available. Most structures dating from the pre-World War II, and later periods, at HPS cannot be attributed to an individual architect or firm. Many World War II–era structures are noted, as based on standard plans of the Navy Bureau of Yards and Docks:

> Though the buildings were constructed as part of a vast support facility built to assist with the activities carried out at Mare Island and at Hunters Point through 1974, simple association with historic events or trends is not enough, in and of itself, to qualify under Criterion A/1. Each property's specific association must be considered important. Since none of the buildings appear to have made particularly significant contributions to the Navy's war effort or to the operations of the NRDL during that time, they don't exhibit a level of associative significance necessary for listing on the NRHP, CRHR or for local listing. From a design standpoint, the majorities of these buildings were build using standard Bureau of Yards & Docks plans or variations thereof and are similar to other WW II-era military installations located through the Nation. While some notable architects, engineers and contractors were involved in the design and construction of a number of buildings at the shipyard, this owes more to the fact that civilian architectural contracts were scarce during the WWII-era and military contracts abundant. Even in cases where noted architectural firms were involved in the design/construction process, it was common practice to use the many standardized Bureau of Yards & Docks plans available, adapting them to specific conditions at each base. As none of the buildings appear to be distinguished examples of their type, period or method of construction, do not represent the work of a master or possess high artistic value, they do not appear to be eligible for the NRHP, CRHR or for local listing under Criterion C/3. Further, many exhibit diminished integrity due to additions, alterations and exposure to the elements.
>
> In general, the buildings do not qualify as contributors to a larger historic district because 1) better examples of these types of buildings are found within the proposed district, within the Bay Area, and on military bases through the United States; 2) inclusion of these buildings within the proposed historic district would not expand or augment the historic context or architectural value of the proposed historic district; and 3) the buildings do not retain enough integrity as a whole to justify an expansion of the proposed district. (Circa Report, pages 88-89)

Building 253, the Optical, Electronics and Ordnance Building, was, as noted on Draft EIR p. III.J-10, designed by San Francisco architect Ernest J. Kump. Building 253, identified as a contributory structure in the potential CRHR Hunters Point Commercial Drydock and Naval Shipyard Historic District is the only World War II or post-war era structure at HPS directly attributed to a specific notable architect. Ernest J. Kump, Jr. (1911–1999), achieved recognition among American modernist architects of the late 1930s and early 1940s. His work is primarily for known for educational facilities, including in the Bay Area, for example, Acalanes High School, in Lafayette, 1939–55; Encinal High School, in Alameda, 1951–52; and Foothill College, in Los Altos, 1961.

The Circa Report notes that for Building 505, the Navy Exchange/Gymnasium, "Navy records also indicate Timothy Pflueger designed the barber shop and chaplain's office portions of this otherwise standard plan building." (Building 505 was not accessible at the time of the Circa Report for review of the condition of the interior spaces attributed to Pflueger.) Timothy Pflueger was a prominent architect, but the Circa Report, page 83, concludes:

> The involvement of notable architects and engineers in the design of military buildings during wartime was not uncommon and the portions of Building 505 designed by the firm of Timothy

> Pflueger are not distinguished examples of his work. Therefore, the building does not appear to qualify for individual listing on the National, California or local registers.

Among post-war structures, for Building 411, the Shipfitters, Welders, & Boilermaker Building, Circa, pages 85–86, notes:

> Austin Willmot Earl, a San Francisco Structural Engineer designed Building 411 for the Navy and Albert Kahn & Associates Architects & Engineers, Inc. appears to have been contracted as for additional design consultation. Retained as the consulting structural engineer for a number of projects at hunters Point Shipyard, Austin W. Earl received the Civilian Merit Award for his work during World War II for the Navy's Bureau of Yards and Docks. Earl became a recognized authority on waterfront construction and was responsible for the engineering of many industrial structures at Mare Island, Hunters Point and Port Chicago. It is unclear to what extent the firm of Albert Kahn & Associates was involved in the design of this building; however, Albert Kahn himself was not involved n the design or construction for Building 411 as he died in 1942. The architectural plans are dated 1945 and the building was not completed until 1947. Barret & Hilp constructed the building.

Austin Earl was involved with engineering design for tunnels, wharves and other facilities, but Building 411 is not considered the work of a master. Therefore, the Circa Report evaluation of historic resources at HPS presented in the Draft EIR provides a sufficient basis for the identification of the significance of contributory structures and boundaries of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. The Circa report appropriately evaluated other buildings and structures at HPs and provides sufficient basis for concluding that those structures would not meet criteria as individual historic resources or as contributors to a larger historic district.

Response to Comment 39-2

Refer to Response to Comment 28-1 with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Response to Comment 39-3

The Project would retain and interpret historic features of Hunters Point Shipyard, including Heritage Park (essentially the NRHP-eligible Hunters Point Commercial Drydock Historic District), as described in Draft EIR Chapter II (Project Description), Hunter Point Shipyard Piers, Drydocks and Waterside Uses, page II-23, and Section III.J, pages III.J-33 to -34. Draft EIR Section III.P (Recreation), page III.P-27 identifies other features that would reference the history of the site. Near Northside Park, the open-air African Marketplace would form an east-west promenade crossing the park, and would relate to the African-American community history in the Bayview-Hunters Point neighborhood. The Waterfront Promenade would provide evidence of the historic qualities of the industrial waterfront, which would be incorporated into tree bosques, seating areas, lawn panels, artworks, and interpretive gardens. Grasslands Ecology Park at Parcel E would contain a visitor/interpretive center. Figure III.P-2 (Proposed parks and Open Space), Draft EIR page III.P-14, illustrates the location of these Project features.

Mitigation measures MM CP-1b.1 and MM CP-1b.2 would provide for documentation of the Shipyard consistent with Historic American Building Survey (HABS)/Historic American Engineering Record

(HAER) Historical Report Guidelines, under HABS/HAER Level II and Level III standards and for interpretive displays at the Shipyard of a number and type subject to the approval of the Historic Preservation Commission.

Response to Comment 39-4

Draft EIR page III.J-21, Historic Resources—Candlestick Point, discusses Candlestick Park stadium under NRHP and CRHR criteria. On the basis of documents cited, the Draft EIR found that Candlestick Park stadium, built in 1960, would not meet NRHP or CRHR criteria as an historic resource. Draft EIR page III.J-33, Impact CP-1a: Change in Significance of Historic Architectural Resources at Candlestick Point, therefore concluded that demolition of Candlestick Park stadium with the Project would be a less than significant effect on historic resources.

Because Candlestick Park stadium will be 50 years old in 2010, an additional Historic Resource Evaluation (HRE) for Candlestick Park stadium was completed (refer to Appendix J3 [CIRCA, Historic Resources Evaluation for Candlestick, April 2010] of this C&R document).[109] The HRE reviews the history of Candlestick Park stadium, and evaluates the structure under NRHP and CRHR criteria. The NRHP criteria are summarized on Draft EIR pages III.J-27 and III.J-28:

> [E]eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and any of the following:
>
> a) Are associated with events that have made a significant contribution to the broad patterns of our history
> b) Are associated with the lives of persons significant in our past
> c) Embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction
> d) Have yielded or may be likely to yield, information important to history or prehistory

CRHR criteria are similar, as presented on Draft EIR page III.J-29:

> In general, an historical resource is defined as any object, building, structure, site, area, place, record, or manuscript that:
>
> (a) Is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and
> (b) Meets any of the following criteria:
>
> 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
> 2) Is associated with the lives of persons important in our past;
> 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
> 4) Has yielded, or may be likely to yield, information important in prehistory or history.

[109] Circa: Historic Property Development, *Historic Resource Evaluation for Candlestick Park Sports Stadium, San Francisco, CA*, April 2010.

The HRE presents the history of development of Candlestick Park stadium as part of the expansion of Major League Baseball to the West Coast in the late 1950s, with the New York Giants moving to San Francisco and the Brooklyn Dodgers moving to Los Angeles. The newly renamed San Francisco Giants played their first two seasons at the existing Seals Stadium (since demolished). Candlestick Point stadium opened in the 1960 season. The site was owned by Charles Harney, one of San Francisco's most-well-known contractors, who sold the property to the City for $2.7 million. Harney was also the contractor for the stadium. The stadium and the site are owned by the San Francisco Recreation and Park Department. The original stadium was a 43,765-seat baseball park, with a two-level grandstand around the infield, and bleacher seating around the outfield. Extensive surface parking was provided around the stadium. As discussed below, the stadium has been altered since 1960 and now serves as football stadium for the San Francisco 49ers.

The HRE analyzes each of the NRHP and CRHR criteria noted above and concludes that Candlestick Park stadium meets certain of the criteria for association with events or persons, but does not possess sufficient integrity to qualify for listing on the NRHP or CRHR. The HRE also notes that Candlestick Park stadium would not appear to meet criteria as a San Francisco landmark under *Planning Code* Article 10. The HRE cites and concurs with earlier evaluations of the stadium that similarly found significant associations with events or persons, but that the property does not possess integrity as an historic resource.

Therefore, Candlestick Park stadium is not an historic resource, and the Draft EIR correctly concludes that demolition of Candlestick Park stadium with the Project would be a less than significant effect on historic resources.

For information, key findings of the HRE are summarized below:

Association with Events

Candlestick Park stadium meets criteria for association with significant events, the expansion of Major League Baseball to the West Coast in the late 1950s, While the HRE notes other events associated with the stadium, such as important baseball and football games, and the San Francisco Giants – Oakland Athletics World Series game during the October 1989 Loma Prieta earthquake, the HRE concludes that those other events would not meet NRHP and CRHR associative criteria.

Association with Persons

Candlestick Park stadium meets criteria for association with significant persons, the baseball career of Willie Mays, regarded as one the greatest baseball players of all time. Mays joined the New York Giants in 1951, and played with the San Francisco Giants at Candlestick Park from 1960 to 1972. As stated in the HRE, "he is the one player in San Francisco Giants history whose achievements could be considered to be of exceptional significance in the history of baseball. In addition, enough time has passed to accurately evaluate the significance of Mays' career, and his stature among the greatest players of all time will not diminish in the future, even as later players surpass his accomplishments."

The HRE discussed other persons associated with the stadium, including prominent baseball players such as Orlando Cepeda, Juan Marichal, Willie McCovey, Gaylord Perry, and Barry Bonds, and prominent San Francisco 49ers football players, including Joe Montana and Jerry Rice, and concluded that those persons would not meet NRHP or CRHR associative criteria.

Design/Construction

The HRE found that the structure does not meet criteria for design and construction.

John S. Bolles (1905–1983) was the architect of Candlestick Park stadium and some of the later alterations." Bolles was responsible for other buildings in the Bay Area, including residential structures, including Ping Yuen public housing in Chinatown, the Anna Waden branch public library in Bayview, and other commercial buildings in Northern California. His IBM campus in San Jose includes Building 25, found eligible for the NRHP and CRHR. Bolles considered Candlestick Park stadium his most important project. However, the HRE found that Bolles would not be considered a "master" architect. Candlestick Park stadium is not the work of a master.

Candlestick Park stadium is a transitional design between baseball parks before the 1950s and dual-use stadiums developed in the 1970s. While Candlestick Park stadium includes features such as concrete construction and a set-back grandstand that reduced impaired sightlines compared to older stadiums, the HRE found that it does not represent an example of contemporary stadium design form the 1960s and 1970s as was found in Los Angeles, Oakland, St. Louis, or New York.

The original design as a 43,765-seat baseball stadium was eventually altered to dual baseball- football use in 1971, and by 1994 had 71,000-seats. Since 2000, when the Giants opened the baseball park at China Basin, now known as AT&T Park, Candlestick Park stadium is football only. Many other modifications have compromised the integrity of the original design. Extensive alterations include (but are not limited to): an increase of the seating capacity from the original 43,765 to 58,000 in 1993 and 71,000 in 1994, major reconfiguration of the grandstand, enclosure of the baseball outfield and installation of retractable seating in right field, replacement of 30,000 original wood seats with plastic seats, eight new ticket booths, enlarged and rehabbed press box, new lights, and the replacement of bluegrass field with Astroturf. These and other alterations have resulted in the stadium's current primary football-use design.

The HRE found that the structure does not possess distinctive or unique design or construction features of those periods.

Information Value

The HRE found that demolition of Candlestick Park stadium would not have a significant effect on the information value of archaeological resources at the site. The Draft EIR found that archaeological resources expected to be found on the Candlestick Point site could have important research value and would, therefore, be legally significant under CEQA. Any potential archeological resources that are covered by existing development would remain covered and unavailable unless the site is redeveloped. Adverse effects of construction-related activities to archaeological resources at Candlestick Point would be less-than-significant through implementation of the CP-HPS Phase II ARDTP, as discussed on Draft EIR pages III.J-36 through 39.

Integrity

The HRE evaluates the integrity of Candlestick Park stadium according to NRHP and CRHR criteria. To retain integrity a property must have most of the seven aspects of integrity as defined by the NRHR. The property has been evaluated for integrity by Caltrans, the State Office of Historic Preservation, Jones &

Stokes, and Circa, all of whom have found that Candlestick Park has a significantly diminished level of integrity due to 30 years of ongoing alterations resulting in cumulative degradation of the historic significance of the property. These alterations, both major and minor, diminished the stadium's integrity of design, setting, materials, workmanship, feeling, and association.

> **Design.** The stadium has been extensively altered over the course of thirty-years since the early 1970s, especially with the enclosure of the stadium seating and removal of the baseball diamond for football use. The property does not retain integrity of design.
>
> **Setting.** The stadium is on an 81-acre site and is surrounded by a paved parking lot with a chain link fence. Landscaping is minimal and consists primarily of clusters of trees around both the north and south (main) gates; a succession of trees defines the outside border of the main access road immediately surrounding the stadium. The setting has been somewhat altered due to the modification of the stadium envelope. The property retains some integrity for setting.
>
> **Materials.** The stadium is primarily comprised of reinforced concrete and steel that has been enlarged, altered, repaired and painted over the course of 30-years. A majority of character defining elements of a baseball field (diamond field layout, bases, pitcher's mound, catcher's box, home plate, in-filed, out-field and foul lines) and stadium (score board, original seating, original press boxes, hospitality suites, concession stands, offices, entrances/exists turnstiles, ticket booths, stairwells, elevators) have been removed or significantly altered. The property does not retain integrity of materials.
>
> **Workmanship.** The stadium has been extensively altered over as noted in the HRE; therefore, it has lost much evidence of craft. The property does not retain integrity of workmanship.
>
> **Feeling.** Candlestick Park was designed and constructed as a baseball stadium. The enclosure of the stadium seating around the original outfield, reconfiguring of the seating and alteration of the diamond configuration eliminated the feeling of a baseball field. While it reflects the feeling of a stadium, it does not reflect that of a baseball stadium. The property does not retain integrity of feeling.
>
> **Association.** Candlestick Park's historic association was once that of the first Major League Baseball park on the West Coast. Its change to a dual purpose, and then to primarily a football stadium have removed the baseball association. The property's association with the introduction of Major League Baseball on the West Coast would not extend to the 1970s. By that time, there were Major League Baseball teams in Anaheim, Oakland, and San Diego, in addition to San Francisco and Los Angeles. The property's association with the career of Willie Mays would extend only to 1972, before Mays was traded to the New York Mets. Almost all of the home games that Mays played during his Candlestick Park years were in the pre-expansion stadium, with its open outfield and upper deck seating only in the infield areas. The property does not retain integrity of association.

To clarify the evaluation of Candlestick Park stadium, the following text is revised on Draft EIR page III.J-21, under Historic Resources—Candlestick Point, first paragraph, replacing sentence four, and adding footnote 251a:

> The Candlestick Point site does not contain historic resources. In 2007, Jones & Stokes completed a review of Candlestick Park stadium, built in 1960, for potential eligibility in the NRHP.[251] The evaluation determined that the stadium did not meet the criteria to qualify as an exceptional property less than 50 years old. The report noted extensive alterations since its construction, including the expansion and enclosure in 1970 and more recent modifications to convert the stadium into a football-only facility. ~~The stadium, if reviewed at the 50-year mark, would not meet criteria for listing on the NRHP or CRHR due to lack of physical integrity resulting from the extensive alterations discussed above.~~ A recent Historic Resource Evaluation (HRE) reviewed the stadium as a 50-year-old structure and the HRE concluded that, while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, specifically the expansion of Major League Baseball

> to the West Coast and the career of Willie Mays with the San Francisco Giants, the stadium does not retain sufficient integrity to qualify as an historic resource under NRHP or CRHR criteria.[251a] …
>
> [251a] Circa: Historic Property Development, *Historic Resource Evaluation for Candlestick Park Stadium, San Francisco, CA*, April 2010 (refer to Appendix J3 [CIRCA, Historic Resources Evaluation for Candlestick, April 2010]).

The following text is revised on Draft EIR page III.J-33 under Impact CP-1a (Change in Significance of Historic Architectural Resources at Candlestick Point), first paragraph:

> The Project would demolish Candlestick Park stadium, and would demolish and redevelop the Alice Griffith public housing site. Neither Candlestick Park stadium, nor the Alice Griffith public housing sites are considered eligible for listing on the NRHP, CRHR, or City landmark registers. As discussed above, ~~Jones & Stokes completed a review of Candlestick Park stadium in 2007 and determined that the stadium did not meet the eligibility criteria for the NRHP~~ while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, the stadium does not retain sufficient integrity to qualify as a historic resource. …

Response to Comment 39-5

Draft EIR Section III.K (Hazards and Hazardous Materials) presents complete information on existing conditions, potential hazards, remediation measures, and legal and administrative procedures that would address hazardous conditions. Section III.K concludes that all Project hazardous material impacts related to site conditions would be less than significant with implementation of mitigation measures. (Refer to Draft EIR pages III.K-53 to -109.) For many areas of HPS Phase II, remediation activities already are underway as part Navy responsibilities under CERCLA. Remediation activities for groundwater contamination would in general assume that existing buildings would be demolished prior to soil remediation. As discussed in the Draft EIR and in Response to Comment 39-1 above, removal of most buildings at HPS Phase II would not affect significant historic resources, and, therefore, remediation activities would not have an adverse effect on such resources. Section F (Draft EIR Revisions) of this document discusses Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources identified in the Draft EIR. Refer also to Response to Comment 28-1.

Subalternative 4A would retain and rehabilitate identified historic buildings in the Historic District using the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Secretary's Standards). As with the Project, Subalternative 4A would also retain the buildings and structures in the potential NRHP Hunters Point Commercial Drydock District. Subalternative 4A assumes that the Navy would transfer the identified historic buildings to the Agency and would not demolish them before transfer.

As part of Subalternative 4A, the retained buildings would require abatement of existing hazardous materials such as asbestos, PCBs from electric fixtures, and lead-based paint. Those abatement activities would be a typical step in a reuse and rehabilitation plan. The Navy is responsible for identifying the required extent of soil and groundwater remediation needed through the CERCLA process, as explained in Draft EIR Section III.K. The Navy will also clear all transferred buildings of any radiological hazards. Whether remediation activities would preclude rehabilitation or reuse of any of the buildings in the identified Hunters Point Commercial Drydock and Naval Shipyard Historic District is not known at this

time. Buildings 211 and 253 have been identified as radiologically impacted buildings. The Navy will not make a determination as to whether these buildings can be cleared for reuse until at the earliest fall 2010. As noted in Draft EIR Section III.K, pages III.K-27 to -28, Basewide Historical Radiological Assessment:

> The overall conclusion of the [Historical Radiological Assessment] HRA was that although low levels of radioactive contamination exist at HPS, no imminent threat or substantial risk exists to tenants, the environment of HPS, or the local community. This conclusion has been reinforced by subsequent Finding of Suitability for Lease (FOSL) issued by the Navy for areas in Parcel B and Building 606 in Parcel D and approved by the regulatory agencies authorizing leases for various uses involving hundreds of employees, artists, and visitors in close proximity to various "impacted" sites each day. A Basewide Radiological Work Plan was subsequently prepared, describing survey and decontamination approaches to be implemented in support of radiological release of buildings and areas.

In sum, before the Navy transfers property to the Agency, it will address all radiologically impacted buildings, and will either complete all remediation or complete a plan for remediation and transfer implementation to the Agency (early transfer). The extent to which Navy remedial work or remedial plans will impact the ability to reuse the historic buildings has not been definitely determined by the Navy at this time.

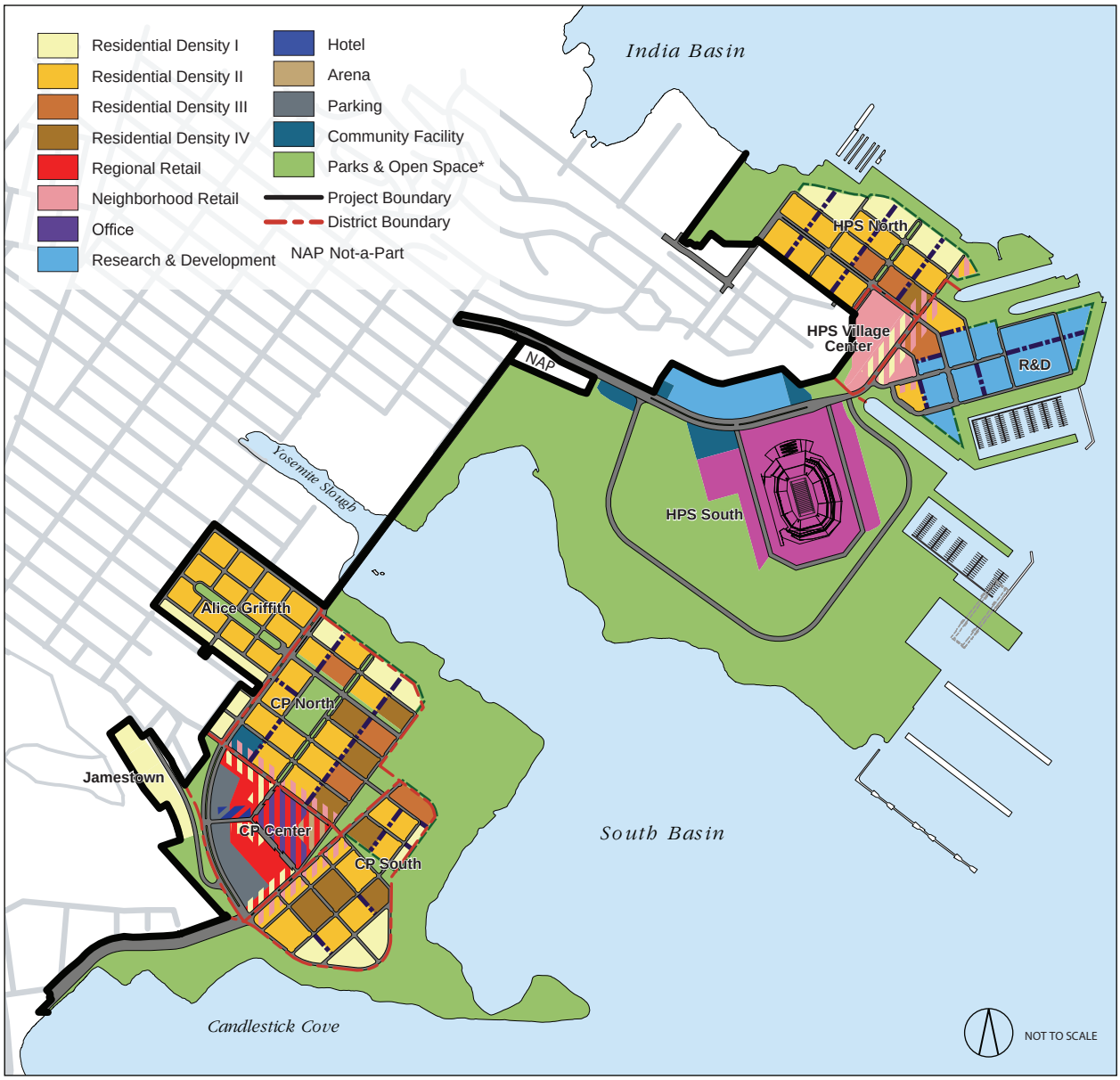
Response to Comment 39-6

Refer to Response to Comment 28-1 and Section F (Draft EIR Revisions) of this document, which discuss Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. Subalternative 4A would reuse structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District with a mix of R&D and parking uses, as presented in the Page & Turnbull and CBRE feasibility studies cited in the Draft EIR (Appendices VI and V2, respectively). Subalternative 4A, as discussed in Section F, would include a reconfigured site plan and building program at HPS such that all Project uses would be accommodated.

Response to Comment 39-7

Draft EIR Figure III.J-2, page III.J-23, Potential Historic District, illustrates historic resources identified in the Draft EIR. The legend indicates the boundary of the NRHP-eligible Hunters Point Commercial Drydock Historic District, and the location of Drydocks 2 and 3, and Buildings 140, 204, 205, and 207 that are contributory to that district. Figure III.J-2 also indicates the boundary of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District (which encompasses the smaller NRHP district), and the locations of Buildings 208, 224, 211, 231, and 253 that are contributory to that district. Additionally, Drydock 4 was previously identified as individually eligible for the NRHP. (It should be noted that Building 208 would now be retained as part of the Project and all variants and alternatives.)

New Figure VI-3a (Subalternative 4A Land Use Plan) illustrates the site plan for Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation Alternative), which would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.



SOURCE: Lennar Urban, 2010.

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FIGURE VI-3a

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A LAND USE PLAN

Letter 40: Gould, Corrina (1/12/10)

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Letter 40: Gould, Corrina (1/12/10)

Response to Comment 40-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18).

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Letter 41: Hamman, Michael (1/12/10)

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2 of 2

Letter 41: Hamman, Michael (1/12/10)

Response to Comment 41-1

Draft EIR Section III.J (Cultural Resources and Paleontological Resources) recently evaluated all structures at Hunters Point Shipyard, as described on Draft EIR pages III.J-21 through -25, and cited in the Circa Historic Property Development, *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Draft Historic Resource Survey and Technical Report*, October 2009, on III.J-1. The reference to the Baumberg report in Draft EIR footnote 252, page III.J-21, is background information. That source did not come from the basis of conclusions about the significance of historic structures at the Shipyard.

Response to Comment 41-2

Refer to Response to Comment 39-1, for a discussion of the adequacy of the evaluation of historic resources at Hunters Point Shipyard Phase II. Refer to Responses to Comments 28-1 and 39-3, and to Section F (Draft EIR Revisions) of this document, with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Response to Comment 41-3

As noted in the comment, mitigation measure MM CP-1b.1, pages III.J-34 to -35, requiring documentation of the CRHR-eligible resources before demolition, would reduce, but not avoid, the significant effect on CRHR-eligible resources. Refer to Responses to Comments 28-1 and 39-3, and to Section F (Draft EIR Revisions) of this document, with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

The comment regarding funding an endowment for preservation of historic buildings in the Bayview neighborhood as mitigation for loss of historic resources at Hunters Point Shipyard is noted. Such a funding mechanism would not fully mitigate the loss of those structures. In addition, there is no program in place to implement the funding measure proposed by the commenter, and there would be no assurance that such a program would be implemented.

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Letter 42: Californians for Renewable Energy, Inc. (1/12/10)

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Letter 42: Californians for Renewable Energy, Inc. (1/12/10)

Response to Comment 42-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

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Letter 43: People Organized to Win Employment Rights (1/12/10)

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Letter 43: People Organized to Win Employment Rights (1/12/10)

Response to Comment 43-1

The process and assumptions used in developing future year 2030 No Project cumulative conditions are presented in Draft EIR pages III.D-39 and III.D-40. As indicated on page III.D-40, the analysis of future cumulative transportation impacts included traffic expected to be generated as part of the India Basin/Area C development. Therefore, the cumulative effects of Area C traffic, traffic from the Project, and traffic from other reasonably foreseeable developments were incorporated into the analysis and informed the mitigation measures. None of the foreseeable projects are in any way dependent on the other taking place, and could occur regardless of whether the other takes place or not.

Although the NOP for this Draft EIR included the Area C development as part of the Project, Agency and Planning Department staff decided to separate the environmental review of the Area C redevelopment program from the Candlestick Point-Hunters Point Shipyard Redevelopment Plan EIR. This separation was to allow this Draft EIR to fully focus on the Candlestick Point-Hunters Point Shipyard Redevelopment Plan and to accommodate the continuing community participation process on planning for the proposed Area C redevelopment program.

Response to Comment 43-2

The Bayview Transportation Improvement Project (BTIP) began almost a decade ago to review options to provide a major truck and auto route between US-101 and the Hunters Point Shipyard and to the South Basin industrial area, and to reduce through truck traffic on Third Street and east/west residential streets. Auto and truck activity is an essential component of the BVHP commercial and industrial businesses and will continue to be so. Providing designated truck access routes as proposed by the BTIP study would help to:

- Provide a roadway for traffic accessing the BVHP community that minimizes travel time, to attract traffic off of Third Street and other residential streets
- Reduce the wear and tear, and excessive damage to residential streets
- Reduce conflicts between truck traffic and residential uses, including pedestrians and light rail

As the project sponsor for the BTIP, the City & County of San Francisco will comply with state and federal environmental laws requiring analysis and disclosure of the potential environmental impacts of the project. To do so, the San Francisco Department of Public Works has been working with the San Francisco Planning Department, Caltrans, and the Federal Highway Administration to develop a joint Draft Environmental Impact Statement (DEIS)/Draft EIR to satisfy provisions of the CEQA and the National Environmental Policy Act (NEPA). The DEIS/Draft EIR for this project, which is as yet unpublished, is intended to ensure a thorough decision-making process—including the identification of alternatives; assessment of potential impacts; and coordination with environmental permitting agencies and the public.

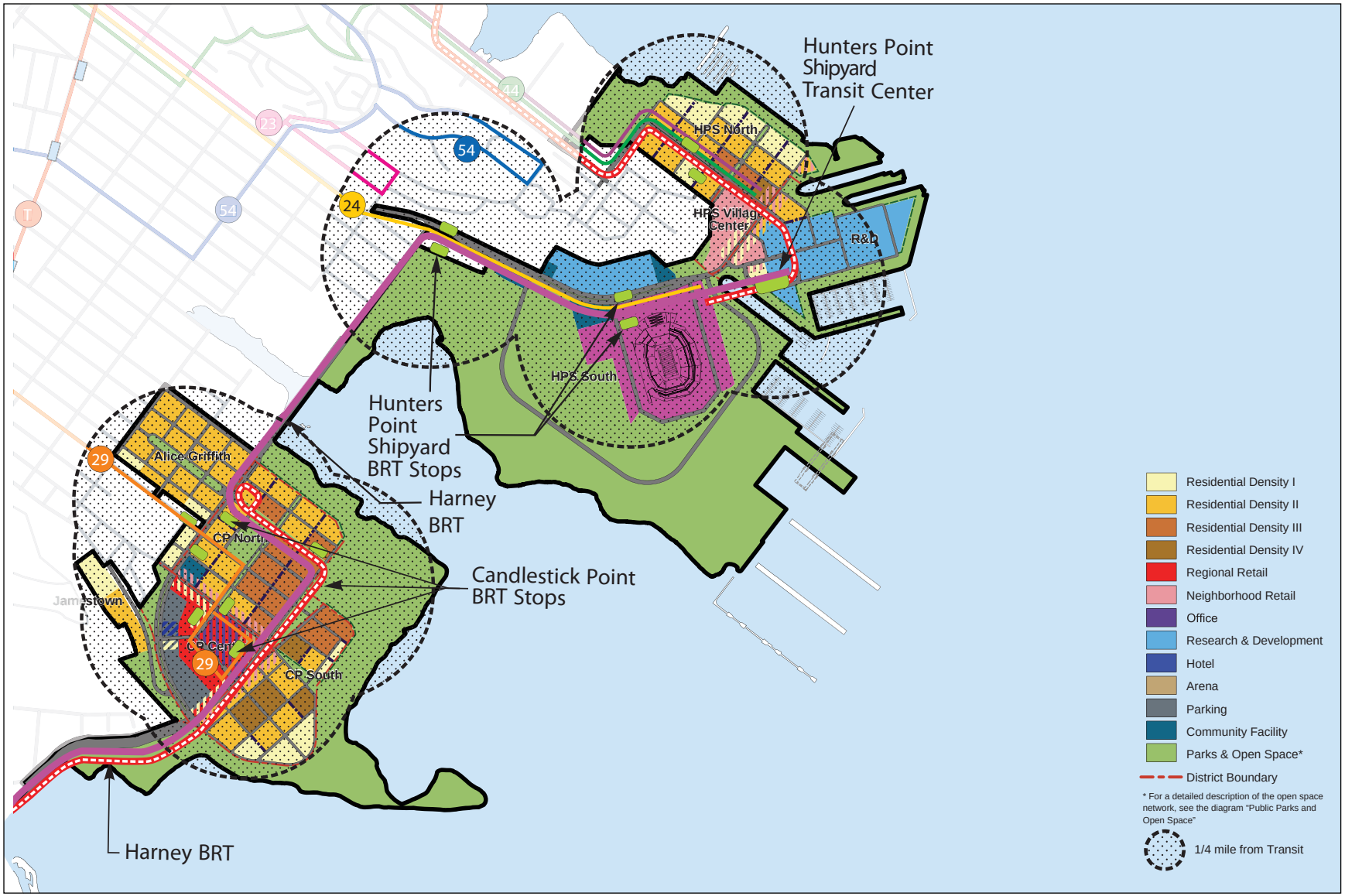
The BTIP requires an extensive environmental review process. Special studies to address the issues identified in the initial site assessments and conceptual engineering reports were completed during 2008 and the information was compiled into an Administrative DEIS/Draft EIR. The BTIP DEIS/Draft EIR was proposed to be published in the summer of 2009; however, reviewing delays were encountered which were out the control of the City & County of San Francisco.

Subsequently, the Candlestick Point-Hunters Point Shipyard Phase II Development Plan Project proceeded and published this Draft EIR on November 12, 2009, with more recent assessments. The objectives of the BTIP were considered in developing the transportation circulation network for the CP-HPS Phase II Development Plan, and the CP-HPS Phase II roadway cross-sections incorporate and expand upon the proposed BTIP improvements to meet the needs of the proposed mixed-use development at Candlestick Point and a new stadium at Hunters Point Shipyard. Therefore, the BTIP was included in the CPHPS Draft EIR in the cumulative analysis as a reasonably foreseeable project. However, because of the timing, some of the previously completed BTIP environmental studies are no longer considered relevant or consistent with the latest cumulative analyses in the area. For example, the transportation analysis conducted for BTIP did not assume the proposed CP-HPS Phase II development, and therefore the BTIP roadway improvements, future year traffic volumes, and operational analyses no longer represent an accurate assessment of the cumulative conditions in the area. Consequently, the City is now revising/updating certain technical studies (transportation, air quality, and noise) to reflect the newest updated information available from this Draft EIR, so that the cumulative analyses are consistent and so that decision makers do not have conflicting descriptions of improvements and analysis results.

Response to Comment 43-3

As currently proposed, nearly all of the Project development would be within ¼ mile of a transit stop. The portions of the development that would not be within this distance include the southernmost portion of the dual-use sports fields, parts of the R&D area, and parts of the parks and open space. As proposed, they would be within ½ mile. Refer to Figure C&R-6 (Transit Routes and Stops) illustrating locations of transit stops within the Project and the land uses contained within a ¼-mile radius of those stops. Existing transit services are described on Draft EIR pages III.D-12 to III.D-15, and existing transit routes are depicted on Figure III.D-3 (Existing Transit Network).

Because the new and expanded Muni lines serving the Project would run through surrounding neighborhoods in the Bayview Hunters Point area to varying extent, as well as other city neighborhoods, these areas would generally experience increased transit frequencies and extended access in conjunction with the transit service plan proposed by the Project. These reliabilities of lines would also benefit from transit-priority treatments within and in the Project vicinity. The Muni lines planned for increased coverage, reliability improvements, and/or frequency include the 23-Monterey, 24-Divisadero, 28L-19th Avenue Limited, 29-Sunset, 44-O'Shaughnessey, 48-Quintara-24th Street (replacing portions of the 19-Polk as proposed in the TEP), 54-Felton, and the T-Third.



SOURCE: Fehr & Peers, 2010.

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FIGURE C&R-6

Candlestick Point — Hunters Point Shipyard Phase II EIR

TRANSIT ROUTES AND STOPS

Response to Comment 43-4

Section II.E.3 of the Draft EIR (on pages II-35 through II-38) states that some of the Project's proposed transportation improvements would require property acquisition. In order to complete both the Harney Way widening improvements described in Section II.E.3 (on page II-35) and the Crisp Road and Arelious Walker Drive improvements described in Section II.E.3 (on page II-38), some property acquisition would need to be required. None of the other transportation improvements proposed by the Project would require the acquisition of private property. The City and the Agency have met with several of the property owners whose property is envisioned to be affected by the roadway improvements. In addition, all property owners received a copy of the Draft EIR. Owners include the State, Lowpensky Family Trust, Regents of the University of California, Murphy Properties, George and Rosalie Yerby, Tuntex Properties, and Sunpark Properties, and several of them have participated in public meetings where the Project has been discussed. In addition, as required by Chapter 31 of the Municipal Code, a Notice of Availability indicating that the Draft EIR was available was also sent to owners and occupants within the 94124 zip code, as well owners and occupants within the Project site and a 300-foot radius beyond the Project site.

BVHP Redevelopment Area Acquisitions

For the improvements to Arelious Walker Drive between Gilman Avenue and Bancroft Avenue proposed by the Project, a total of approximately 2.32 acres would need to be acquired. These include portions of Blocks 4876, 4886-807, 4886-808, 4886-828, 4917-003, and 4935-003. These properties are currently owned by one private owner and the California Department of Parks and Recreation. The acquisition of the California Department of Parks and Recreation property is authorized under SB 792. This is discussed further in the Section III.P (Recreation) of the Draft EIR. There are currently no permitted residences on these properties and no businesses operating on these parcels other than game day parking. The privately owned property is zoned M1.

The properties that would need to be acquired to complete the proposed improvements to Arelious Walker Drive between Gilman Avenue and Bancroft Avenue are within the boundaries of the Bayview Hunters Point Redevelopment Project Area and are subject to the eminent domain limitations and prohibitions of Proposition G, state law, and the Bayview Hunters Point Redevelopment Plan.

Proposition G expressly prohibits, 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.

Under state law, eminent domain cannot be used until the Agency "make[s] every effort to acquire property by negotiation, instead of by condemnation or eminent domain; that the Agency pay just compensation based upon fair market value; and that the Agency adopt at a public hearing by a vote of not less than two-thirds of all members of the Agency Commission, a resolution finding that acquisition of such property through eminent domain is in the public interest, and necessary to carry out the Redevelopment Plan."

In addition, the Bayview Hunters Point Redevelopment Plan provides that the use of eminent domain shall be subject to the following limitations and prohibitions:

- The Agency shall not use eminent domain to acquire property without first receiving a recommendation from the PAC or appointed citizens advisory committee. As stated in Section 1.1.6 [of the Bayview Hunters Point Redevelopment Plan], the Agency commits to maintain a PAC or an appointed citizens advisory committee for the duration of this Redevelopment Plan.
- The Agency shall not use eminent domain to acquire publicly owned property including without limitation, property owned by the San Francisco Housing Authority.
- Eminent domain proceedings, if used in Project Area B [which includes Candlestick Point], must be commenced within 12 years from the Effective Date. This time limitation may be extended only by amendment of this Redevelopment Plan, as adopted and approved by the Board of Supervisors and the Agency Commission, following a community process.
- The Agency shall not acquire, through the use of eminent domain, real property in a Residential (R) District, as defined by the Planning Code ("R" zone), as of the Effective Date, in Project Area B.
- The Agency shall not acquire, through the use of eminent domain, property that contains legally occupied dwelling units.
- The Agency shall not acquire, through the use of eminent domain, property owned by Churches or other religious institutions, as defined in Planning Code Section 209.3(j).
- The Agency shall not acquire real property in Project Area B to be retained by an owner pursuant to an Owner Participation Agreement, unless the owner fails to perform under that agreement and as a result the Agency exercises its reverter rights, if any; or successfully prosecutes a condemnation or eminent domain action.
- The Agency shall use eminent domain on a parcel not zoned "R" (Residential) only as a last resort after the property owner has failed, after reasonable notice, to correct one or more of the following conditions:
  - The property contains an unreinforced masonry building (UMB) that has not been seismically retrofitted by the date required by City ordinance.
  - The property contains a building in which it is unsafe or unhealthy for persons to live or work as determined by the Department of Building Inspection, after failure to comply with an order of abatement of such conditions pursuant to Section 102 of the Building Code.
  - The property contains uses that pose a threat to the public's safety and welfare as formally determined through major citations by the appropriate City agencies or departments, including, but not limited to the San Francisco Police Department, San Francisco Fire Department, San Francisco District Attorney's Office, San Francisco Department of Public Health, San Francisco Department of Building Inspection, and San Francisco Planning Department.
  - A parcel that is vacant, used solely as a surface parking lot (not accessory to another use), or contains a vacant or substantially vacant (approximately 75 percent or more of the rentable area) building(s) and the owner has no active plans for a new use or development.
  - Under-utilization of a property of irregular form and shape, and of inadequate size that substantially hinders its economically viable uses for development consistent with this Redevelopment Plan.

Consistent with the BVHP Redevelopment Plan, owners of real property in the BVHP Project Area may participate in the redevelopment of the Project Area by new development or rehabilitation in accordance with the standards for development or the standards for rehabilitation, which are set forth in the OPA Rules that were adopted on March 7, 2006, after a public hearing. The OPA Rules governing participation

by property owners are subject to amendment from time to time. The Agency may require as a condition to participate in redevelopment in the Project Area that each participant enter into a binding written OPA with the Agency by which the property will be developed, maintained or rehabilitated for use in conformity with the Redevelopment Plan, the Planning Code, the OPA Rules, declaration of restrictions, if any, and applicable design guidelines promulgated by the Agency. The proposed amendments to the BVHP Redevelopment Plan provide that owners of property in Zone 1 of the Project Area, which covers Candlestick Point, must enter into an OPA in order to coordinate the delivery of public infrastructure with the development of publicly owned land in the Candlestick Point sub-area. Properties whose owners choose not to participate in development pursuant to an OPA with the Agency will be permitted to continue existing uses as nonconforming uses.

The Agency has a number of avenues available for completing the roadway improvements in the BVHP Redevelopment Plan area. SB 792 authorizes acquisition of the California Department of Park and Recreation property. The private property could be acquired by negotiation, through an OPA process, or by eminent domain as a last resort. The Agency would comply with the requirements of the BVHP Redevelopment Plan and Proposition G provisions in carrying out the roadway improvements.

Acquisitions outside the Redevelopment Project Areas

For the Harney Way widening improvements proposed by the Project, a total of approximately 0.7 acre of property located north of Harney Way between Thomas Mellon Drive and Executive Park East, currently zoned C-2, would need to be acquired. These include portions of Blocks 4991-075 and 4991-074. There are two separate private owners of these properties. On these portions of the respective properties, there are currently no permitted residences or any operating businesses.

Additionally, approximately 1.3 acres of property containing no structures, and located within the Candlestick Point State Recreation Area south of Harney Way, would need to be acquired from the California Department of Parks and Recreation; such an acquisition is authorized under SB 792. This is discussed further in the Section II.P (Recreation) of the Draft EIR. These include portions of Blocks 5076-008, 5076-010, and 5023-101.

In addition, to complete the improvements connecting Arelious Walker Drive to Crisp Road near the HPS Phase II area, approximately 0.81 acres of property on Blocks 4591A-007 (zoned M2) and 4591A-002 (zoned P/M2) would need to be acquired. There are two separate owners for these properties and there are no permitted residences on these properties. Uses currently operating on these properties are a commercial woodshop and institutional research, respectively. No structures would be affected except for a small shed structure on Block 4591A-002, which is on land owned by the Regents of the University of California (UCSF). The Arelious Walker Drive improvements also require approximately 0.24 acres of property on Block 4805-025, which contains no structures and would need to be acquired from the California State Lands Commission as authorized under SB 792. This is discussed further in the Section II.P (Recreation) of the Draft EIR.

The properties that would need to be acquired to complete the Harney Way widening improvements and the connections between Arelious Walker Drive and Crisp Road are not within the boundaries of the Bayview Hunters Point Redevelopment Project Area or the Hunters Point Shipyard Redevelopment

Project Area. The proposed amendments to the Bayview Hunters Point Redevelopment Plan and Hunters Point Shipyard Redevelopment Plan do not change the existing zoning for these properties.

Regardless of whether these properties are located within any redevelopment project area, Proposition G expressly prohibits, 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. The Project implementation would be carried out in a manner that would comply with these provisions. None of the property is residentially zoned, improved with dwelling units, or is a church. With the exception of a small portion of property owned by UCSF, use of eminent domain could be employed, consistent with Proposition G. If for any reason negotiation with UCSF were unsuccessful, the Agency could modify the roadway configuration. For example, instead of routing the roadway in a manner that required acquisition of UCSF property, the roadway could be accommodated on adjacent property that the Navy would transfer to the Agency.

With respect to when property acquisitions could occur, they could occur any time after certification of the EIR, if the EIR is ultimately certified by the Lead Agencies. Page II-80 of the Draft EIR further clarifies the time periods during which off-site roadway improvements would be constructed, indicating that it would only be during a portion of the Project's overall construction schedule. (The indicated text changes are a result of updating the development schedule since publication of the Draft EIR.):

> Construction activities in Candlestick Point would occur from ~~2011~~2012 through ~~2028~~2031.[39] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2013 through 2021~~ beginning in 2013 and would align with vertical development. …
>
> Construction activities in HPS Phase II would occur from ~~2010~~2011 through ~~2023~~2031.[40] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2011 through 2016~~ beginning in 2013 and would align with vertical development. …

Response to Comment 43-5

As described on page II-35 of the Draft EIR, one of the strategies of the TDM would require that homeowner's dues include the cost of transit passes for all households. As currently described in the Draft EIR, a rental household would not specifically include the cost of transit passes.

Response to Comment 43-6

The forecasts for transit usage in the Draft EIR are based on transit mode share forecasting models developed specifically for this analysis and validated based on observed transit usage in other neighborhoods in San Francisco. The models have been designed to account for differences in trip type (work vs. non-work), travel time, parking costs, and transit service levels. Ultimately, the analysis forecasted that 20 percent of weekday AM and PM peak hour trips would occur by transit. The current transit mode share in the Bayview neighborhood is 15 percent. Given the substantial increase in transit service proposed as part of the Project, the slight increase predicted in this analysis is reasonable.

The Project's transit improvements described on Draft EIR pages III.D-48 through III.D-50, and included in mitigation measure MM TR-17 on Draft EIR page III.D-99, would be implemented to meet the needs

of the Project. The phasing plan for implementing this service was designed to ensure that the level of transit provided is generally substantially greater than the Project's transit demand, to ensure that the Project maintains its "transit orientation" throughout the development horizon. If transit use generated by the Project falls short of expectations, measures included in the Project's TDM Plan could be implemented to encourage transit use and discourage auto use. The Project's TDM Plan, which would be approved as part of the Disposition and Development Agreement, would include a provision for monitoring the effectiveness of congestion-reducing and traffic-calming measures. As part of the annual monitoring of the measures and programs, the on-site coordinator, would, in cooperation with SFMTA, review the effectiveness of the Project's transportation measures and other traffic calming measures implemented in the project vicinity. If warranted, the on-site coordinator and SFMTA would consider implementation of additional parking, traffic-calming, and congestion-alleviating measures.

Response to Comment 43-7

The traffic impact analysis includes 14 study intersections on Third Street, four intersections on Evans Avenue/Innes Avenue, four intersections along Harney Way, and four intersections along Palou Avenue. The impacts of Project traffic and traffic associated with cumulative development on study area roadway facilities, including Third Street, Evans Avenue/Innes Avenue, Harney Way, and Palou Avenue were analyzed and are described in Impacts TR-3, TR-5, TR-6, and TR-9. The potential for area congestion to cause traffic to "spill" into adjacent neighborhood streets was described in Impact TR-10. No further analysis is required.

Response to Comment 43-8

Chapter IV of the Draft EIR describes transportation conditions associated with Project Variants 1 and 2, in which case additional development would be provided in the Hunters Point Shipyard site instead of a new NFL stadium. Four intersections along Palou Avenue were analyzed in the Draft EIR including Palou Avenue at Third Street, at Keith Street, at Ingalls Street, and at Crisp Avenue. Under the Project, Variant 1 and Variant 2, traffic operating conditions at the intersection of Third/Palou would be LOS F, due primarily to the cumulative traffic volume increases on Third Street. Under the Project, Variant 1 and Variant 2, the intersections of Keith/Palou, Ingalls/Palou and Crisp/Palou would be signalized as part of the Project. Under Variant 1 and Variant 2, intersection LOS at Ingalls/Palou and Keith/Palou would be LOS C or better, indicating acceptable operating conditions even with the additional development proposed for these project variants. At the intersection of Crisp/Palou, operating conditions would be LOS D for Variant 2. Under Variant 1 the additional R&D development would cause the intersection of Crisp/Palou to fail (i.e., LOS F). As indicated on Draft EIR page IV-19, a mitigation measure was identified that would reduce Variant 1 impacts at this location to less than significant levels.

More detailed analysis of these variants is provided in the Project Transportation Study, which was included as Appendix D of the Draft EIR.

Response to Comment 43-9

As indicated on Draft EIR page II-38 (Project Description), the Yosemite Slough bridge would primarily function for transit, bicycle and pedestrian use. The bridge would have a 40-foot-wide greenway, which would

be converted for peak direction auto travel lanes on 49ers game days only. Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use. The Project's Infrastructure Plan, which the Board of Supervisors will approve through the Interagency Cooperation Agreement, would require that the bridge be closed to autos except on football game days. Before the bridge is open for use, the Board of Supervisors, by a legislative act must accept the bridge and designate it as a transit use only lane, except for the limited purpose specified in the Infrastructure Plan. Any subsequent changes to the use of the bridge would require Board of Supervisors approval.

Response to Comment 43-10

As shown on Figure III.D-6, the Project would provide improvements along portions of seven east-west streets outside of the Project Boundary, including Jamestown Avenue, Ingerson Avenue, Gilman Avenue, Carroll Avenue, Thomas Avenue, Palou Avenue, and Innes Avenue/Hunters Point Boulevard. Generally, these improvements consist of resurfacing and some lane reconfiguration within the existing right-of-way, although the sidewalks would be narrowed on Gilman Avenue from existing 15 feet to 12 feet to accommodate two travel lanes in each direction and to maintain on-street parking. (Note that the proposed 12-foot-wide sidewalks would remain consistent with the City's Draft Better Streets Plan guidelines).

As of the date of publication of this document, there have been approximately 236 workshops and public meetings on the Project, including four focused workshops in the spring of 2008 on the topics of transportation, urban design, and open space. A number of design features and priorities from those workshops have been incorporated into the roadway improvements, including maintaining existing on-street parking, provision of new street trees, better connections to the City bicycle network, and generally safer and more walkable sidewalks. In summer 2009, several street-specific community workshops were held in the Bayview and India Basin area, with a focus on design and engineering treatment options for Palou Avenue, Gilman Avenue, Harney Way, and Innes Avenue, among other corridors, the input from which has led to final design decisions for each street.

Response to Comment 43-11

The existing Alice Griffith housing site sits at the eastern end of the Bayview Neighborhood. Internally, the character of the street configuration within the Alice Griffith site is considerably different from the rest of the Bayview neighborhood, offering a more suburban-style, curvilinear street design. As a result, the Alice Griffith site has only two connections to the existing neighborhood, at the intersections of Griffith Street/Gilman Avenue and Hawes Street/Fitzgerald Avenue. These limited connections isolate the site and discourage walking and bicycling. It is currently served by the 29-Sunset bus route, which operates with frequencies of 10 minutes during typical weekday peak periods.

The Project would reconstruct the Alice Griffith housing site and extend the existing street grid network in the Bayview neighborhood through the site, providing a substantial increase in the number of roadway connections and better integrating the site with the rest of the neighborhood. The street grid would continue east into the Candlestick Point development, such that the Alice Griffith site is connected to both the Bayview neighborhood and the Project via a continuous street grid network.

The Project would also double the frequency of service on the 29-Sunset from existing 10 minutes during peak commute periods to 5-minute frequencies. The Alice Griffith site would also be a short walk (less

than ¼ mile) from the proposed new BRT service, which would offer high-quality rapid service in exclusive right-of-way to the Hunters Point Shipyard site to the northeast and across US-101 to the west toward the Geneva Avenue corridor and regional transit connections at the Bayshore Caltrain station and the Balboa Park BART station. The Alice Griffith site would also be within ¼ mile of the new Candlestick Point Express (CPX) bus route offering express service to Downtown San Francisco and connections to other regional transit service (ferries, AC Transit, etc.).

Response to Comment 43-12

As noted on page II-43 of the Draft EIR, "all commercial parking facilities would be paid parking, with measures to discourage single-occupant automobile use, such as designation of preferred parking areas for bicycles, carpools, vanpools, and carshare vehicles." This would include grocery stores.

The Project calls for 125,000 square feet of neighborhood-serving retail each in the Candlestick Point and Hunters Point Shipyard developments. A grocery store is not specifically proposed as part of the Project, but would be allowed under the proposed land uses. Adequate space is proposed at either site to accommodate a grocery store.

Generally, the neighborhood-serving retail spaces are provided adjacent to the primary transit nodes within each site, specifically including both local transit and the proposed BRT. This would allow high-quality and frequent transit access to the retail space. Further, with the proposed extension of the existing street grid system in the Bayview neighborhood into the Project site, patrons could access the neighborhood-serving retail via a direct walk, bicycle ride, or vehicle trip, if desired.

Response to Comment 43-13

The parcel along Crisp that is labeled Not a Part of the Project is owned by the Regents of the University of California and is occupied by an animal testing facility, APN 4591A-002. The property is zoned P (Public uses) (north portion) and M-2 (Heavy Industrial) (south portion).

Response to Comment 43-14

The Project has been designed to transition in a pleasing manner from the adjacent neighborhoods through the use of setbacks, landscaping treatments, and stepped-up building heights and massing oriented primarily toward the center of the development. The street grid system will be extended to connect the Project with adjacent neighborhoods, including HPS Phase I. Although architectural finishes have not yet been chosen, they will be selected to blend harmoniously with existing neighborhoods while still attaining a distinct sense of place.

Response to Comment 43-15

In response to the comment, Figure II-13 (Proposed Transit Improvements), page II-40, in the Draft EIR has been revised to delete "Phase I Improvements" from the legend, and rename "Phase II Improvements" to "Bus Rapid Transit." Figure 7 (Proposed Transit Improvements) from Draft EIR Appendix D (the Transportation Study) is correct. Refer to Response to Comment 7-1 for the revised Figure II-13.

Response to Comment 43-16

Phasing of transit improvements is shown in Table 2 on page 31 of the Project Transportation Study, included as Appendix D of the Draft EIR. A more detailed roadway and transit service timing and phasing plan would be provided as part of the Project's Infrastructure Plan, which would be included in the Project's DDA. The Project would be implemented in four overlapping phases, with transportation infrastructure improvements (both transit and roadway) linked to the development phases. The majority of development and infrastructure improvements would be completed by the end of the second phase, which has a scheduled completion date of 2021.

Response to Comment 43-17

The new Alice Griffith housing is proposed to be constructed as part of the first phase of development, along with construction of the new stadium. Following completion of the new stadium, the old stadium would be deconstructed and new roadway network in Candlestick Point would be constructed. However, access to Alice Griffith would be maintained as the Candlestick Point development proceeds.

Response to Comment 43-18

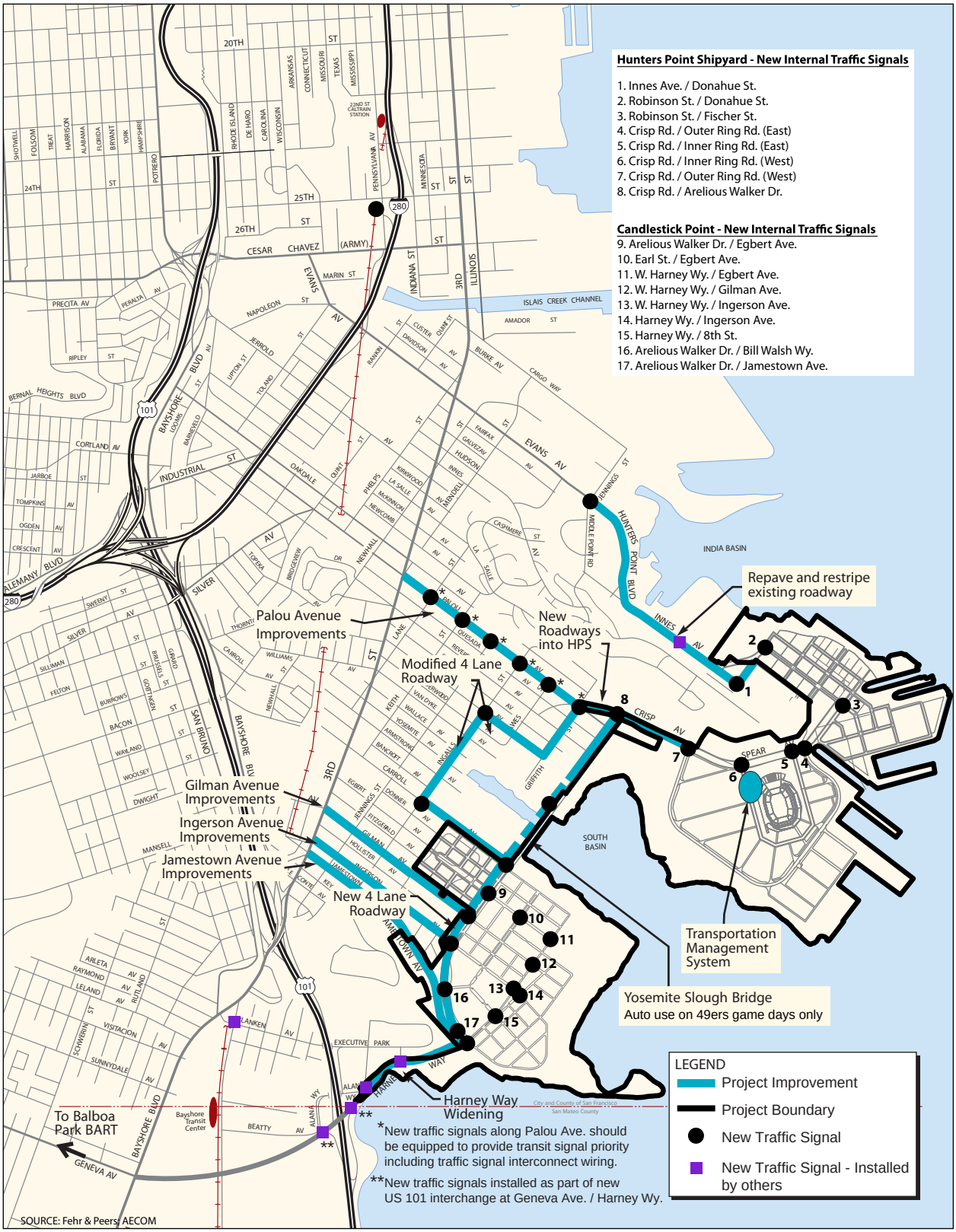
Land uses, including gas stations, in the Project site will ultimately be dictated by the amended Bayview Hunters Point and Hunters Point Redevelopment Plans and not by the Planning Code. Gas stations have not been identified as a Principal use in these amendments.

Response to Comment 43-19

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise taken into account for various Project components and how the Project will provide continued flood protection with greater levels of sea level rise. The shoreline will remain at or very close to the as-proposed Project shoreline location, which implies that only groundwater effects need to be considered for the subject roadway improvements.

Response to Comment 43-20

Figure C&R-7 (Location of New Traffic Signals) presents the locations of proposed on-site and off-site traffic signals. The figure illustrates 26 intersections throughout the Project area and the Bayview neighborhood that would be either manually controlled from within the Stadium's Transportation Management System or by an on-site Traffic Control Officer. The manual control would allow for efficient egress of game attendees from the stadium.



SOURCE: Fehr & Peers, 2010.

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FIGURE C&R-7

Candlestick Point — Hunters Point Shipyard Phase II EIR

LOCATION OF NEW TRAFFIC SIGNALS

Off-site intersections that would be signalized as part of the Project are also listed on Draft EIR page III.D-46.

The following currently unsignalized off-site intersections would be signalized as part of the transit preferential treatment on Palou Avenue, or when traffic volumes warrant signalization:

- Crisp Road/Arelious Walker Drive
- Crisp Road/Outer Ring Road (West)
- Crisp Road/Inner Ring Road (West)
- Crisp Road/Inner Ring Road (East)
- Crisp Road/Outer Ring Road (East)
- Robinson Street/Fisher Street
- Robinson Street/Donahue Street
- Innes Avenue/Donahue Street
- Palou Avenue and Griffith Street
- Palou Avenue and Hawes Street
- Palou Avenue and Ingalls Street
- Palou Avenue and Jennings Street
- Palou Avenue and Keith Street
- Palou Avenue and Lane Street
- Carroll Avenue and Ingalls Street
- Thomas Avenue and Ingalls Street
- Arelious Walker Drive and Carroll Avenue
- Arelious Walker Drive and Gilman Avenue
- Arelious Walker Drive and Ingerson Avenue
- Arelious Walker Drive and Harney Way
- Pennsylvania Avenue and 25th Street
- Evans Avenue, Jennings Street and Middlepoint Road

Intersection control for new intersections within the Project site will be included in the Project Infrastructure Plan. The following intersections would be signalized:

- Arelious Walker Drive/Harney Way/P Street
- Arelious Walker Drive/Jamestown Avenue
- Arelious Walker Drive/Bill Walsh Way
- Arelious Walker Drive/Ingerson Avenue
- Arelious Walker Drive/Gilman Avenue
- Arelious Walker Drive/Egbert Avenue
- Arelious Walker Drive/Carroll Avenue
- Harney Way/8th Street
- Harney Way/Ingerson Avenue
- West Harney Way/Ingerson Avenue
- West Harney Way/Gilman Avenue
- West Harney Way/Egbert Avenue
- Earl Street/Egbert Avenue

A pedestrian and bicycle-actuated signal would be installed at the Bay Trail crossing of the Yosemite Slough Bridge, about 150 feet north of the slough.

At intersections on major roadways where traffic signals are not installed, STOP signs would be installed on streets intersecting the following major roadways:

- Donahue Street, at Galvez Street
- Robinson Street, between Donahue Street and Fischer Street
- Spear Avenue, between Fischer Street and B Street
- Arelious Walker Drive, between Harney Way and Carroll Avenue
- Harney Way, between Arelious Walker Drive and 4th Street
- West Harney Way, between 8th Street and Donner Avenue
- Palou Avenue and Jennings Street

As noted above, the on-site intersection of Donahue/Innes would be signalized as part of the Project and the intersection of Donahue/Galvez would be STOP-sign controlled (the westbound approach of Galvez Street would have a STOP sign, while Donahue would not be controlled). These two intersections reflect the proposed street network for Hunters Point Shipyard, which differs somewhat from the roadway design in the Hunters Point Shipyard Redevelopment Plan adopted in 1997. The 1997 Redevelopment Plan featured a four lane curved roadway bypassing the intersection of Innes/Donahue in the northeast quadrant of HPS (known as the "S-Curve"). The S-Curve plan included traffic signals at the intersections of Innes/S-Curve and S-Curve/Donahue/Galvez. As the current CP-HPS Phase II planning and design progressed, the roadway was refined, leading to the removal of the S-Curve. Intersection analyses were conducted for 2030 Cumulative plus Project conditions to determine the intersection LOS conditions and if the removal of the S-Curve would affect transit operations.

- Removal of the S-Curve would not affect intersection operations, and both intersections would operate at acceptable levels. During both the AM and PM peak hours, the signalized intersection of Innes/Donahue would operate at LOS C, while at the intersection of Donahue/Galvez, the westbound approach of Galvez Street would operate at LOS C (Donahue Street would be uncontrolled and therefore not be subject to intersection control delays).
- Removal of the S-Curve from the plan would not affect the proposed transit routes that would serve Hunters Point Shipyard (i.e., the 48-Quintara, the 54-Felton and the Hunters Point Expresses). While the proposed plan would increase the bus routes by an additional 300 feet than under the S-Curve plan, the modest increase in travel distance would be offset by the removal of a traffic signal at the intersection of S-Curve/Donahue/Galvez that would be required under the S-Curve plan.

The traffic analysis is detailed in the memorandum *Supplemental Intersection Analysis in the Hunters Point Shipyard*, Fehr and Peers, January 12, 2010.

Letter 44: Neighborhood Parks Council (1/12/10)

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Letter 44: Neighborhood Parks Council (1/12/10)

This letter is identical to Letter 49. Letter 44 was submitted to the San Francisco Planning Department, while Letter 49 was submitted to the Agency.

Response to Comment 44-1

As indicated in Response to Comment 31-9, Figure III.B-3 has been revised to include Bay Area Water Trail access points in the Project vicinity. While the precise location of access points within the Project area will be determined through future public processes, including the CPSRA General Plan Amendment process, the Project will provide access for small non-motorized recreational watercraft and therefore will advance the purposes of the Bay Area Water Trail. Refer to Response to Comment 31-9 for the revised Figure III.B-3.

Response to Comment 44-2

Refer to Draft EIR Section III.S (Greenhouse Gas Emissions) for discussion of the Project's impact to greenhouse gas emissions.

Senate Bill 97 (Chapter 185, 2007) requires the Governor's Office of Planning and Research (OPR) to develop draft CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions." On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions, as required by Senate Bill 97. These proposed CEQA Guideline amendments would provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in draft CEQA documents.

At the time the Draft EIR was prepared and released, these guidelines had not been adopted by the Natural Resources Agency. However, On December 31, the Natural Resources Agency formally adopted the proposed new CEQA Guidelines concerning the analysis of greenhouse gas emissions. These new CEQA Guidelines do not become legally effective until the Office of Administrative Law (OAL) approves the Guidelines and transmits them to the Secretary of State for inclusion in the California Code of Regulations. OAL has 30 days to review the Guidelines, and they become legally effective 30 days after OAL submits them to Secretary of State. The OAL approved and filed the guidelines with the Secretary of State on February 16, 2010. The guidelines were be published in the *California Code of Regulations* on March 18, 2010.

With respect to transportation, the revised language is as follows:

> Would the project:
>
> a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
> b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
> c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
e) Result in inadequate emergency access?
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

While the revised guidelines referenced by the commenter had not been adopted at the time the Draft EIR was prepared and circulated for public review, the Draft EIR does include an analysis of Greenhouse Gas Emissions in Section III.S. Further, with respect to the transportation requirements of the CEQA guideline changes, no changes occurred that 'require' any new analysis. Appendix G as cited by the commenter is just a sample of what criteria may be used in an initial study. They are not formal requirements. As discussed in the CEQA Guidelines (Section 15064.7), lead agencies as have the discretion to set their own thresholds for determining significance of project impacts.

The criteria for determining significance for each mode of transportation in the Draft EIR, as established by the City of San Francisco, are described in pages III.D-31 through -33 of the Draft EIR.

The Draft EIR adequately examines the potential traffic-related impacts of the Project in relation to the existing traffic conditions and street system capacity. The Draft EIR also provides detailed analysis of alternative transportation modes including transit (refer to Impacts TR-17, TR-18, TR-19, TR-20, TR-21, TR-22, TR-23, TR-24, TR-25, TR-26, TR-27, TR-28, TR-29, TR-30, TR-39, TR-47, and TR-52), bicycles (refer to impacts TR-31, TR-32, TR-40, TR-48, and TR-53) and pedestrians (refer to Impacts TR-33, TR-34, TR-41, TR-49, and TR-54).

The timing and phasing of transportation improvements would be developed and included in the Project's DDA. Refer also to Master Response 18 (Transit Mitigation Measures) for details and clarity regarding proposed roadway configuration and implementation mitigation measures.

Response to Comment 44-3

The particular comment is one of the proposed amendments to the CEQA guidelines for evaluating transportation impacts. While the revised guidelines had not been adopted at the time the Draft EIR was prepared and circulated for public review, with respect to the transportation requirements of the CEQA guideline changes, no changes occurred that "require" any new analysis. As stated on page III.A-3 of the Draft EIR, the impact significance used in the EIR are appropriately based on the San Francisco Planning Department MEA and Agency guidance regarding environmental effects to be considered significant. Page III.A-3 of the Draft EIR specifically states that:

> The impact significance criteria used in this EIR are based on San Francisco Planning Department Major Environmental Analysis (MEA) and San Francisco Redevelopment Agency guidance regarding the environmental effects to be considered significant. This guidance is, in turn, based upon Appendix G to the CEQA Guidelines and MEA's Initial Study checklist, with some modifications. In cases where potential environmental issues associated with the Project are identified, but are not clearly addressed by the guidance listed above, additional impact significance criteria are presented. The significance criteria used for each environmental topic/resource are presented at the beginning of the impact discussion in each section of Chapter III of this EIR.

Response to Comment 44-4

This particular comment is also one of the proposed amendments to the CEQA guidelines for evaluating transportation impacts. Refer to Response to Comment 44-3 for discussion of revisions to the CEQA guidelines.

Response to Comment 44-5

This particular comment is also one of the proposed amendments to the CEQA guidelines for evaluating transportation impacts. Refer to Response to Comment 44-3 for discussion of revisions to the CEQA guidelines.

Response to Comment 44-6

Figure II-14 does not provide the phasing of the bicycle improvements on the Project roadway network. The timing and phasing of transportation improvements would be defined in the Infrastructure Plan, which would be included in the Project's DDA.

Within Hunters Point Shipyard Class II bicycle lanes would be provided on Innes Avenue, Robinson Street, Fisher Street, and along Crisp Road a Class I off-street facility would be provided. Construction of these streets and development adjacent to these roadways are currently planned to occur within the first phases of CP-HPS Phase II development, and therefore interim bicycle and pedestrian connections would not be necessary. The bicycle network within Hunters Point Shipyard would connect with existing Bicycle Route #7 on Palou Avenue (a Class III facility).

Response to Comment 44-7

The analysis provided in Impact RE-2, beginning on page III.P-15 of the Draft EIR and concluding on page III.P-31, evaluates not only impacts that could occur as a result of the resident and employee population, but also what could occur with the existing population of the Bayview area. The analysis determines that the increase in the Project's resident and employee population and the existing area population would not lead to substantial physical deterioration or degradation of existing and proposed facilities, nor would it result in the need for new or expanded facilities. The Project would, therefore, not cause a significant impact and no mitigation is required. Nonetheless, mitigation measure MM RE-2 has been identified to ensure that parks are phased as development occurs.

Response to Comment 44-8

Page III.P-31 of the Draft EIR has been revised to include Table III.P-3a (Residential Units, Employment, and Park Acreage Provided during Each Stage of Development) following Table III.P-3 in the Draft EIR, page III.P-31:

Table III.P-3a Residential Units, Employment, and Park Acreage Provided during Each Stage of Development [New]

Stage of Development	Residential Units	Population	Total Parkland (ac)	Park-to-Population Ratio (acres per 1,000 Residents)	Employees	Park-to-Population Ratio (acres per 1,000 Residents & employees)
Existing	256	1,113a	120.2	108	—	201.5
Phase 1	3,160	7,363	235.6	32.0	2,346	24.3
Phase 2	5,165	12,035	246.9	20.5	7,474	12.7
Phase 3	7,670	17,872	250.4	14.0	10,595	8.8
Phase 4	10,500	24,465b	336.4	13.8	10,730	9.6

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Housing, and Employment). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.

b. Calculated as 2.33 people per residential unit.

As illustrated in Table III.P-3a, when employees are included in the Project's population, the parkland ratio remains well above the standard of 5.5 acres per 1,000 population at all phases of the Project. The Project will not cause significant physical degradation of exiting park facilities.

Figure II-17 (Proposed Building and Parks Construction Schedule), Draft EIR page II-52, shows that the Project's construction schedule would maintain adjacency between residential development and park construction and improvement. This phasing will be made mandatory by the Project's Disposition and Development Agreement. (Figure II-17 has been revised in Section F [Draft EIR Revisions] to reflect that building construction activities would occur 1 to 2 years later than originally planned.)

Response to Comment 44-9

The comment regarding marina siting is noted. The Project area is not presently used by substantial numbers of small non-motorized craft such as kayaks. Moreover, with the exception of the Yosemite Slough bridge impacts discussed in Response to Comment 47-20, the Project is unlikely to impact conditions for watercraft other than windsurfers.

Letter 45: National Trust for Historic Preservation, Western Office, and California Preservation Foundation (1/12/10)

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Letter 45: National Trust for Historic Preservation, Western Office, and California Preservation Foundation (1/12/10)

Response to Comment 45-1

This comment contains introductory information and is not a direct comment on the content or adequacy of the Draft EIR. No response is required.

Response to Comment 45-2

This comment contains introductory information and is not a direct comment on the content or adequacy of the Draft EIR. No response is required.

Response to Comment 45-3

Refer to Responses to Comments 28-1 and 39-3, and to Section F (Draft EIR Revisions) of this document, with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Response to Comment 45-4

Draft EIR Section III.J (Cultural Resources and Paleontological Resources) discusses the NRHP-eligible Hunters Point Commercial Drydock Historic District, as identified in 1998. The Hunters Point Commercial Drydock Historic District is shown in Figure III.J-2 (Potential Historic District), page III.J-23. As discussed in Draft EIR Chapter II (Project Description), page II-23, the Project would retain structures in this NRHP-eligible Hunters Point Commercial Drydock Historic District, including Drydocks Nos. 2 and 3, and Buildings 104, 204, 205, and 207. Impact CP-1b, Impact of Hunters Point Phase II, pages III.J-33 to -34, notes that that the Project would have less than significant impacts on the NRHP-eligible district. Section III.J also identified a larger CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, shown on Figure III.J-2, that would include Buildings 208, 211, 224, 231, and 253. The Project would demolish those buildings, and as stated in the Draft EIR, this would be an unavoidable significant adverse impact on the CRHR-eligible district. (As noted in Section B (Project Refinements), herein, the Project analyzed in the Draft EIR proposed demolishing Buildings 208, 211, 224, 231, and 253. Building 208 will now be retained as an element of the cultural landscape, but would not be occupied.) The NRHP-eligible resources would remain and would continue to be part of the NRHP-eligible Hunters Point Commercial Drydock Historic District.

The NRHP-eligible Hunters Point Commercial Drydock Historic District as part of the Project would be bounded by new R&D development to the west and south and by the shoreline areas of HPS and San Francisco Bay to the north and east. Structures in the historic district, including Drydock Nos. 2 and 3, and Buildings 104, 204, 205, 207, and 208 would be within open space areas, as shown in Draft EIR Figure II-9 (Proposed Parks and Open space), page II-27. (Figure II-9 has been revised in Response to Comment 86-5 to reflect the proposed Bay Trail route around the Yosemite Slough.) With the Project, R&D buildings south of the drydocks would replace large-scale buildings, such as Building 211 and Building 253. While nearby

R&D development up to 105 feet in height would be a different design than the existing structures in the historic district, that new development would not alter the setting of the historic district such that its integrity would be impaired. In addition, the historic district would retain its waterfront setting, including the drydocks. Thus, new development at HPS would not have an adverse impact on the setting and context of NRHP-eligible Hunters Point Commercial Drydock Historic District as part of Project.

Mitigation measure MM CP-1b.1, pages III.J-34 to -35, requiring documentation of the CRHR-eligible resources before demolition, would reduce, but not avoid, the significant effect on CRHR-eligible resources.

Refer to Section F of this document, discussing Subalternative 4A (Proposed Project with Historic Preservation Alternative) that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and would avoid significant adverse effects on historic resources.

Response to Comment 45-5

Refer to Responses to Comments 28-1 and 39-3, and to Section F (Draft EIR Revisions) of this document, with regard to Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation) and Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) as preservation alternatives that would retain the structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, consistent with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, and would avoid significant adverse effects on historic resources.

Response to Comment 45-6

The Draft EIR found that the Project would not have a significant adverse effect on the NRHP-eligible Hunters Point Commercial Drydock District. As stated on Draft EIR pages III.J-33 to III.J-34:

> The Project proposes to retain the buildings and structures in the potential Hunters Point Commercial Drydock District, identified in 1998 as eligible for listing in the NRHP. Drydocks 2 and 3 and Buildings 140, 204, 205, and 207 would be rehabilitated using the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Page & Turnbull, architects and historic resource consultants, reviewed the proposed treatment and rehabilitation of Drydocks 2, 3, and 4. The treatments would include repair of concrete surfaces of the drydocks and addition of guardrails along their perimeter. Page & Turnbull found that the proposed treatments would provide a methodology for resolving severe deterioration issues, and ultimately provide for the longevity of the historic resources; the treatments would be consistent with the *Secretary of the Interior's Standards for Rehabilitation*[266] (refer to Appendix J [Drydock Assessment] of the Draft EIR). Heritage Park is proposed at Drydocks 2 and 3 and would include interpretive display elements related to the history of HPS. Per CEQA Guidelines Section 15064.5(b)(3), these impacts would be mitigated to a less-than-significant level.

As discussed on in Section III.J, pages III.J-33 to -34, the Project would demolish structures identified as part of the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District; this would be a significant and unavoidable adverse effect. Refer to Response to Comment 28-1 with regard to Subalternative 4A (CP-HPS Phase II Development Plan; Stadium, Marina, Yosemite Slough Bridge, with Historic Preservation), which would retain the structures in the California Register of Historical Resources (CRHR)-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, and would avoid significant adverse effects on historic resources.

The Draft EIR includes supplementary information on the historic treatment of the Drydocks 2, 3, and 4 as atypical structures. All buildings to be retained in the NRHP-eligible Hunters Point Commercial Drydock Historic District, would, as noted, be rehabilitated under the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Draft EIR, page III.J-29, third full paragraph, notes:

> CEQA Guidelines Section 15064.5(b)(3) states that "generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings shall be considered as mitigated to a level of less than a significant impact on the historical resource."

Response to Comment 45-7

Refer to Response to Comment 39-4 on the evaluation of Candlestick Park stadium under NRHP and CRHR criteria. As discussed in that Response, Candlestick Park stadium would not meet NRHP or CRHR criteria as an historic resource.

Response to Comment 45-8

The *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Historic Resources Survey and Technical Report*, October 2009, by Circa Historic Property Development (Circa Report, cited on page III.J-1), evaluated structures at Hunter Point Shipyard for eligibility for the NRHP, the CRHR, and local historic registers. The Circa Report concluded that Buildings 208, 211, 224, 231, and 253 met criteria as contributors to the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, described on pages III.J-22 through III.J-25. The Circa Report did consider NRHP criteria in that evaluation, and concluded that Buildings 208, 211, 224, 231, and 253 did not meet criteria for the NRHP. The conclusion is noted on page III.J-22 and Table III.J-1, page III.J-24. Therefore, the Draft EIR provides information that updates the evaluation of historic resources at Hunters Point Shipyard since the 1998 study noted in the comment, the 1998 study is also addressed on Draft EIR, page III.J-21.

To clarify the summary of the Circa Report in the Draft EIR, the following underlined text has been added after the second sentence, first paragraph, page III.J-22:

> … <u>The investigation evaluated the eligibility of buildings and structures for the NRHP, the CRHR, or local historic registers.</u> …

Refer also to Response to Comment 39-1 with regard to evaluation of historic resources at Hunters Point Shipyard.

Response to Comment 45-9

Refer to Responses to Comments 34-4 and 45-6 with regard to preservation of resources in the NRHP-eligible Hunters Point Commercial Drydock Historic District consistent with the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

Response to Comment 45-10

Refer to Response to Comment 34-6, clarifying that the Navy is completing the NRHP listing process for the Hunters Point Commercial Drydock Historic District identified in 1998.

Letter 46: Visitacion Valley Planning Alliance (1/11/10)

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Letter 46: Visitacion Valley Planning Alliance (1/11/10)

Response to Comment 46-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment 46-2

The comment questions whether construction/approval of an entertainment and regional retail center at the location proposed is consistent with the City's Transit First policy. There would be a robust transit network serving the entertainment and retail sites. These facilities would be served by three transit lines, including:

- 29-Sunset, with service to Mission Street, the Balboa Park BART station, San Francisco City College, and San Francisco State University
- CPX, which would provide express service to the Transbay Terminal in Downtown San Francisco, where patrons can connect to many other local bus lines as well as regional transit systems, including ferries, AC Transit bus service to the East Bay, and Golden Gate Transit bus service to Marin and Sonoma Counties
- 28L BRT, which would provide high-frequency service in exclusive right-of-way to the Hunters Point Shipyard transit hub, the Bayshore Caltrain station, and the Balboa Park BART station

Consequently, patrons from the regional retail and entertainment centers who wish to use transit would be able to connect to destinations throughout the entire Bay Area with only a single transfer between systems or routes. The ability to provide convenient connections to this robust transit network was a key reason for the design and proposed location of these uses.

The Project proposal includes a mix of regional and local transit links to ensure quick access by transit from points throughout the Bay Area to major destinations in the Project area. These include the proposed stadium, the parks, and the entertainment and retail center complex at Candlestick Point. While these land uses are consistent with the voter-approved Proposition G, the transit links proposed in the Project have been designed specifically to ensure that regional attractions (e.g., the arena) have multiple transit route access and strong connections to BART and Caltrain. Thus, the entertainment and retail complex would have direct access to BART and the T-Third by the 28L-BRT and the 29-Sunset, and direct access to Caltrain by the 28L-BRT, as well as multiple pedestrian and bicycle links to the Bayview via Gilman Avenue, Jamestown Avenue, and Ingerson Avenue, and along Harney Way and the State Park; links that would also serve the same local-to-regional transit hubs.

Unlike numerous regional attractions in the Bay Area, transit serving this site would not only provide links to BART, Muni Metro, and Caltrain, it would provide those links on exclusive right-of-way to reduce and minimize conflicts, congestion impacts and other typical delay and unreliability factors of conventional bus transit service. The Project therefore provides a high level of transit orientation and amenity to support the trips to and from the Project, from both San Francisco and the larger Bay Area.

The commenter also suggests that the proposed reconstruction of Harney Way would negatively impact shoreline access. The proposed configuration of Harney Way includes a number of pedestrian amenities designed to improve shoreline access. The reconstruction would include two new signalized intersections,

at Thomas Mellon Drive and Executive Park East. Each of these new signalized intersections would provide new crosswalks across Harney Way and allow controlled crossings for pedestrians. The reconstructed Harney Way has also been designed in two phases—the first being a slightly narrower, interim phase with fewer travel lanes, and the second being a slightly wider ultimate phase with more travel lanes when traffic volumes warrant—such that pedestrian crossing distances across travel lanes would remain a short as possible for as long a duration as possible.

The intersection and freeway facility LOS impacts associated with the Project were analyzed and described in the Draft EIR. The analysis indicated a number of significant traffic-related impacts to the surrounding roadway system, including facilities in Visitacion Valley. The analysis describes mitigation measures to reduce traffic-related impacts to less than significant levels, where feasible mitigation measures were identified. However, at a number of facilities expected to experience significant impacts, no feasible mitigation measures were identified. For those facilities where no feasible mitigation measures were identified, a detailed discussion of mitigation measures considered and why they were determined to be infeasible is provided in the Transportation Study in Appendix D of the Draft EIR.

The commenter also suggests that unacceptable LOS at intersections in Visitacion Valley be mitigated by land use planning for the Project by not providing a regional entertainment and retail center. A number of intersections in Visitacion Valley would operate at LOS E or LOS F under future year 2030 conditions without the Project. Therefore, not providing the Project's regional entertainment and retail center would not mitigate the poor operating conditions at these intersections. Chapter VI of the Draft EIR describes a number of Alternatives to the Project, some of which would generate less traffic than the Project, and would therefore add less traffic to study intersections in Visitacion Valley.

Impacts TR-38 and TR-43 describe traffic and parking impacts, respectively, associated with 49er game day conditions. Although mitigation measures are proposed to reduce the severity of traffic impacts, they would remain significant and unavoidable with mitigation. Parking impacts during 49er game days were found to be less than significant. Visitors to the regional retail and entertainment center during game days would likely use regional facilities, such as US-101 and the Harney Way interchange, rather than local roadways within Visitacion Valley to access the retail and entertainment center.

Response to Comment 46-3

The Project's commercial uses have been designed to provide a range of opportunities to the region, the adjacent neighborhoods, and the new Project residents. The retail market analysis prepared by CBRE Consulting (Appendix U to the Draft EIR) determined that the commercial uses proposed by the Project would be sufficiently supported by growth in the region and the new residents of the Project. The market analysis determined that there would be no adverse urban decay impacts from cumulative development on the surrounding neighborhoods, including Visitacion Valley. Access to the Project area would be improved under the Project with numerous connections, including BRT and a marina, to the greater San Francisco area. It is anticipated that there would be sufficient market base to support more than one entertainment venue.

Response to Comment 46-4

The comment is acknowledged. This proposal does not reduce or avoid any significant and unavoidable impact of the Project.

Response to Comment 46-5

The Draft EIR evaluates potential impacts from the Project construction and traffic along the Harney Way corridor, including Executive Park, as described in Section III.H (Air Quality) and in Appendix H3, Attachments 1, 2, 4 and 6. The greater Visitacion Valley area is farther away than and generally upwind of the Harney Way corridor. As pollutant concentrations from these types of sources decrease with increasing distance and as the predominant wind direction tends to blow from west to east, out to the San Francisco Bay, the air quality impacts in Visitacion Valley would be lower than those in the Harney Way corridor. As discussed in Appendix H3, Attachments 1, 2, 4 and 6, the impacts in the Harney Way corridor were well below the BAAQMD CEQA threshold of significance so no adverse health impacts associated with the Project would be expected for the greater Visitacion Valley area.

Response to Comment 46-6

Refer to Response to Comment 31-5 regarding the subjectivity of aesthetic evaluation. Section III.E (Aesthetics) of the Draft EIR does not indicate there would be no impact on views. Rather, the analysis acknowledges that the towers would partially obstruct some views from different vantage points, which were clearly identified. Figure III.E-22 (View 10: Northeast from Bayview Hill), page III.E-33, of the Draft EIR, shows the view from Bayview Hill. To the east, residential towers at Candlestick Point would be visible. Short and mid-range views of degraded and unmaintained areas would be replaced with well-designed development (page III.E-60 of the Draft EIR). As shown in Figure III.E-21 (View 11: Northwest from CPSRA), page III.E-34, of the Draft EIR from the easterly area of CPSRA, the Bay, Bayview Hill, and Candlestick Point stadium are clearly visible. Views of Bayview Hill would be partially obstructed, as noted on page III.E-60 of the EIR. However, this view would not be completely blocked, as shown in the simulation, and Bayview Hill would remain fully visible from other vantage points.

Response to Comment 46-7

The traffic-related impacts associated with the Project have been analyzed and are presented in the Draft EIR. Specifically, Impacts TR-1 through TR-16, TR-38, TR-46, and TR-51 identify traffic-related impacts due to the Project, their levels of significance, whether mitigation is feasible, and level of significance after mitigation. These impacts include traffic throughout the transportation study area, including a number of intersections in the Visitacion Valley area and the nearest freeway facilities. They also include the cumulative effects of a number of already approved and/or reasonably foreseeable development projects in the study area, as referenced by the commenter.

The health and aesthetic impacts emanating from traffic congestion, as well as quality of life have been addressed in Draft EIR Sections III.I (Air Quality), Section III.E (Aesthetics), and Section III.B (Land Use and Plans) respectively. Further as the Draft EIR includes a cumulative analysis of all impact areas, the combination of the Project with all reasonably foreseeable development has also been addressed in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) under each issue area.

With regard to replacing the regional retail centers with neighborhood-serving uses, these ideas were addressed in Chapter VI Alternatives. A reduced development scenario was presented in Alternative 3, page VI-4, in which retail uses would not be developed.

Refer to Response to Comment 52-7 regarding the neighborhood-serving retail (which includes grocery stores) uses and other services proposed by the Project that would be available and accessible to the larger Bayview community and also to the residents of Alice Griffith. Draft EIR Chapter II (Project Description), page II-16, second paragraph, states:

> Existing 256 public housing units would be demolished on the existing SFHA site and 844 new homes would be constructed in their place along with neighborhood serving retail and services, open space and new streets. The 844 new homes would include a mix of market-rate, affordable and below-market rental and homeownership and public housing replacement units.

Figure II-4 (Proposed Land Use), page II-11, identifies the location of neighborhood-serving retail with a pink striped overlay.

The commenter reiterates a previous comment regarding consistency between the Project and the City's Transit First Policy. Refer to Response to Comment 46-2 for a discussion of the consistency of the City's Transit First policy with the proposed entertainment and regional retail center.

The commenter notes that the specificity of comments was affected by the length of time available to comment. Refer to Responses to Comments 80-1 and 84-11 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. In addition, refer to Response to Comment 96-1 for a discussion of the other opportunities for providing public comment prior to publication of the Draft EIR. Refer to Response to Comment 85-5 for a discussion of the extensive planning process for the Project.

Finally, the commenter has submitted an alternative concept plan for consideration that replaces the proposed regional retail and entertainment center with residential, neighborhood serving retail and other commercial development. California has declared that the statutory requirements for consideration of alternatives must be judged against a rule of reason. CEQA Guidelines Section 15126.6(f) defines the "Rule of Reason," which requires that an EIR set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the Project. Of those alternatives, the EIR need examine in detail only those that the Lead Agency determines could feasibly attain most of the basic objectives of the Project. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is *(i)* failure to meet most of the basic project objectives, *(ii)* infeasibility, or *(iii)* inability to offer substantial environmental advantages over the project proposal (CEQA Guidelines Section 15126.6(c)). Further, CEQA Guidelines Section 15126.6(f)(1) states that "the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." Sufficient information is not provided by the commenter on the alternative concept plan to draw any conclusions about its feasibility.

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Letter 47: California State Parks Foundation (1/12/10)

Response to Comment 47-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 47-2

The comment is acknowledged. No response is required.

Response to Comment 47-3

Following implementation of the Project, CPSRA will be protected by the same statutory scheme that protects the rest of the State Park System.

As the Draft EIR acknowledges, the proposed reconfiguration would remove 29.2 acres from CPSRA. Of this area, 21.4 acres are currently used as parking for events at Candlestick Park stadium. This land currently does not provide CPSRA with recreational benefit; as such removing it does not damage the Park. Similarly, the land that would be crossed by the proposed Yosemite Slough bridge is not presently available for recreation. As discussed in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), with identified mitigation, the Project will have less-than-significant impacts on biological resources in the slough currently or following the Yosemite Slough Restoration Project. The only direct loss to the Park is the 7.8 acres of recreation land (which includes several acres used for CPSRA parking) that would be removed and developed with residential uses essential to the Project's overall success.

In contrast to this relatively small loss, the reconfiguration would provide a substantial net increase in usable recreation land within CPSRA. The proposed reconfiguration would increase the recreational value of CPSRA, in part by providing substantial improvements to parkland in exchange for the land to be removed. The Project, moreover, would not damage any part of the post-reconfiguration park, as discussed more fully in Response to Comment 47-28. Overall the area of CPSRA usable for recreation will increase from the current area of 77.7 acres (about 64 percent of the park's total 120.2 acres, including the slough, which is of minimal recreational value in its unrestored state) to 96.7 acres (the entire future park), a clear improvement.

Response to Comment 47-4

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Yosemite Slough Wetlands Restoration Project and the biological impacts resulting from construction and operation of the Yosemite Slough bridge; and Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the traffic implications if the Yosemite Slough bridge were constructed.

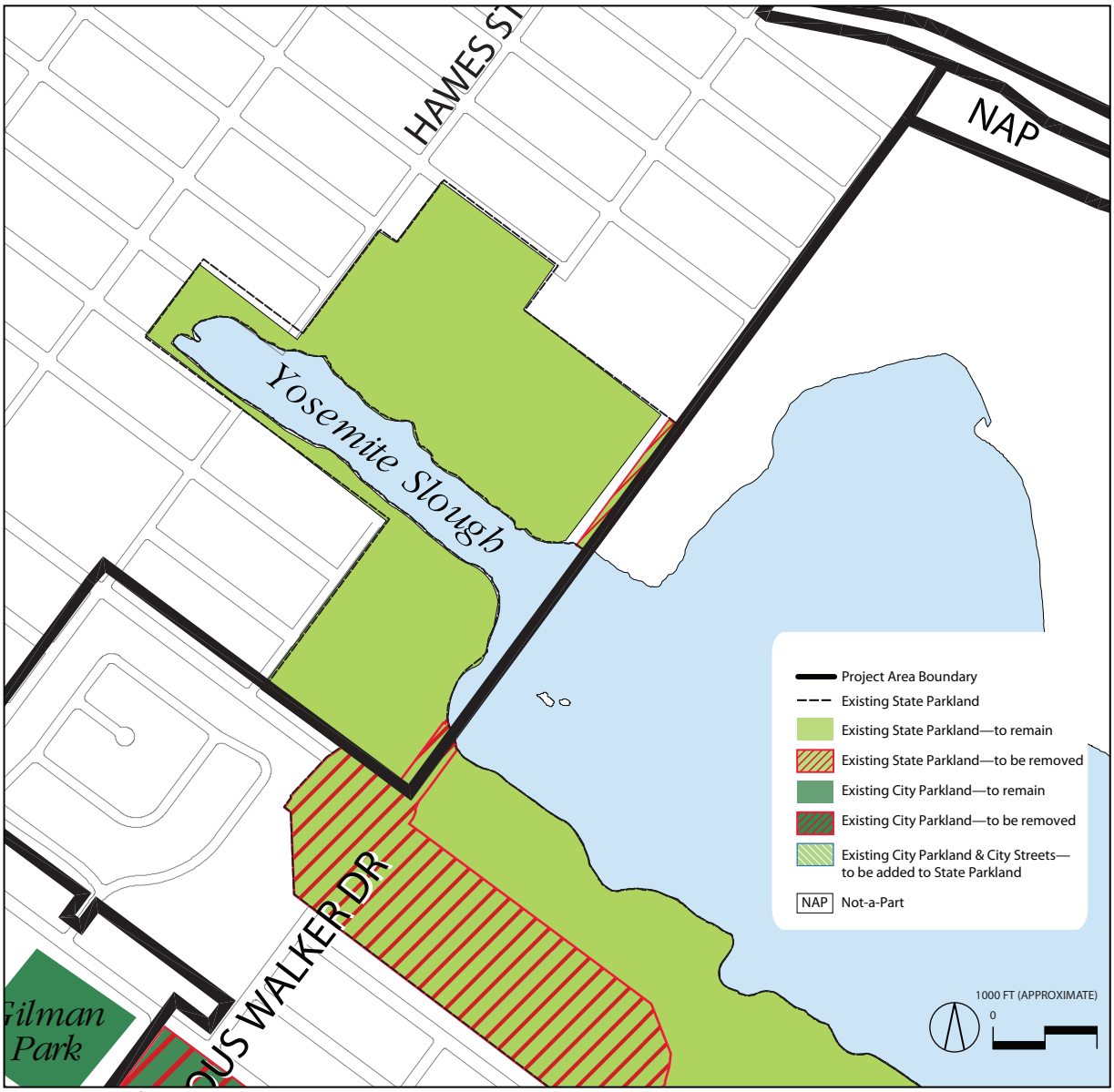
Project Boundaries and the Yosemite Slough Bridge

As noted in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), confusion regarding whether or not Yosemite Slough was considered part of the Project and whether impacts to portions of Yosemite Slough outside the Project site were analyzed in the Draft EIR stemmed

in part from reviewers' interpretations of various figures in the Draft EIR, particularly Figure III.N-1 (Biological Resources Study Area). This figure correctly depicted only the mouth of Yosemite Slough as being within the "Project Boundary," while showing that a slightly greater portion of the slough was within the "Study Area" and the entire slough was within the "Yosemite Slough Watershed Wildlife Study Area."

The purpose of Figure III.N-1 was to indicate the relationships of three different geographic areas: the boundary of the Project site (Project Boundary); the boundary of the area that was covered by the wetland delineation performed for the Project (Study Area); and the boundary of the area in which data on wildlife use had been collected during a study performed by LSA Associates, Inc. and volunteers in 2004 (Yosemite Slough Watershed Wildlife Study Area). The Study Area boundary extended beyond the Project boundary because impacts to wetlands and aquatic habitats, both existing and those that would be present after implementation of the Yosemite Slough Restoration Project, were anticipated to occur slightly upstream from the Project boundary during construction of the Yosemite Slough bridge. That the Study Area boundary did not include the entire slough does not indicate that the remainder of the slough was not considered in the impact analysis. Rather, as discussed in the following section, the impact analysis considered direct and indirect effects on all biological resources both within and adjacent to the Project boundary, including <u>all</u> of Yosemite Slough and relevant adjacent areas.

The figures in the EIR depict the location of the proposed Yosemite Slough bridge relative to the Project site boundaries and the CPSRA. In response to this comment, Figure C&R-8 (CPSRA and Project Boundaries) is provided as a larger-scale depiction to illustrate the Project boundaries relative to the slough. This illustration also clearly shows the proposed position of the bridge relative to the CPSRA boundary. The bridge footings on either side of Yosemite Slough would require removal of portions of parkland from the CPSRA (red hatched areas). On the north side of the slough, this would result in 0.8 acre, and on the south side of the slough it would be part of 2.6 acres that would be reconfigured. As evident in the figure, on the north end of the slough, the bridge footings on the north are located at the eastern edge of the park boundary and thus would not "split" the CPSRA. On the south end of the slough, the area removed for bridge footings would impinge on approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA. Persons using the Bay Trail would be able to cross Arelious Walker Drive and easily access the opposite portion of the CPSRA. Thus, while the road and bridge approach on the south side of the slough would cross the CPSRA, it would not act as a physical barrier preventing use of the entire CPSRA. While the proposed road and bridge would cut through the open space in one location, the majority of the restored slough area would remain unaffected and available for its intended use. Further, given the limited automobile use of the bridge (during stadium events only) crossing Arelious Walker Drive would not involve navigating a heavily traveled thoroughfare. Cross-traffic, except on stadium day events, would be limited to the BRT, bicycles, and pedestrians. The current condition of the south side of the slough (the larger shore area) is documented in the Draft EIR, page III.P-26, and states in part: "This area, which runs north along the shoreline from the Boat Launch to Arelious Walker Drive, is currently used for stadium parking and is not available as recreation or open space land. The Project would create grasslands and other habitats and make the area a functioning part of CPSRA's open space."



SOURCE: Lennar Urban, RHAA, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

CPSRA AND PROJECT BOUNDARIES

FIGURE C&R-8

The Yosemite Slough Restoration Project

Commenters suggested that the Draft EIR did not adequately recognize the Restoration Project as an integral component of the CPSRA or adequately analyze effects of the bridge on the Restoration Project, and suggested that the bridge would conflict with the goals of the restoration. The Restoration Project was discussed in the cumulative context and was considered one of the "planned and in-process wetland Restoration Projects within the Bay area" in the cumulative impact analysis on page III.N-118 of the Draft EIR. In addition, the effects of the Project on the habitats and species that would be expected to use the restoration site were analyzed in the context of direct and indirect impacts to sensitive habitats and special-status/sensitive species both on- and off-site (Impact BI-3a through Impact BI-12c). Direct, explicit reference to the effects of the Project, including the Yosemite Slough bridge, on the Restoration Project itself was limited in the Draft EIR. Because the Draft EIR followed the CEQA requirement to assess impacts with respect to the change that the Project would cause to existing, baseline conditions (under which the Restoration Project has not been implemented), the descriptions of those impacts focused on existing conditions rather than explicitly discussing the Restoration Project. Nevertheless, as explained in more detail, below, the existing slough serves as an appropriate proxy for the restored slough in terms of type of habitat and species that could be impacted by the Project. Although the Restoration Project would increase the extent of tidal aquatic, mudflat, and (especially) tidal marsh habitat in Yosemite Slough, the type of the potentially affected habitats and species present after implementation of the Restoration Project would be similar to existing conditions, and the quantity of impacts to the new/restored habitats would not be substantially greater than the Project's effects on existing Yosemite Slough conditions. Thus, the DEIR assessed impacts to the resources which are the focus of the Restoration Project. To enable the public to see how the analysis covered the impact areas, Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) more directly correlates the biological analysis with the details of the Restoration Project.

The Yosemite Slough Restoration Project was considered in the analysis of cumulative impacts in all technical sections. For clarity, text changes have been made to specifically call out the Restoration Project in the cumulative analysis of each technical section (refer to Section F [Draft EIR Revisions]).

As stated in the Initial Study/Mitigated Negative Declaration issued by the California State Parks Foundation[110] for the Restoration Project, the goals and objectives of the restoration plan include the following:

- Increase the area subject to tidal influence.
- Restore habitat diversity by re-establishing tidal flats and marsh in areas of present upland fill.
- Improve local foraging and roosting habitat for migratory and resident birds.
- Improve quality of life for the surrounding community.
- Remediate, sequester, or remove contaminated soils to reduce potential for human and wildlife contact.
- Create a clean, beautiful, and local park that the public can visit and view wildlife habitat.
- Create an environmental area that local schools can use for educational field trips.

[110] California State Parks Foundation. 2006. Draft Initial Study/Mitigated Negative Declaration. Candlestick Point State Recreation Area Yosemite Slough Restoration Project. SCH # 2005122023, June.

- Benefit local businesses by increasing the number of visitors coming to the area.
- Connect the Bay Trail through CPSRA with the Bay Trail that is proposed for Hunters Point.

As described in Section III.N (Biological Resources) and Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), all impacts to the slough, restored or unrestored, were analyzed. The Project would not interfere with any of the identified objectives of the Restoration Project. In numerous ways, the Project would further the objectives of the Restoration Project, particularly with respect to improving quality of life for the surrounding community, remediating, sequestering, or removing contaminated soils to reduce potential for human and wildlife contact, benefiting local businesses by increasing the number of visitors coming to the area, and connecting the Bay Trail through CPSRA with the Bay Trail that is proposed for Hunters Point. The Project would rehabilitate and replace dilapidated structures and vacant lots full of rubble and debris with high-quality development that would include numerous acres of open space and local parks. The Project would connect the Bay Trail along the shoreline on Hunters Point. The Project would increase the number of visitors <u>and</u> residents coming to the area, exposing residents and visitors to the CPSRA and the restored slough who might have otherwise not been provided the opportunity. The bridge itself would provide unique viewing opportunities of the slough wetlands and tidal habitat that would not otherwise be available. The area is urban now, although degraded. The Project would create a new, improved development that includes open space and parks that would complement the CPSRA, and would include shoreline improvements that would directly benefit visitors to the CPSRA. The Project and the Restoration Project are not mutually exclusive. The two projects can further the objectives of each other.

Analysis of the Yosemite Slough Bridge and Roadway

As noted in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) and Section III.N (Biological Resources), Section III.E (Aesthetics), and Section III.P (Recreation) of the Draft EIR, the placement of a bridge across the neck of the slough would not, as demonstrated in the EIR, result in significant and unavoidable impacts to wildlife habitat or recreational users of the slough, or in significant and unavoidable impacts to scenic resources. It is acknowledged that the bridge and roadway would present a structural element that would not otherwise be visible across the neck of the slough. The Project's proposed roadway and bridge through an otherwise entirely recreational open space area would have some adverse impact on the recreational experience, when compared to a natural open space area with no roadway or bridge running through it. Clearly, the introduction of a roadway and bridge, together with activity on and use of those features, would adversely affect the natural feel of this portion of the park. Nevertheless, the EIR does not consider the proposed roadway and bridge to result in a significant adverse impact on the proposed improved recreation area for a variety of reasons. The Slough is presently, and would continue to be, located with an urban environment, bordered in part by developed lots and roads. Hence, even without the proposed roadway and bridge, park users would be aware of and in close proximity to the roads and developed areas bordering the park. In addition, the proposed road and bridge would provide some benefits to the restored park. The bridge would be carefully designed to maximize its integration with surrounding natural areas, including open work, low profile, and architectural finishes that would allow the bridge to blend to the maximum extent feasible with the surrounding environment. The Yosemite Slough is between two urbanized areas, and the "natural" view and feel of the slough as it currently exists would only be sensed if one were wearing blinders, providing the narrowest possible focus directly out from the slough. Otherwise, urban development as it exists would intrude on the "natural feel" of the area, even without the Project. Also refer to Response to Comment 47-20.

Yosemite Slough Bridge Benefits

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the need for the bridge and the benefits that it provides. Even without a stadium, the bridge would provide substantial benefits to bicyclists and pedestrians, and facilitates reduced transit times. With a stadium, the bridge would also provide acceptable access to the stadium on game days. The bridge, as noted, above, would provide viewing opportunities for visitors and residents that would not otherwise be available. The pedestrian and bicyclist paths on the bridge would provide unique opportunities for viewing wildlife and the improved wetlands upon completion of the Restoration Project that would otherwise be unavailable. The nesting island and restored wetlands would be highly visible from the bridge and would actually provide a better view in some respects than the view from on the ground. Wildlife traversing the slough could easily be watched from the bridge.

No-Bridge Options

The commenter indicates that there is no analysis in the EIR of a non-stadium option without the Yosemite Slough bridge. A range of development scenarios excluding the Yosemite Slough bridge has been analyzed in the Draft EIR. These include Alternative 2, Alternative 4, and Alternative 5, the analysis of which provides a range of impacts for development without a bridge, from a reduced development scenario without a stadium to a more intense development without a stadium as analyzed under Alternative 5. Alternative 2 analyzes the full Project land use program without construction of the Yosemite Slough bridge. Generally, travel demand associated with all Variants and Alternatives studied would be similar with or without the Yosemite Slough bridge. Because the Yosemite Slough bridge would not accommodate auto travel on non-game days, the traffic circulation patterns are expected to be the same under Alternative 2 as the Project. Similarly, since auto traffic would only use the bridge on game days for any Alternative or Variant considered, the typical non-game day travel patterns for any of the Alternatives or Variants that include the bridge would be the same under conditions without the bridge. If Variant 1 (R&D Variant), Variant 2 (Housing Variant), or Variant 2A (Housing/R&D Variant) were approved, and no bridge were constructed, the impacts would not increase from those identified for Variant 1, Variant 2, or Variant 2A with the bridge. In fact, all operational and construction impacts associated with the bridge, although identified as less than significant, would be eliminated.

Without the bridge across Yosemite Slough, additional travel distance and travel time would have a notable effect on passengers who use the BRT to travel to or from the Hunters Point Shipyard (the analysis indicates a reduction of 15 percent for these trips). However, because this represents a relatively small portion of overall Project-generated transit riders, the overall change in transit ridership and auto trip generation is negligible. This conclusion applies to any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough.

Operation of the BRT within the rail right-of-way would not affect study intersection operations. Therefore, the traffic impacts associated with Alternative 2 would be the same as the Project. Similarly, traffic impacts associated with any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough would be the same as the equivalent Variant or Alternative without the bridge.

Table C&R-10 (Development Plan Assumptions for Alternatives 2, 4, and 5) describes the Project components that were analyzed for Alternatives 2, 4, and 5.

Table C&R-10 Development Plan Assumptions for Alternatives 2, 4, and 5

Alternative	*Yosemite Slough Bridge*	*Stadium*	*Intensity of Development Plan*
2	No	Yes	Same as Project
4	No	**No**	Reduced CP-HPS Phase II Development (approximately 30%) with Historic Preservation
5	No	**No**	Same as Project but less development at CP, more at HPS Phase II

While Alternative 2 analyzed the impacts of a no-bridge scenario with the stadium at a similar development intensity as the Project, Alternatives 4 and 5 examined alternative development scenarios, one with a reduced development envelope compared to the Project and the other with the same development program, but different distribution of uses, as the Project, both without a stadium <u>or</u> inclusion of the Yosemite Slough bridge.

Alternative 4 is a reduced-development alternative. A total of 7,350 residential units would be constructed under this alternative, about 30 percent less than proposed with the Project. Consequently, the population growth anticipated under this alternative would be approximately 17,126 compared to approximately 24,465 under the Project. Land uses proposed under Alternative 4 would be similar to those proposed under the Project; however, residential densities and commercial intensities for most uses would be approximately 30 percent less at full build-out in comparison to build-out of the Project.

Alternative 5 would have the same overall land use program as the Project. The total number of housing units would be the same as for the Project. However, approximately 1,350 units would be shifted from Candlestick Point to HPS Phase II, because no State Parks agreement would occur, resulting in a smaller development footprint at Candlestick Point. No Yosemite Slough bridge would be constructed and there would be no stadium at HPS Phase II. As noted on page VI-126 of the Draft EIR, Alternative 5 would retain the existing configuration of the State Park boundary, and would not include improvements or ongoing funding for operations and maintenance as provided by the Project. As a result, the land area available for development at Candlestick Point would be smaller and 1,350 housing units would be shifted to HPS Phase II. A total of 6,500 residential units would be constructed at Candlestick Point with higher densities, resulting in more mid-rise structures and towers than under the Project. The amount of retail, office, community service, hotel, arena uses would remain as proposed under the Project. Research and development uses, neighborhood retail, community-serving uses, the artists' studios, and marina proposed by the Project are also proposed under Alternative 5. Residential development would increase by 1,350 units, for a total of 4,000 units. The San Francisco 49ers football stadium would not be constructed at HPS Phase II.

Therefore, the EIR has analyzed alternatives without a bridge or stadium that range from a 70-percent of Project development to a full Project development with units shifted from Candlestick Point to HPS Phase II. The shifting of these residential units in Alternative 5 would result in more intense development at HPS Phase II than as analyzed for the Project. While the traffic patterns would be somewhat different under Alternatives 2, 4, and 5, the EIR has analyzed an equivalent, a reduced, and a more intense Project at HPS Phase II without inclusion of the bridge.

If the 49ers relocate to a city other than San Francisco, Variants 1, 2, or 2A could be developed. If any of these Variants is ultimately implemented, and there is no Yosemite Slough bridge, impacts with regard to

Land Use and Plans, Population, Housing, & Employment, Aesthetics, Wind, Shadow, Cultural and Paleontological Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Public Services, Recreation, Utilities, Energy, and Greenhouse Gas Emissions would not differ from the analyses in the EIR with respect to these Variants, as impacts on these resource areas are based on intensity of development, population/employment generation, extent of land disturbance, and types of land uses, and would not become more severe or result in additional environmental impacts if a bridge were not constructed. Therefore, the analyses contained in the EIR for any of these Variants would apply if neither the stadium nor the bridge is built.

The only resources that could be affected by routing traffic around the slough would be traffic, transit, air quality, and noise. Alternatives 2, 4, and 5 analyzed routing traffic around the Yosemite Slough rather than across a Yosemite Slough bridge. If Variants 1, 2, or 2A were approved without a bridge, the traffic impacts of routing traffic around the slough has been included in the EIR analysis of Alternatives 2, 4, and 5, and would be greater than the Project. The biological resource impacts would be reduced with no bridge compared to the Project. However, the benefits of the bridge would not be realized, such as decreased transit times and additional wildlife viewing opportunities.

The only area where transportation and circulation would be different without a stadium if the bridge were not built relates to transit travel times. The distance across the Yosemite Slough bridge (from Carroll Avenue to Shafter Avenue) is approximately 0.4 mile. The distance on the route around the slough is approximately 1 mile, a difference of 0.6 mile. The travel time for the BRT route across this distance (assuming an average 10 to 20 mph travel speed) would be approximately 1.25 to 2.5 minutes. The travel time for the BRT route around the slough (assuming an average 7 mph travel speed) would be 8.7 minutes, an increase of over 6 to 7.5 minutes. Therefore, the assumption of a 5-minute difference in travel time as disclosed in the Draft EIR is a reasonable estimate given the uncertainties in estimating actual transit travel time. Further, whether the actual difference in travel time is 5 minutes or 6 minutes, or perhaps even 7 minutes, it would not alter the significance conclusion relative to transit travel since the transit ridership generated would be similar to the Project with a no-bridge development scenario, and transit demand would be accommodated by available capacity, similar to the Project. Further, as described for Alternative 2 in the Draft EIR, traffic volumes would be similar under conditions with or without the bridge, since traffic would not typically be allowed to use the bridge. Therefore, impacts to transit associated with traffic congestion would be similar with or without the bridge.

Response to Comment 47-5

The Draft EIR considers the Project's impacts to recreation opportunities at CPSRA as a whole, while acknowledging that some area would be removed from the park. It concludes that because recreational opportunities would increase overall, the Project would not have a significant physical impact. Refer to Draft EIR at p. III.P-32. As discussed in Responses to Comments 47-20 and 47-26, below, the Project would not significantly degrade existing recreational opportunities at, or any other aspect of, Yosemite Slough as it exists today. Response to Comment 47-20 discusses potential impacts to future uses of the slough. Refer also to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) and to Draft EIR pages III.E-50 through III.E-51, concerning the Project's aesthetic impacts to the slough.

Response to Comment 47-6

This comment contains introductory, closing, or general background information and also reflects the commenter's opinions. No response is required. However, each of the commenter's general issues is specifically responded to in Responses to Comments 47-7 through 47-65.

Response to Comment 47-7

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) and Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge), which discuss the bridge's effects on biological resources and transportation, respectively. As noted in Master Response 4, although the bridge does provide an important function related to the stadium on game days, the bridge would also serve a vital role in providing effective BRT service to the Hunters Point Shipyard neighborhood and a key pedestrian and bicycle connection between the Hunters Point Shipyard and Candlestick Point neighborhoods. Therefore, the bridge is proposed under Project Variants 1 and 2, which do not include the stadium.

However, the Draft EIR Chapter VI includes an analysis of the Project without the Yosemite Slough Bridge. Alternative 2 (CP-HPS Phase II Development Plan; No Yosemite Slough Bridge) would have the same land use program proposed with the Project, including the State Parks agreement, but would not include the Yosemite Slough bridge. Discussion of impacts of Alternative 2, as compared to the Project, is presented on Draft EIR pages VI-30 to VI-59. Alternative 2 could also be combined for approval with Project land use Variants 1 and 2, also resulting in a Project without the Yosemite Slough bridge. Alternative 4 (Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina or Yosemite Slough Bridge) and Alternative 5 (Reduced CP-HPS Phase II Development; No HPS Phase II Stadium, State Park Agreement, or Yosemite Slough Bridge), presented on Draft EIR pages VI-93 to VI-159 also do not include the Yosemite Slough bridge.

The benefit of the bridge with respect to BRT service described above are similar for the land use plans as part of the Project, Project Variants, and Project Alternatives where BRT service is proposed.

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 47-8

Refer to Responses to Comments 47-3 and 47-28 for discussions of the proposed park reconfiguration.

Response to Comment 47-9

This comment is an overview of the commenter's concerns, which are specifically described and responded to above and below in responses to this letter.

Response to Comment 47-10

The Draft EIR identifies both the City and County of San Francisco and the Agency as co-lead agencies for the purposes of carrying out or approving the Project and preparing the CEQA review document. Section 15051(a) of the CEQA Guidelines provides criteria for determining the Lead Agency, stating that

it generally should be the agency that will carry out the Project. Section 15051(d) of the CEQA Guidelines also acknowledges that there may be times in which two or more public agencies have a substantial claim to be the Lead Agency, in which case, the agencies may designate one agency as the lead or may provide for cooperative efforts by two or more agencies, as is the case for the CP-HPS Phase II EIR.

The City and County of San Francisco has adopted guidelines for implementing CEQA, as required by the statute; and those guidelines are codified in its Administrative Code Article 31. Article 31.04 states that the City and all of its officials, boards, commissions, departments, bureaus, and offices shall constitute a single "local agency," "public agency," or "lead agency," as those terms are used in CEQA, except that the Agency shall be a separate "local agency" or "public agency" as specified in CEQA. With regard to the establishment of any redevelopment area, the City shall be the "Lead Agency." In other words, the City has authorized the Agency to be its own Lead Agency except in the instance of the establishment of a redevelopment area.

In this case, the Project does not establish a redevelopment area, so Article 31.04 does not mandate that the "City" serve as the Lead Agency; however, the Project proposes to amend two plans of existing redevelopment areas and that action requires Board of Supervisor approval. The Board also will take a number of other approval actions. The Agency, however, will carry out the Project. The facts here present a situation as recognized in Section 15051(d) where two or more agencies have a substantial claim to be the Lead Agency. Given the language in Article 31.04, it has been the City's experience that the Agency has a substantial claim to be the Lead Agency in circumstances where the Agency proposes to establish redevelopment areas or amend redevelopment plans. Consequently, in addition to having CEQA allow for cooperative efforts by two or more agencies, the City and Agency have long had the practice of jointly preparing CEQA documents for redevelopment plans and plan amendments.

Consistent with CEQA's basic purpose of informing decision-makers and the public about potential significant environmental effects, the identification of cooperative lead agencies increases the opportunity for public disclosure. Rather than creating a problem for the public, if anything, this process results in a better process for the public. It ensures that the Project is well defined, both by the City and the Agency. It requires two commissions to hold public hearings on the draft document, the Redevelopment Commission and the Planning Commission, following both the City's adopted guidelines for carrying out CEQA and the Agency's adopted guidelines. It requires both commissions to certify to the adequacy, accuracy, and completeness of the Final EIR.

As a procedural matter, there is no additional burden on the part of the public by having additional hearings; instead, the public is afforded more opportunities to participate in the process, and any oral comments at any one or more of the hearings are provided equal weight. The public has embraced the practice, as is evident by the number of people who appeared to testify before the commissions. Further, the process does not produce administrative waste because the fact remains that both the City and the Agency have discretionary approval authority over the Project and both agencies must be fully informed as to the potential environmental impacts before acting on the Project.

Consistent with Section 15051(c) of the CEQA Guidelines, to the extent that the City would act first on the Project, it could be considered the primary Lead Agency, if a choice were to be made. However, if the City were designated as the primary Lead Agency and the Agency as a responsible agency (as opposed to

designating co-lead agencies), the conclusions of the EIR would not change, nor would the process by which the EIR has been or will be heard and considered by the City and the Agency. The designation of the City as the primary Lead Agency would not trigger any of the conditions identified in Section 15088.5 of the CEQA Guidelines that require recirculation of an EIR, which include (1) a new significant environmental impact; (2) a substantial increase in the severity of an environmental impact; (3) a feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the significant impacts of the project (but the project's proponents decline to adopt it); or (4) precluding meaningful public review and comment.

Response to Comment 47-11

Use of a Project-Level vs. Programmatic EIR and Certainty with Respect to Project Features and/or Variant Features

As stated on page I-6 of the Draft EIR:

> This EIR evaluates the development Project's environmental effects at a project level of detail and examines all phases of the Project, including planning, construction, and operation, as well as the direct, indirect, and cumulative impacts that might result. The Candlestick Point-Hunters Point Shipyard Phase II EIR is a Redevelopment Plan EIR pursuant to CEQA Guidelines Section 15180 and a project EIR pursuant to CEQA Guidelines Section 15161. The CEQA "Project" includes the proposed Candlestick Point-Hunters Point Shipyard Phase II Development project, the proposed amendments of the Bayview Hunters Point and Hunters Point Shipyard Redevelopment Plans, and the proposed amendments of the San Francisco *General Plan* and the San Francisco *Planning Code*.

CEQA does not mandate the use of programmatic EIRs in most circumstances. Section 15168(a) of the CEQA Guidelines provides permissive language regarding the use of Program EIRs, stating, "A program EIR is an EIR which <u>may</u> [emphasis added] be prepared on a series of actions that can be characterized as one large project and are related. …" Section 15165 of the CEQA Guidelines, in its section describing multiple and phased projects, provides guidance as to when a program EIR must be used, stating, "Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effect, the lead agency shall prepare a single program EIR for the ultimate project as described in Section 15168." The identification of a separate section of the CEQA Guidelines to address multiple and phased projects is intended to make clear that an EIR must address the impacts associated with the whole of an action. If the approval of one particular activity could be expected to lead to many other activities being approved in the same general area, such as is the case with multiple or phased projects, the EIR must examine the expected effects of the ultimate environmental changes. Essentially, while CEQA and the CEQA Guidelines allow for different types of environmental documents, such as a program EIR or a project EIR, the type of environmental document ultimately selected must disclose all environmental impacts associated with a project or an action that leads to other reasonably foreseeable actions; impacts cannot be overlooked due to piecemeal development. As further explained in Practice Under the California Environmental Quality Act (Kostka and Zischke 2009), a Program EIR may be used to (1) avoid multiple EIRs, which could otherwise cause piecemeal environmental review or (2) consider broad programmatic issues for related actions at an early stage of the planning process.

The CP-HPS Phase II Project, while it would occur over a 20-year period of time due to the size of the site and magnitude of the undertaking, represents a single and discrete project, the whole of which has been fully

analyzed in the CP-HPS Phase II Project EIR. With respect to the stadium, the EIR evaluates a project that includes a stadium, which is consistent with the development application submitted by Lennar Urban and jointly accepted by the City and County of San Francisco and the Agency. However, because it is possible that the 49ers may not choose to remain in San Francisco, which is a decision made by the 49ers and outside of the control of the lead agencies and the Applicant, it is possible that a stadium would not be necessary at the Project Site; therefore, the EIR evaluated a variant to the Project that did not include a stadium.

With respect to the Tower Variants, the document analyzes different locations and heights of the residential towers at Candlestick Point, while maintaining the same total number of residential units identified for the Project, in order to provide a range of options for the Planning Commission and Board of Supervisors to evaluate. Impacts related to all of the environmental topics, including shade, wind, and aesthetics impacts, are fully evaluated for all of the variants, including the Tower Variants. In fact, as stated on page IV-1 of the Draft EIR (and as revised in this document in Section F [Draft EIR Revisions]):

> Most of the features of the variants would be similar to the features of the Project. None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description). The Project could be approved in combination with Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5, any of which can be overlaid on the Project. Variants 1, 2, and 2A represent variants of the Project without a stadium; either of these variants, if approved, could also include components of Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5. For all of these variants, this ~~c~~Chapter IV (Project Variants) provides an environmental analysis such that this EIR would be adequate under CEQA for purposes of review and approval for any of the variants of the Project either individually or in combination with elements of the Project. The variants are analyzed at a project-~~-~~level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) Section III.A through Section III.S of this document. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table IV-1 (Comparison of Variants to the Project). Table IV-2 (Impact Comparison of Project Variants) summarizes the effects of the Project compared to the variants. ~~As necessary, figures are included to illustrate key details of the Variants and are presented below with the variant descriptions.~~

The analysis of variants in the EIR does not reflect uncertainty or ambiguities, but, instead, provides flexibility and a range of options for the Lead Agency to consider. In all cases, the variants have been fully evaluated.

All potential components of the proposed development that could occur over the 20-year development schedule have been fully considered in the Draft EIR, either in the analysis of the Project or in the analysis of the variants.

It is acknowledged that some aspects of the Project will need to undergo further design and those further design details will be reviewed and approved by the Agency following the initial approval actions for the Project, consistent with the design review process set forth in the Project approval documents. It is anticipated that these later approvals would require additional environmental analysis only if the specific conditions provided for in CEQA for such later approval action were to occur. As stated on page I-7 of the Draft EIR:

> It is anticipated that each discretionary approval related to the implementation of the Project would rely on this EIR and would not require preparation of subsequent environmental documentation, unless otherwise required by CEQA pursuant to Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 through 15164. Anticipated approvals for the Project are included in Chapter II.

Recreational Impacts Associated with Variant 5

As stated on page IV-238 of the Draft EIR with respect to Variant 5 (49ers/Raiders Shared Stadium):

> Development with the 49ers/Raiders Shared Stadium Variant would be similar to the Project. The Shared Stadium Variant would include the construction and improvement of new parks, recreational facilities, and open space. At build-out of this Variant, approximately 337.5 acres of parks, open space, and recreational uses would be provided, as described in Table IV-1, which is about 0.5 acre more than proposed with the Project.

As stated on page IV-238 of the Draft EIR:

> The Shared Stadium Variant would have the same number of housing units as proposed with the Project, thereby resulting in the same residential population of 24,465, although 0.5 acres more of parkland would be provided. Operational impacts are determined based on a ratio of acres of parkland per resident. Currently, the City provides approximately 7.1 acres of parkland per thousand residents, and the standard used in Section III.P assumes a ratio of 5.5 acres of parkland per 1,000 population is sufficient to meet the demand for recreational facilities without causing or accelerating substantial physical deterioration of facilities or requiring the construction of further facilities. The parkland-to-population ratio associated with the Shared Stadium Variant would be 13.7, which is the same as the Project. The Shared Stadium Variant ratio would be considerably higher than the ratio of 5.5 acres of parkland per thousand residents, which is considered sufficient to meet demand for recreational facilities without causing or accelerating substantial physical deterioration of facilities or requiring the construction of further facilities. Impacts would be less than significant.

As stated on page III.P-29 of the Draft EIR (which provides the same information for Variant 5):

> The Project would also provide approximately 10,730 jobs, which could result in a daytime population of 35,195 (adding the resident population of 24,465, and assuming that no residents were also employees, which is unlikely). Counting the entire daytime population as a part of the population served by the parks on the Project site, the parks-to-population ratio would be 9.5 acres per 1,000 employees/residents, which still exceeds the benchmark ratio of 5.5 acres per 1,000 residents.

In summary, Variant 5 would provide 0.5 acre of additional park facilities, but would result in the same residential and daytime population and associated parks-to-population ratios as the Project, which are considered acceptable.

The Draft EIR assumed there would be 12 game days and 20 other stadium events for the Project, resulting in a total of 32 events. Variant 5 assumes 22 games and 20 other stadium events, for a total of 42 events, an increase of 10 events as compared to the Project.

Environmental Impacts of Shared Stadium and No Stadium Variants

As with the Project, Variant 5 would locate the stadium at Hunters Point, which is not proximate to the CPSRA for purpose of both attending a game and recreating at the CPSRA. As with the Project, it is assumed that individuals that attend a game may arrive early for the purpose of tailgating (refer to page III.D-26 of the Draft EIR), but would not also arrive early (or stay late) for recreation purposes at the CPSRA. Therefore, even with an increase of 10 events, it is unlikely that any of the individuals would impact the recreational values of the CPSRA.

In terms of how the Project will differ in terms of environmental impacts under the 49ers/Raiders Shared Stadium as compared to the Project, refer to the analysis for Variant 5, provided on pages IV-214 through IV-248 of the Draft EIR, as well as Table IV-2 (Impact Comparison of Project Variants). Table IV-2 has

been revised to include Subalternative 4A and is presented in Section F (Draft EIR Revisions). In terms of how the Project will differ in terms of environmental impacts, if the stadium is not built, unlike the Project, refer to the analysis for Variants 1 and 2, provided on pages IV-4 through IV-139 of the Draft EIR, as well as Table IV-2 (Impact Comparison of Project Variants).

Response to Comment 47-12

All of the issues raised in this comment are addressed by the commenter in greater detail in subsequent comments. Therefore, refer to Response to Comment 47-4 for a discussion of why the Yosemite Slough was not included as part of the Project site. Refer to Response to Comment 47-11 for a discussion of reasonably foreseeable future activities associated with the Project. Refer to Response to Comment 47-14 for a discussion of the Project's objectives. Refer to Response to Comment 47-16 for a discussion of necessary federal approvals.

Response to Comment 47-13

Refer to Response to Comment 47-4 regarding the identification and analysis of Yosemite Slough.

Response to Comment 47-14

Chapter II (Project Description) of the Draft EIR clearly indicates that the Project includes construction of a new 49ers stadium, as first described on page II-14 and again described on page II-20. The conceptual design and cross-sections in Figure II-7 (49ers Stadium Conceptual Elevations) and Figure II-8 (Existing and Approved Parks and Open Space), pages II-22 and II-23, further reflect this aspect of the Project. Figure II-8 has been revised and presented in Response to Comment 50-23 to correct the legend and clarify the park boundaries around the stadium site. The Project, including a new 49ers stadium, is evaluated in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) within each environmental topic area.

In this comment, the commenter is identifying one of the six objectives of the Project. Objective 5 on page II-7 of the Draft EIR states:

> 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 necessary infrastructure, and in so doing should:
> - Provide the parking necessary to operate the stadium.
> - Provide the necessary transportation infrastructure, including automobile, public transit and pedestrian connections between Candlestick Point, Hunters Point Shipyard, and the larger BVHP neighborhood, to facilitate the efficient handling of game day traffic.

The Project Objectives are designed to describe the underlying purpose of the Project, as a whole, and to guide in the selection of alternatives. While the City and Agency would like a stadium to be part of the Project, development of an NFL stadium is not the City's or Agency's decision, and is a business decision of the NFL. For the purpose of the analysis of Project impacts, the 49ers stadium is assumed as part of the Project. For example, Section III.D (Transportation and Circulation) evaluates the transportation impacts of a 49ers stadium and identifies mitigation measures to address them.

While the Project includes development of a stadium, several variants to the Project were developed to address a non-stadium scenario. To maintain the same major elements of the Project, while accounting for the potential for the 49ers to relocate to Santa Clara or another jurisdiction, the City identified Variant 1 (R&D Variant) and Variant 2 (Housing Variant), which would develop R&D or housing, respectively, in lieu of a stadium, at levels that would be consistent with population and employment levels associated with a stadium scenario. This analysis is presented in Chapter IV (Variants), and is presented separately from the analysis of a new 49ers stadium within Chapter III. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the need for, and benefit of, the Yosemite Slough bridge.

Project variants are addressed on page IV-1, second paragraph, of the Draft EIR. The Draft EIR states that the Project and one or more variants could be adopted ultimately by decision-makers. Nothing in CEQA precludes adoption of a Project that authorizes multiple land uses. The use of the variants in the Draft EIR was done to make it clear which portions of the Project might be developed in alternative ways. Text changes in Section F (Draft EIR Revisions) of this document show new text that has been added to the Executive Summary to discuss Project variants.

As addressed on page IV-214, last paragraph, of the Draft EIR, a stadium shared by two NFL teams would have limited new environmental effects compared to a one-team stadium:

> Overall, the 49ers/Raiders Shared Stadium Variant would not change the amount or type of development compared to the Project. However, the 49ers/Raiders Shared Stadium Variant includes an increase in NFL events per season from 12 to 20 games. Development with this Variant is also likely to result in events occurring weekly for the entire NFL season. Thus, no construction-related environmental effects would occur in excess of those identified for the Project. The potential operational effects of the 49ers/Raiders Shared Stadium Variant would be related to the increase of stadium use and would affect air quality, noise, transportation, utilities, energy, and aesthetics.

As stated in Appendix D of the Draft EIR, pages 35 and 36, the 49ers/Raiders Shared Stadium Variant would have the same impacts as the Project, except that transportation impacts would occur on ten additional days compared to the Project.

Refer to Response to Comment 17-1 for a discussion of allowing the bridge to be open year-round for automobile use.

Response to Comment 47-15

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open to automobile traffic outside of game-day conditions.

Further, the purpose of making the BRT route "rail-ready" is not as a precursor to anticipated implementation of light-rail on this route; rather, it is a common citywide approach to providing new infrastructure, including new BRT routes, that seeks to avoid precluding future modifications or conversions as technology or demands change. Generally, the concept of "rail-ready" implies that roadway designs, including available right-of-way, curve radii, grades, potential station platform areas, and overhead clearances proposed by the Project would not preclude implementation of light rail along the route.

However, there is currently no proposal to implement light rail along the BRT route. If such a proposal were made at a later date, any such proposal would need to go through appropriate environmental review

prior to being considered by SFMTA. Such a project is not foreseeable and cannot, therefore, be analyzed because no such project has been defined or proposed.

Response to Comment 47-16

Table ES-1 (Major Project Approvals), Draft EIR page ES-6, and Table II-16 (Major Project Approvals), Draft EIR page II-82, include the major Project approvals, including regional, state, and federal approvals. The table is not an exhaustive list, as identified in the table note, but describes the major approvals that would be required of the Project. In response to this comment, Table ES-1 and Table II-16 are revised:

Table ES-1 Major Project Approvals [Revised]

…

Redevelopment Agency Commission

…

- ~~Approves~~ Reports to the Board of Supervisors on the amendments to Redevelopment Plans

…

- Approves land transfer agreements with Port Commission, State Lands Commission, and California Department of Parks and Recreation (CDPR)

…

…

Bay Conservation and Development Commission

- Approves amendments of the Bay Plan and Seaport Plan
- Approves permits for activities within BCDC's jurisdiction, including the proposed Yosemite Slough bridge
- Reviews 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

…

US Army Corps of Engineers

- Approves permit for fill related to the Yosemite Slough bridge, shoreline improvements, and other activities~~.~~
- Consults with USFWS or NMFS regarding federally listed species prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to Section 7 of federal ESA
- Consults with NMFS regarding pile-driving and harbor seal and California sea lion prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to *Marine Mammal Protection Act*
- Consults with NMFS regarding modifying designated EFH prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to the *Magnuson-Stevens Act*

…

Each federal agency required to take approval actions would determine its NEPA requirements for those actions. The Navy, for example, is preparing a Supplemental Environmental Impact Statement (SEIS) with a Draft SEIS expected to be published in June 2010 and the Final SEIS expected in December 2010.

Response to Comment 47-17

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the potential impacts from construction of the Yosemite Slough bridge on wetlands that are restored as part of the Yosemite Slough Restoration Project as mitigation for impacts from other projects.

Response to Comment 47-18

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's consistency with, and potential effects of the Yosemite Slough Restoration Project. The Yosemite Slough Restoration Project is not an adopted land use plan of a local or regional agency within the meaning of Section 15125(d) or (e) of CEQA.

Response to Comment 47-19

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the project on the Yosemite Slough Restoration Project and its biological goals.

Mitigation measures pertaining to impacts to jurisdictional habitats (i.e., MM BI-4a.1, MM BI-4a.2, and MM BI-4c) would apply to any impacts to the resources present when the project is constructed, whether they currently exist or whether they will exist as a result of the Yosemite Slough Restoration Project. Therefore, no revisions to these mitigation measures are necessary.

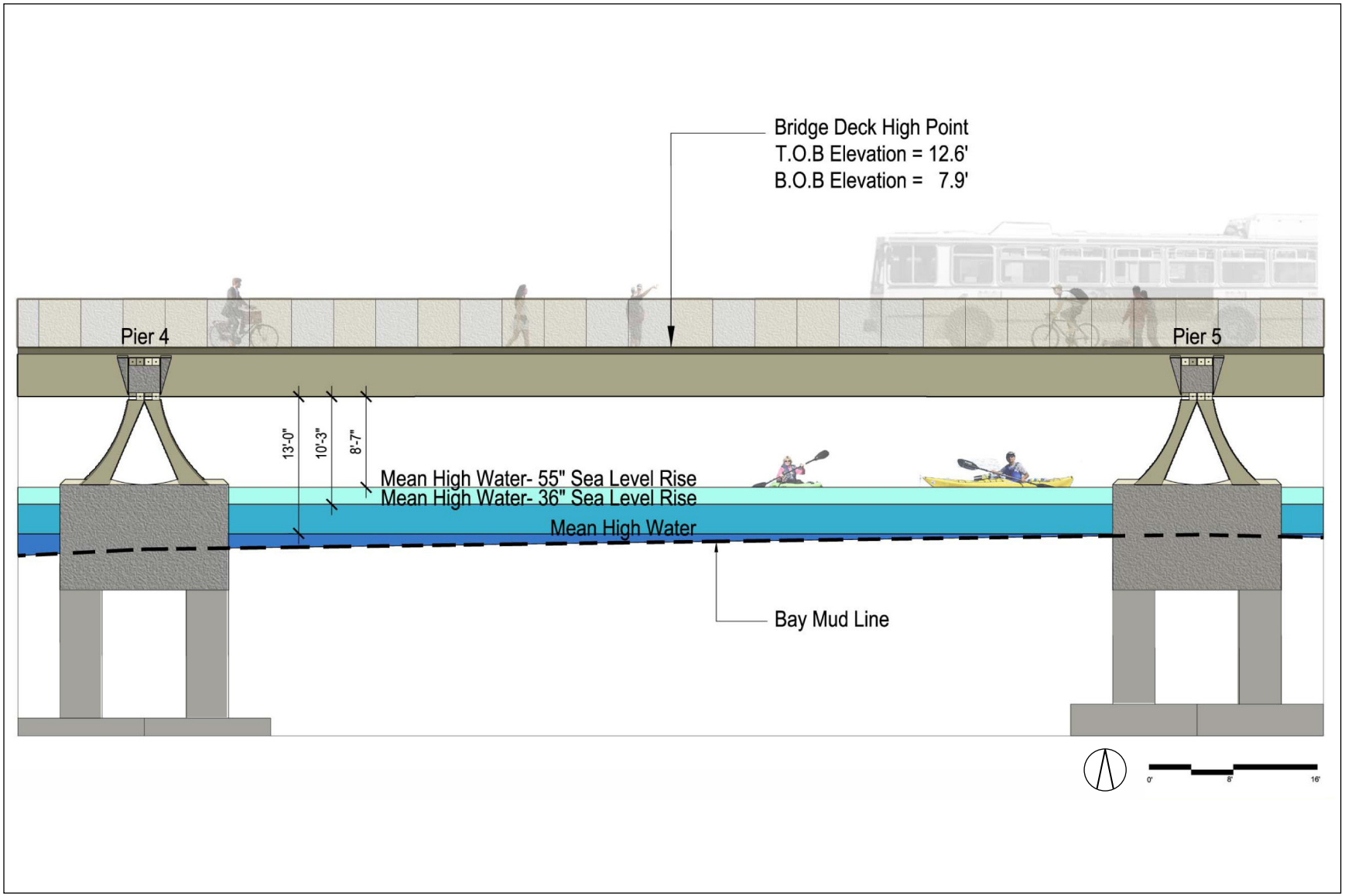
Response to Comment 47-20

The Draft EIR considers, as CEQA requires, the Project's impact on the existing physical environment, which includes Yosemite Slough in its existing, unrestored state. For example, Draft EIR pages III.E-50 through -51 analyze the Project's aesthetic impacts related to the slough. Yosemite Slough currently does not support substantial recreational use, including recreational boating or trails. Thus, the Project would not have a negative impact on existing recreational use.

Analysis of the Project's impact on the future recreational uses associated with the slough and the Restoration Project is difficult. Because these uses do not currently exist, such analysis requires one to project how future visitors may use and experience the slough, and then to project how the Project, particularly the proposed bridge across the slough, would alter those experiences. CEQA normally discourages such speculation. Nevertheless, the commenter has provided information about the proposed future project to create a wetland restoration area around Yosemite Slough and expressed concern that the Project is inconsistent with various elements of the project. Although no such uses exist at this time, assuming the Restoration Project as described by the commenter is eventually constructed, the Project would not have a significant adverse impact on future recreation in the slough, as explained below.

Recreational Boating in the Slough

The proposed bridge across Yosemite Slough would not impede the passage of recreational paddle crafts from the slough into the open bay. Although the precise details of the bridge's design have not been finalized at this time, preliminary plans estimate that under current conditions, the bridge would provide approximately 13 feet of clearance at mean high water—that is, during an average high tide, as illustrated by Figure C&R-9 (Yosemite Slough Bridge—Paddle Craft Clearances). This is sufficient clearance to allow unimpeded navigation by human-powered craft. If sea level rises by 55 inches—a projection at the high end of many estimates of the effects of climate change—clearance would be 8 feet, 7 inches at mean high water, which is still sufficient for paddle craft navigation. And in a more moderate seal level rise scenario of 36 inches, clearance would be 10 feet, 3 inches at mean high water. Thus, there will be no physical impediment to navigation.



SOURCE: RHAA; Lennar Urban, 2010.

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FIGURE C&R-9

Candlestick Point — Hunters Point Shipyard Phase II EIR

YOSEMITE SLOUGH BRIDGE – PADDLE CRAFT CLEARANCES

Some paddlers may feel that their experience is less "natural" because of the bridge and is therefore diminished. Bridges are a frequent feature of water recreation areas in California. For example, most paddlers visiting Elkhorn Slough in Monterey County, a very popular human-powered boating area, pass under Highway 1 at the beginning of their outing. Moreover, the recreational experiences offered by CPSRA and other parks within the Project area involve a mosaic of natural and developed parklands, all connected to urban development. The restored slough will be a more-natural part of the patchwork, but will not be isolated from the developed and urban areas nearby. People visiting the slough, including paddlers, will be aware that they are in an urban park and could expect to see features like the bridge. Thus, while the bridge may detract from the sense of nature that some visitors hope for, on the whole it will not have significant adverse impacts on boaters', or other visitors' recreational experiences, as described below.

The Bay Trail Along the Slough Shoreline

As discussed in Response to Comment 47-28, the Bay Trail alignment proposed in the Draft EIR has been amended in response to public comments. The amended alignment traces the slough shoreline and connects with the proposed Bay Trail alignments on Candlestick Point and Hunters Point. The Bay Trail must cross Arelious Walker Street on both sides of the slough. On the north side, the crossing would be possible without substantial deviation from the shoreline alignment. On the south side, visitors walking the Bay Trail would need to walk along Arelious Walker for a block inland (southward) in order to cross the street, then return to the shoreline. The trail alignment along Arelious Walker would be clearly marked. While this crossing is not exactly the same as identified in the Restoration Project's plans, it is not a significant inconsistency. The Bay Trail will remain a continuous shoreline trail.

Vista Points in the Slough

Proposed vista points associated with the planned Yosemite Slough restoration may also provide recreational experiences in the future. The footprint of proposed bridge may include the areas planned for vista points. While the precise location and nature of these vista points are not known (and CEQA does not require such speculation), it is likely that the proposed bridge will have a less than significant impact on the experience they would offer. On most days of the year, the bridge will be open only to pedestrians, cyclists, and transit vehicles. In this pedestrian-dominated mode, the bridge will be effectively an aspect of the Project's parkland, linking CPSRA with the open space on Hunters Point. The entire length of the bridge will offer scenic vistas both towards the Bay and inward toward the restored slough. The availability of these views essentially provides the experience that the vista points would have offered. Moreover, the bridge's final design may be able to accommodate widened portions of the sidewalks that project over the water and serve as observation decks at either end of the span. These would similarly be effective replacements for the vista points, and would be available at all times, even on those occasions when the bridge is open to private vehicles.

To the extent that the surroundings of a vista point—rather than simply the views on offer—are considered an essential part of the experience, the proposed sites could be relocated within the slough restoration area. For example, overlooks could be constructed along the Bay Trail at points on either side of the slough west of the bridge. These points would provide views of the slough comparable to those from the originally proposed vista sites. Views toward the Bay would include the bridge, which may detract from some viewers' experience. The points would nevertheless offer substantial views of the Bay, the mouth of the slough,

Double Rock, and shoreline features. In light of these views and of viewers' expectations of the urban nature of these parklands, the bridge's impact on views from the slough, and of the recreational experience of Slough viewpoints, would be less than significant.

Overall, while the proposed bridge would result in a different, more urban recreational experience than Slough visitors would obtain without it, the Project would not have a significant adverse impact on potential future recreational opportunists in Yosemite Slough.

Other Elements of Slough Restoration Project

The commenter points to several elements of the Restoration Project and concludes that the Project is inconsistent with these elements. The Project will remove from CPSRA approximately 1.5 acres of the 34 acres in the proposed restoration area, which includes the slough itself. Consequently, the large majority of the Restoration Project is not directly affected by the Project. The Project will not have any effect on recreational access to the slough, one of the Restoration Project's stated purposes; in fact, the connection of Arelious Walker Street across the slough will enhance access to the restoration area and result in more, not fewer visitors to the area. The Project will not prevent the construction of the Restoration Project's proposed interpretative center, fencing, lighting, benches, or drinking fountains. With the exception of the small acreage affected by the bridge construction, the Project will not affect the addition of 2.5 acres of passive public use areas, new interpretative trails, and vista points along those trails. As explained above, small portions of trails and vista points affected by the bridge could be relocated within the slough restoration area without a substantial effect on the recreational opportunity that the Yosemite Slough Restoration Project presents to visitors to the area.

The Project would construct a bridge and roadway in an area that otherwise would, after the restoration project, be used solely for recreation and open-space uses. The construction of these facilities, together with their use and operation, would adversely affect visitor's experience of the restored natural state of the area. However, the slough is now, and would continue to be, located in an urban environment, bordered by roads and developed lands. The bridge would have limited automobile use, primarily serving as a BRT, bicycle, and pedestrian route. Even without the bridge and roadway, users would always be near and aware of the urban environment in addition to the more natural immediate surroundings in the restoration area. Moreover, the majority of the restored slough area would be unaffected. Therefore, any adverse impact would be less than significant.

Response to Comment 47-21

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Project on wetlands created as part of the Yosemite Slough Restoration Project.

Refer to Response to Comment 47-20 for a discussion of the Project's impacts on future recreation in the slough, and Response to Comment 47-73 for a discussion of the aesthetic impacts of the Project on the restored slough.

Response to Comment 47-22

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the project's potential effects on the Yosemite Slough Restoration Project. As discussed in Master Response 3, impacts on the biological resources that are expected to occur within the Restoration Project area were addressed in the Draft EIR. Also, refer to Responses to Comments 47-67 through 47-101 for responses to individual comments in WRA's letter, and refer to Master Response 3 for a discussion of text added to quantify potential impacts of the Yosemite Slough bridge on wetlands proposed to be created as part of the Restoration Project.

Response to Comment 47-23

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the reasons why different study areas were depicted on Figure III.N-1 (Biological Resources Study Area) and Figure III.N-2 (Study Area Habitats) and for clarification regarding the scope of the project's analysis of impacts to biological resources in on-site and off-site areas (i.e., the impacts to resources in all of Yosemite Slough were included in the impact analysis).

With respect to whether the biological resources impact analysis included Yosemite Slough, page III.N-1 of the Draft EIR states:

> The Study Area for this biological resources analysis includes both developed and undeveloped portions of HPS Phase II and Candlestick Point, including the entire Candlestick Point State Recreation Area (CPSRA), as well as off-site open waters adjacent to the Project site that would be impacted by Project components (i.e., breakwater, pier, etc.); refer to Figure III.N-1 (Biological Resources Study Area). The off-site aquatic resources discussed include Yosemite Slough (except the area of construction), the open water area between Candlestick Point and HPS Phase II (known as South Basin), and adjacent open waters that would be impacted by Project components (i.e., breakwaters, gangways, floats, etc.). For purposes of the evaluation of sensitive species, the Study Area is defined as the Project site and a radius of up to 5 miles beyond the Project site.

Thus, the Draft EIR included Yosemite Slough in the off-site areas in which impacts were analyzed. The phrase "(except the area of construction)" was not intended to indicate that the area of construction was excluded from the impact analysis; rather, this parenthetical phrase was intended to indicate that the area of construction was included in the on-site impact analysis. In response to this comment, Section III.N (Biological Resources), third paragraph, second sentence, page III.N-1, has been revised as follows for clarification purposes:

> … The off-site aquatic resources discussed include Yosemite Slough (except the area of construction, <u>which is included in the on-site impact analysis</u>), the open water area between Candlestick Point and HPS Phase II (known as South Basin), and adjacent open waters that would be impacted by Project components (i.e., breakwaters, gangways, floats, etc.). …

Response to Comment 47-24

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the project's potential effects on the existing biological resources of Yosemite Slough, and the potential effects on the wetlands planned for restoration under the Yosemite Slough Restoration Project.

Response to Comment 47-25

Refer to Responses to Comments 47-26 through 47-30 for discussions of the Draft EIR's analysis of the Project's impacts on existing recreational resources and facilities.

Response to Comment 47-26

The majority of the CPSRA shoreline would not be affected by the proposed bridge. Please refer to Response to Comment 47-20 regarding the bridge's impacts on recreational opportunities in Yosemite Slough.

Response to Comment 47-27

Current recreation in CPSRA consists primarily of windsurfing and land-based uses such as picnicking and walking. The Draft EIR analyzes the Project's impacts on such users. It analyzes the Project's impacts on windsurfing on page III.P-33. The Draft EIR analyzes the Project's impacts on existing land-based uses by considering the area that will be available for such uses. It considers construction-related impacts in Impact RE-1, beginning on page III.P-12. Regarding impacts on future recreational uses in Yosemite Slough, please refer to Response to Comment 47-20. As discussed in Response to Comment 47-3, the Project will enhance the rest of CPSRA (outside the slough), and therefore will not have an adverse impact on future recreational uses.

Response to Comment 47-28

The Draft EIR analyzes recreational impacts in part by considering whether the Project would "adversely impact existing recreational opportunities." This standard goes well beyond what is required by the CEQA Guidelines, which include recreation standards that only address impacts to the physical environment; they do not require any consideration of impacts to recreational users' experiences. Refer to CEQA Guidelines, Appendix G Section XIV. This qualitative standard was selected to acknowledge and analyze the changes that current users of CPSRA will encounter during and after implementation of the Project. In applying this standard to the Project, the Draft EIR recognizes that the proposed reconfiguration of CPSRA would remove some land from the Park. As the Draft EIR shows, and as further identified in Table C&R-11 (CPSRA Recreation Land), this land does not for the most part support recreational uses presently. Specifically, of the 29.2 acres to be removed, only 7.8 acres is presently used for recreation. The remainder is not recreation land, but is used for parking for Candlestick Park stadium events.

Table C&R-11 CPSRA Recreation Land

	Current CPSRA Land (acres)	*Current CPSRA Land to be Removed by Reconfiguration*	*CPSRA Land to Be Improved*	*Land to be Added to CPSRA and Improved*	*Total Following Reconfiguration (Current Improved Land + CPSRA Land to be Improved + Land Added to CPSRA)*
Improved Recreation Land	51.5	[3.9]		5.7	96.7
Unimproved Recreation Land	26.2	[3.9]	*22.3*		
Land Unavailable for Recreation	42.5	[21.4]	*21.3*		
Total	***120.2***	***[29.2]***	***43.6***	***5.7***	

At the same time, the Project would provide substantial improvements to CPSRA. These proposed improvements are not mitigation measures. Rather, they are an essential part of the Project. The Draft EIR acknowledges that land would be removed from CPSRA, but concludes that following implementation of the Project, including the improvements, the Park as a whole will not suffer an adverse effect on recreational opportunities. The table below demonstrates the that the Project would remove only small amounts of actual recreation land, while improving large areas of land currently inaccessible or underused.

Specifically, of the 77.7 acres of CPSRA currently in use for recreation, approximately 51.5 acres is developed with facilities and actively used. The remaining 26.2 acres is undeveloped and used less frequently. Following the reconfiguration, 69.9 acres of this land would be improved and available for recreation. Further, 5.7 acres of improved land would be added. The removal of actual recreation land would be minimal: only 7.8 acres, half of which is unimproved. Against that small loss, CPSRA would gain large areas of improved land.

Overall, the reconfiguration and associated park improvements would increase, rather than diminish, recreational opportunities at CPSRA. In short, CPSRA will provide a better recreational experience after the Project than it does now.

Response to Comment 47-29

The Draft EIR considers the Project's impacts on the existing physical environment, and therefore analyzes the impact of increased use on existing recreational facilities. It does not analyze the impacts of increased use of areas that are currently unused for recreation purposes, such as areas of CPSRA that are currently used for stadium parking but will, following the Project, be used for recreation. Because these areas are presently parking lots, future use cannot degrade them to worse-than-current conditions. In other words, future use cannot make these parts of CPSRA worse than the parking lots they currently are.

Thus, the Draft EIR's analysis of CPSRA is concerned solely with the Project's impacts on the 77.7 acres of CPSRA currently available for recreation. Of this area, 7.8 acres would be removed from the park, which, the Draft EIR acknowledges. The remaining 69.9 acres will likely experience increased visitation due to the Project, although CEQA does not require the Draft EIR to speculate about or quantify the precise level of increased visitation. The Draft EIR's analysis thus must take account of the combined impact of the removal of 7.8 acres and increased usage of the remaining 69.9 acres. The Draft EIR reasonably concludes that the park will be able support the increase in visitation without substantial degradation, on the basis of many aspects of the Project: the improvements to the 69.9 acres that will increase the amount of use the area can support, the addition of 26.8 acres to CPSRA's stock of improved recreation land, the Project's funding for CPSRA operations and maintenance, and the availability of large areas of new parkland throughout the Project area. Refer to Draft EIR on page III.P-32. As such, this substantial improvement in the quality of parkland at CPSRA would outweigh the impact of the loss of 7.8 acres of recreation land, thus rendering any impact less than significant.

Moreover, in this context increased visitation is a benefit of the Project: bringing additional visitors to this unique and important state park advances the goals of the City, the Agency, and the State Park System.

Regarding the standard of significance for this impact, CEQA requires analysis of a project's impacts on the physical environment. Thus standards of significance measure whether a project would make the

environment—in this case, recreational facilities—significantly worse than it is without the project. Here, the ratio of parkland to acres to 1,000 residents is used as a way of measuring whether the Project will increase park usage to such a degree that substantial physical degradation would occur or accelerate. The current ratio at the Project site is very high because there is a small population as compared to the size of CPSRA. The Project will inevitably reduce this ratio, but such reduction would not lead to degradation of existing facilities and thus would not cause a significant environmental impact. The Draft EIR selected its standard of 5.5 acres of parkland per 1,000 residents because this was the ratio existing in the City at the time of the 1986 General Plan. Although an improvement in this ratio would be a benefit, maintenance of the ratio would allow the ongoing maintenance of parkland without accelerated degradation. In fact, as demonstrated on pages III.P-30 and -31 of the Draft EIR, parkland ratios at the Project site will be well above 5.5 acres per 1,000 residents at all phases of the Project.

Response to Comment 47-30

In response to the comment, the text in Section III.P (Recreation), page III.P-1, paragraph 1, sentence 3 has been revised as follows:

> … The analysis in this section concludes that ~~no~~ the Project could have potentially significant ~~or significant~~ environmental impacts ~~development would result from the Project~~ related to the timing of proposed park; therefore, ~~no~~ a mitigation measure~~s~~ ~~are~~ is included.

Also in response to the comment, the text in Section III.P (Recreation), page III.P-25, last paragraph, has been revised as follows:

> … In addition, The Last Rubble would contain a new beach area ~~and marshland (refer to Figure II-21)~~. Other features here may include parking, picnic areas, overlook terraces, restrooms, and a restaurant/café.

Noise impacts to CPSRA are encompassed by the analysis in Section III.I (Noise and Vibration). Park users are not considered sensitive receptors.

Response to Comment 47-31

This comment contains introductory information and summarizes an attached letter from Tom Brohard and Associates (Comments 47-102 through 47-115). Responses to specific comments from that letter are provided in Responses to Comments 47-67 through 47-101. Also refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of transportation issues relating to the Yosemite Slough bridge.

Response to Comment 47-32

The Draft EIR considered impacts of the Project to scenic vistas and scenic resources, including the CPSRA, impacts from increased light and glare, and analyzed whether the Project would substantially degrade the visual character or quality of the site. Regardless of whether the CPSRA is called out specifically in the Draft EIR as a scenic resource or not, impacts to the CPSRA were considered in all applicable technical sections, including Aesthetics, Hazards and Hazardous Materials, Hydrology and Water Quality, Geology and Soils, Noise, Biological Resources, Traffic, Air Quality, and Recreation. The Draft EIR does not underplay the significance of the CPSRA as a resource, contrary to the commenter's assertion. If that

were the case, there would be no analysis in the Draft EIR of impacts to the CPSRA at all or the CPSRA would be briefly mentioned here and there. The fact that the CPSRA, when built out, will dwarf all other park resources in the area, as commenter states, actually provides some substantiation for the fact that the Project, although large, would not adversely affect the CPSRA from a visual standpoint. There are no impacts to the CPSRA that are not disclosed in the Draft EIR, and the commenter does not cite any such specific impacts that were not analyzed. Instead, the commenter relies on the fact that the Draft EIR does not specifically identify the CPSRA as a "scenic resource" in exactly those words. The Draft EIR references the CPSRA repeatedly throughout every section of the document; thus, the impacts of the Project were considered in the full environmental context, pursuant to *Kings County Farm Bureau v. City of Hanford* (1990), 221 C.A.3d 692.

Response to Comment 47-33

Refer to Responses to Comments 31-14, 47-34, 47-36, 47-58, 47-73, and 47-76 for discussion of the proposed bridge and its aesthetic impacts on views. Response to Comment 47-46 also contains additional simulations of the proposed Yosemite Slough bridge from four additional reference points. Impacts on CPSRA would be less than significant.

Response to Comment 47-34

Section III.E (Aesthetics) of the EIR contains 30 figures. Viewpoints were selected for inclusion in the EIR that are representative of the wide range available on such a large site. It is not necessary to include every possible view of a project feature to make a determination of the significance of an impact. Refer to Responses to Comments 31-14, 47-34, 47-36, 47-58, 47-73, and 47-76 for discussion of the proposed bridge and its aesthetic impacts on views. Response to Comment 47-46 also contains additional simulations of the proposed Yosemite Slough bridge from four more reference points. The analysis in the EIR and the amplification of that analysis in the Responses to Comments demonstrates that the Project would have a less-than-significant aesthetic impact on the CPSRA.

Response to Comment 47-35

Construction equipment for the bridge would not block views except from very close up, and the presence of construction equipment would be temporary and intermittent. Views of, across, and from the slough would remain from many vantage points during and after construction of the bridge. Pages III.E-51 and III.E-52 of the Draft EIR state that impacts from construction are potentially significant, and less than significant with mitigation measure MM AE-2 (requiring strict control and storage of construction equipment and staging). With regard to lighting, most recreational users of the CPSRA are on site during daylight hours (the park is open from 8:00 A.M. to 5:00 P.M. daily and slightly longer during summer). Therefore, security lighting at night would not disturb recreational users of the CPSRA. All potentially significant impacts from construction of the Yosemite Slough bridge have been identified and determined to be less than significant in the EIR. Also refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of impacts of lighting in the bridge area on biological resources.

Response to Comment 47-36

Impact AE-4 analyzes long-range views across the site. From a distance, the Yosemite Slough bridge will not appear as a prominent feature of the Project. Facts to support the conclusions of the EIR as to long-range views were presented on pages III.E-53 through -56, which discussed eight different viewpoints in addition to views across the Bay towards Oakland. With regard to Impact AE-5, the commenter fails to quote the remainder of the paragraph (page III.E-58, second paragraph of the Draft EIR), which sets forth the reasons the potentially significant impact of the bridge would not substantially damage a resource that contributes to a scenic public setting. The bridge would contain "green" auto lanes, with plantings in the middle providing a green boardwalk. Page III.N-95 of the Draft EIR indicates that the bridge would be low enough in profile to easily allow birds to fly over the bridge, and the bottom of the bridge deck would be high enough that swimming birds could swim under during tidal currents that currently allow that. The bridge would be low in profile (9 feet above water at the arch of the span and extending to 16 feet above water at its tallest point) and integrated into the open space on either side of the slough, and would contain piers and pedestrian and bicycle paths for a pedestrian viewing experience. Yosemite Slough would continue as a waterway bordered by open space opening from a narrow channel to the west to the wider South Basin to the east and would remain a scenic resource on the site. Placement of a low-profile bridge at one end of the slough would not substantially damage the scenic resource, as the vast majority of the slough would be untouched, and the impact would be less than significant. Visual simulations included in the Draft EIR show that the bridge would not, in the context of the entire expanse of the slough, substantially damage the resource.

For a discussion of the bridge and aesthetic impacts, refer to Responses to Comments 31-14, 47-34, 47-36, 47-46 (including four new graphics depicting the bridge), 47-58, 47-73, and 47-76. Whether a visual impact is substantial is largely a subjective determination based on an evaluation of facts. The Lead Agencies have made the determination that the bridge would not substantially impede views of the Bay or substantially damage a scenic resource because the bridge would have a small footprint relative to the expanse of the slough, and because its design would be visually integrated into the environment to a substantial degree. The Lead Agencies have determined that the Project, and the bridge in particular, would not result in a substantial adverse change in the visual character or quality of the site. The visual simulations and the extensive analysis contained in this section provide substantial evidence of the nature and magnitude of the change in visual character. The Lead Agencies have concluded based on substantial evidence that the change is not substantially adverse and the impact would be less than significant.

Response to Comment 47-37

Refer to Response to Comment 47-35 regarding light and glare impacts. The CPSRA is not open at night. Therefore, Project lighting would have no adverse effect on recreational users of the CPSRA, which would be on site only during daylight hours. With regard to bridge lighting and vehicle headlight impacts on biological resources, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]).

Response to Comment 47-38

The comment states that the evaluation of potential noise impacts is flawed for three reasons: (1) the CPRSA was not included as a noise sensitive receptor, (2) the proposed Yosemite Slough bridge is not analyzed as a source of noise, and (3) no potentially significant or significant noise impacts from noise to recreational users are identified. Refer to Responses to Comments 47-39, 47-40, and 47-41 for full responses to these issues. Also refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]).

Response to Comment 47-39

The comment states that the Draft EIR does not disclose potentially significant impacts to recreational users of the CPSRA, and that the Draft EIR provides no significance threshold for analyzing potential noise-related impacts to recreational users of the CPSRA. While it is true that the Draft EIR characterizes parks and open space as noise-sensitive uses, this characterization is based upon the City of San Francisco General Plan's "Land Use Compatibility Chart for Community Noise" presented in the Environmental Protection Element of the *San Francisco General Plan*. The General Plan Land Use Compatibility Chart indicates that new construction of parks should generally not be undertaken in areas where ambient noise levels exceed 75 dBA. As shown in the Draft EIR and further explained in Response to Comment 47-41, implementation of the project would result in an increase in 24-hour noise levels to the areas adjacent to the CPSRA; however, the future ambient noise levels are estimated to be well below the 70 dBA noise exposure that is considered satisfactory by the General Plan. It should also be pointed out that noise-sensitive uses, as per the General Plan, are not the same as noise-sensitive receptors under CEQA. Noise-sensitive receptors are generally considered to be those individuals for whom a long-term exposure to excessive noise could be detrimental to their health or welfare. Uses with noise-sensitive receptors in San Francisco are generally considered to be uses such as residences, schools, hospitals, and rest homes.

The commenter states that no noise measurements were taken within the CPSRA. Noise measurements were taken in close proximity to uses that would experience permanent long-term increases in ambient noise levels as a result of project implementation. As described in Section III.I (Noise and Vibration), existing long-term (24-hours over the course of three days in January 2009 and July 2009) and short-term (15-minute) noise measurements were taken at locations that were identified as having sensitive receptors that would potentially be permanently impacted by implementation of the Project. These noise-sensitive receptors represented residential and educational uses as identified in Table III.I-3 through Table III.I-6. Consistent with the City's Noise Ordinance and General Plan, the A-weighted decibel scale (dBA) was used to measure potential noise impacts. Residential and educational uses were selected, as these uses would have the highest degree of sensitivity to increases in noise levels, and increases in exterior noise levels above 75 dBA L_{max} (L_{max} is the highest peak noise) would result in interference with indoor speech and sleep disruption, and would impact the educational environment of the schools in the vicinity of the Project. While users of the CPSRA would experience a change in ambient noise levels, these recreationists are <u>not</u> considered noise sensitive receptors. Implementation of the Project would not result in ambient noise levels in excess of 70 dBA within the CPSRA, as noise levels along adjacent roadways were modeled to be below 65 dBA L_{dn}. As roadway noise is the predominant source of ambient noise in the Project vicinity, and as the CPSRA is generally located either equal to or further from roadways than the noise

measurement locations used for the EIR, ambient noise levels within the CPSRA would be equal to or less than the noise levels identified at those noise measurement locations. Recreational users of the CPSRA would not be exposed to 24-hour increases in noise levels as would residential uses located along the Project roadways, nor would they be exposed to temporary increases above 75 dBA L_{max} that would occur during stadium events at the new stadium site. In addition, as noted, the CPSRA is not open after dark, which is when most non-football-related stadium events would likely occur. Therefore, the locations selected for both long- and short-term noise measurements meet the requirements of the City of San Francisco and provide an accurate baseline for evaluation of potential project impacts to sensitive receptors as required by CEQA.

As noise levels adjacent to the CPSRA would be substantially below the 70 dBA noise, implementation of the proposed Project would be considered compatible with CPSRA uses. The potential for the project to create permanent increases in ambient noise levels that would exceed the 70 dBA noise exposure limit were evaluated under Impact NO-4, which analyzed operational impacts such as the use of mechanical cooling systems, deliveries of retail and commercial products and activities such as trash collection and Impact NO-6, which analyzed operational impacts due to increase in roadway noise levels. As detailed under these impacts, ambient noise levels associated with the Project would not exceed 70 dBA and noise measurements were not required to be taken in the CPSRA as impacts to users within the CPSRA would be less than significant.

The commenter claims that the Draft EIR provides no significance threshold for determining significant impacts on the CPSRA, in addition to claiming that no quantitative or qualitative analysis was made for determining potential Project-related noise impacts to the CPSRA. As neither the CDPR nor the CPSRA General Plan has established significance criteria for increases in ambient noise levels, the lead agencies utilized the thresholds of significance identified in Section III.I.4 (and further detailed below), in order to determine potential impacts to both existing and future noise-sensitive receptors both on and off site with regard to construction and operational increases in noise. The Lead Agencies utilized the City of San Francisco Noise Ordinance standards for residential uses to evaluate potential permanent increases in noise levels that would occur with implementation of the project for off-site uses, including users of the CPSRA. The residential noise standards are the most restrictive identified in the Noise Ordinance, and, therefore, afford the most protection to off-site users in the vicinity of the Project.

The Draft EIR's significance thresholds are clearly identified on under Section III.I.4 (Impacts) on pages III.I-21 and III.I-22. Specifically, with regard to impacts relating to increase in ambient noise increases that would potentially impact noise-sensitive receptors the following thresholds were identified based upon the City of San Francisco General Plan or Noise Ordinance:

- During Construction
  - > Generate construction noise between the hours of 8:00 P.M. and 7:00 A.M. that exceeds the ambient noise level by 5 dBA at the nearest property line (unless a special permit has been granted by the Director of Public Works or the Director of Building Inspection); or produce noise by any construction equipment (except impact tools) that would exceed 80 dBA at 100 feet. (Criteria I.a and I.d)
- During Operation
  - > Cause an increase in noise (i.e., as produced by "any machine or device, music or entertainment or any combination of same") greater than 5 dBA or 8 dBA above the local

ambient (i.e., defined as the "lowest sound level repeating itself during a minimum 10-minute period as measured with a sound level meter, using slow response and A-weighting") at any point outside the property plane of a residential, commercial/industrial or public land use, respectively, containing the noise source. (Criteria I.a, I.c, or I.d)

> In the case of noise or music generated from a "licensed Place of Entertainment," cause an increase in low frequency ambient noise (i.e., defined as the "lowest sound level repeating itself during a 10-minute period as measured with a sound level meter, using slow response and C-weighting") by more than 8 dBC. (Criteria I.a, I.c, or I.d)

Additionally, the Draft EIR considered noise impacts where quantitative significance thresholds may not be included in the City of San Francisco *General Plan* or Noise Ordinance. The Draft EIR states that the Project would cause or be subject to a significant noise or vibration impact if it would:

- Cause outdoor traffic noise levels at existing or proposed residential and other noise-sensitive uses to increase by more than the FTA criteria specified in Table III.I-9, which vary depending on the baseline ambient noise levels. (Criterion I.c)
- Cause excessive annoyance, activity disruption, or sleep disturbance due to noise from SFO-related aircraft operations at the proposed residential uses to be located on the Project site according to FAA criteria (i.e., aircraft noise level of 65 dBA L_{dn} or greater). (Criteria I.e, I.f, and I.g)

The lead agencies utilized the FTA criteria to evaluate noise impacts from surface transportation modes (i.e., passenger cars, trucks, buses, and rail). The incremental noise allowances established by the FTA extended the EPA's incremental impact criteria to higher baseline ambient levels. As baseline ambient levels increase, smaller and smaller increments are allowed to limit increases in community annoyance (e. g., in residential areas with a baseline ambient noise level of 50 dBA L_{dn}, a 5 dBA increase in noise levels would be acceptable, while at 70 dBA L_{dn}, only a 1 dBA increase would be allowed). Again, these standards, which are designed to protect the most noise-sensitive uses, such as residential and educational uses, were applied to all off-site uses, including users of the CPSRA.

As such, the Draft EIR evaluated potential impacts to all on- and off-site users that would occur due to construction and operation of the Project. As there would be no development within the CPSRA and noise levels from roadways adjacent to the CPSRA (e.g., Harney Way and Gilman Avenue) would be well below the 70 dBA compatibility range, no noise measurements were required to be taken within the CPSRA. No new or additional analysis would be required as suggested in the comment. Further, in response to this comment Figure III.I-5 (Existing and Future Noise Sensitive Land Uses in Project Site and Vicinity) has been modified to more accurately depict land uses identified as noise sensitive by the City of San Francisco's General Plan or Municipal Code.

Response to Comment 47-40

As stated in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), ambient noise levels at Yosemite Slough are currently high, due to the industrial and storage uses of the properties on the south side of Yosemite Slough (that are outside both the Yosemite Slough Restoration Project area and the CP/HPS project site, and will thus not be subject to change as a result of either project) that are the source of considerable ambient noise. The Yosemite Slough bridge will be used only by BRT buses except during the 10 to 12 days (or if Variant 5 is approved) annually in which vehicles entering or

SOURCE: Lennar, 2009; CCSF, 2007; PBS&J, 2010. PBS&J 04.21.10

FIGURE III.I-5 ~~Candlestick Point - Hunters Point Shipyard Phase II EIR~~

EXSITING AND FUTURE NOISE SENSITIVE LAND USES IN PROJECT SITE AND VICINITY

exiting the new stadium will be using the bridge. The hybrid buses that would be used on this BRT route would have a maximum noise level (from pull-away to 35 mph) of 70 to 75 dBA, roughly equivalent to the sound of freeway traffic at a distance of 50 feet. The roadway noise modeling performed for the project in the Draft EIR accounts for the total increase in daily vehicle trips to predict the 24-hour increases in roadway noise levels along existing uses that would potentially be impacted by implementation of the project. Development of the Yosemite Slough bridge would result in BRT buses traveling along the bridge over undeveloped portions of the CPSRA, and would not result in an increase in 24-hour noise levels that would exceed standards for sensitive receptors established by the City's Noise Ordinance or the *City of San Francisco General Plan*.

As described below in Response to Comment 47-41, implementation of the project would result in an increase in 24-hour noise levels in the CPSRA that are within the noise exposure that is considered satisfactory with no special noise insulation requirements according to the "Land Use Compatibility Chart for Community Noise" presented in the Environmental Protection Element of the *San Francisco General Plan*. Additionally, while noise levels would increase in the vicinity of the Yosemite Slough bridge, there are no permanent noise sensitive receptors within the vicinity of the bridge (residential, educational, or convalescent uses). While recreationists would be exposed to a new source of noise in the vicinity of the bridge, their exposure would be temporary and below the thresholds of significance identified in the Draft EIR. Refer to Response to Comment 47-41 for greater details regarding potential construction impacts to recreationists within the CPSRA.

Response to Comment 47-41

Permanent increases in ambient noise levels were evaluated and identified in the Draft EIR utilizing the significance standards identified in the City of San Francisco Noise Ordinance, as described in Response to Comment 47-39 above. While the Noise Ordinance does incorporate the World Health Organization Guidelines (WHO), the City utilizes the Environmental Protection Element of the *San Francisco General Plan* in determining compatibility of proposed land uses with existing adjacent uses. Specifically, Objective 11 of the Environmental Protection Element states:

> Promote land uses that are compatible with various transportation noise levels.
>
> Policy 11.1 Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.
>
> The "Land Use Compatibility Chart for Community Noise" included in Policy 11.1 specifies the compatibility of different land use types within a range of ambient noise levels.

The "Land Use Compatibility Chart for Community Noise" specifies that for new development to be compatible with Parks and Playgrounds:

- Noise exposure is considered "satisfactory, with no special noise insulation requirements" where the L_{dn} is 70 dBA or less.
- "New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the design" where the L_{dn} is between 68 dBA and 78 dBA.
- "New construction or development should generally not be undertaken" where L_{dn} is over 75 dBA.

As shown in Table III.I-14 (Modeled Noise Levels along Major Project Site Access Roads), the only two roadways in the vicinity of the CPSRA that would experience increases in roadway noise levels are Harney Way west of Jamestown Avenue, which is modeled to have a noise level of 59.6 L_{dn} in the year 2030 and Gilman Avenue east of Third Street, which is modeled to have a noise level of 64.6 L_{dn} in the year 2030. These noise levels are within the noise exposure that is considered satisfactory with no special noise insulation requirements according to the "Land Use Compatibility Chart for Community Noise" presented in the Environmental Protection Element. Therefore, impacts from increased roadway noise levels are identified and would be less than significant to users of the CPSRA.

Existing CPSRA users are frequently exposed to noise levels that are likely above the 75 dBA maximum identified in the "Land Use Compatibility Chart for Community Noise." These would include football games and special events at the existing stadium site, the Blue Angels flying show that occurs during Fleet Week, and fireworks shows on the Fourth of July. Project-related business and residential uses would be required to comply with the noise limits established by the City of San Francisco Noise Ordinance, and therefore, operational impacts to users of the CPSRA would be less than significant, as identified in the Draft EIR.

Upon approval of the Project, no construction activity associated with development of Candlestick Point would occur within the CPSRA. Further, page 48 of the CPSRA General Plan acknowledges that construction activity associated with proposed CPSRA improvements would be short-term and less than significant. As construction of the Candlestick Point area would comply with the regulations of Section 29 of the Noise Ordinance and identified in mitigation measures MM NO-1a.1 and MM NO-1a.2, construction-related impacts would be less than significant with regard to exposure of persons to or generation of noise levels in excess of standards established in the Environmental Protection Element of the *San Francisco General Plan* or San Francisco Noise Ordinance (Article 29, *San Francisco Police Code*) as identified in the Draft EIR.

The Draft EIR did identify that construction activities occurring within the Project site and in the Project vicinity for roadway and infrastructure improvements would last throughout the 18-year construction phasing, and, therefore, this temporary increase in ambient noise levels would be noticeable and would likely be cause for human annoyance. Implementation of the above-mentioned mitigation measures would reduce the noise levels associated with the loudest construction activities identified above, but not to a less-than-significant level. Therefore, construction-related temporary increases in ambient noise levels for users of the CPSRA would be considered significant and unavoidable as identified in the Draft EIR.

No substantial sources of groundborne vibration would be built as part of the Project; therefore, operation of the Project would not expose sensitive receptors on site or off site to excessive groundborne vibration or groundborne noise levels, and this impact would be less than significant to users of the CPSRA, as identified in the Draft EIR. Construction related vibration would likely not occur within 50 feet of users of the CPSRA, as the general vicinity of the construction area would be secured and CPSRA users would not be located directly adjacent to these construction activities. As such, construction related vibration impacts would be less than significant to users of the CPSRA.

Refer also to Response to Comment 47-40 for a discussion of traffic noise impacts associated with the Yosemite Slough bridge.

Response to Comment 47-42

Contrary to the comment, the Draft EIR does calculate the significance of the risks due to fugitive dust, including contaminated fugitive dust. With regard to the identification of significance thresholds, the thresholds used to evaluate toxic air contaminants (TACs) associated with contaminated dust are discussed on page III.H-17:

> Though not explicitly required by the BAAQMD CEQA Guidelines,[181,] a HRA was conducted to evaluate the human health effects from emissions of DPM and TAC-containing soil-PM_{10} associated with Project construction activities. This analysis was deemed appropriate due to the scale (multi-year time horizon utilizing extensive construction equipment over a large area) and location (e.g., brownfield redevelopment on land which may contain residual chemicals in soil) of the Project. Therefore, the BAAQMD CEQA significance thresholds as described below were used to evaluate the possibility that emissions of DPM or soil-PM_{10} emissions from Project construction activities would expose the public to potential airborne health risks:
>
> - Probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 1×10^{-5} (10 in a million)
> - Ground level concentrations of noncarcinogenic air contaminants/pollutants resulting in a HI greater than 1 for the MEI

While the thresholds presented are not specifically designated by the BAAQMD for use in evaluating impacts from construction activities, they are the de facto risk and hazard levels used by the BAAQMD and virtually all other local and state agencies in California in determining whether a project, process or facility would have an adverse health impact. In respect to the supporting calculations, refer to Appendix H3, Attachment II of the Draft EIR, entitled *Human Health Risk Assessment of Chemicals Bound to Airborne PM_{10}* for a complete description of the methodology and supporting calculations used to estimate cancer risks and noncancer hazards associated with construction dust emissions.

The control measures applied in the Draft EIR relating to fugitive dust are appropriate and are consistent with the City of *San Francisco Health Code* and BAAQMD CEQA Guidelines. The mitigations are not optional and are required by the City of San Francisco, as discussed on page III.H-16:

> *San Francisco Health Code* Article 22B, Construction Dust Control, requires, for construction projects within 1,000 feet of sensitive receptors (residence, school, childcare center, hospital or other health-care facility or group-living quarters), preparation of a site-specific dust control plan. That plan must include a number of equivalent measures to minimize visible dust. These measures contain all the dust control measures presented in the BAAQMD CEQA Guidelines; however the *San Francisco Health Code* requirements increase the watering frequency as well as adding monitoring, recordkeeping, third-party verification, and community outreach requirements not found in the BAAQMD guidelines.

As discussed in Impact AQ-3, on page III.H-28 of the Draft EIR:

> Emissions of soil-PM_{10} from construction activities were estimated assuming the mitigation measures discussed in MM HZ-15.

The specific mitigation measures to be implemented are defined in MM HZ-15 of the Draft EIR. In summary, a dust mitigation plan must be submitted and approved by the BAAQMD prior to issuance of a grading, excavation, site building, or other permit from the City. Mitigation is not deferred; rather specific standards that the dust plans must meet are set out in the mitigation measure. The mitigation measure MM HZ-15 to be implemented in the Project is defined on Draft EIR pages III.K-99 to -101, (underlined

text shows revisions outlined in Master Response 16 [Notification Regarding Environmental Restrictions and Other Cleanup Issues]), as follows:

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

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:

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:

- *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 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.*
- *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*

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:

- *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 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*

- *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 Project Applicant 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:

- *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 porosity.*
- *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.*
- *Installing and using wheel washers to clean truck tires.*
- *Halting all construction activities during periods of sustained strong winds, hourly average wind speeds of 25 miles per hour.*
- *Applying soil stabilization methods to inactive areas.*
- *Sweeping off adjacent streets to reduce particulate emissions.*

- *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.*

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.

The Draft EIR concludes that with mitigation measure MM HZ-15, the impacts would less than significant (page III.H-29):

> As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. …

The Draft EIR goes on to indicate, that in the absence of mitigation measure MM HZ-15, the impacts would likely be significant (page III.H-29) (text has been revised as shown by underline and strikethrough):

> As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~;~~ ~~however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measures, the impacts from TACs bound to soil PM_{10} would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

The BAAQMD significance thresholds used in the Draft EIR to evaluate air quality impacts are current and appropriate for use. The current guidelines, as specified in the 1999 BAAQMD CEQA Guideline document, are recommended for use until the implementation of updated guidelines. Since the publication of the Draft EIR, the BAAQMD has released additional information pertaining to the updated BAAQMD CEQA Guidelines. During the BAAQMD Public Meeting on January 6, 2010, the Board decided to postpone adoption of the updated CEQA Guidelines to a future meeting. Future consideration of the updated BAAQMD CEQA Guidelines is postponed until June 2010 at the earliest. Therefore, the adoption and implementation of the updated BAAQMD CEQA Guidelines is not expected until after June 2010.

Even so, the proposed BAAQMD CEQA Guidelines as available at the time the Draft EIR were considered in the Draft EIR, as specified in the first full paragraph on page III.H-39 and, further, Master Response 19 (Proposed BAAQMD Guidelines) provides an updated analysis based on the most recent guidance.

The conclusions stated in the Draft EIR with respect to soil-PM_{10} due to construction activities are outlined on page III.H-38, third paragraph, as follows:

> As stated under Impact AQ-1, fugitive dust associated with Project construction would not be expected to cause violations of AAQS with the inclusion of a City mandated and approved dust

control plan. As stated under Impact AQ-2 and Impact AQ-3, emissions of DPM and soil-PM_{10} from construction activities associated with the Project would not exceed BAAQMD's thresholds for determining potential impacts to human health. With this plan in place, Project dust emissions would be controlled consistent with BAAQMD CEQA Guidelines and, therefore, construction fugitive dust emissions would be considered to have a less-than-significant project impact. With Project emissions well controlled, the Project would not make a considerable contribution to a cumulative impact.

Response to Comment 47-43

As discussed in Response to Comment 47-42, the BAAQMD significance thresholds used in the Draft EIR to evaluate air quality impacts are current and appropriate for use. The current guidelines, as specified in the 1999 BAAQMD CEQA Guideline document, are to be used until the implementation of updated guidelines. Refer to Master Response 19 (Proposed BAAQMD Guidelines) for an updated analysis based on the most recent guidance.

Response to Comment 47-44

The California Air Resources Board (ARB) considers a United States Environmental Protection Agency (USEPA) Tier 2 engine outfitted with California ARB Level 3 Verified Diesel Emission Control Strategies (VDECS) as a USEPA Tier 4 equivalent engine. The Draft EIR used these two terms interchangeably; however, in response to this comment and to clarify the description, the text in Section III.H (Air Quality) has been revised to always refer to the mitigation as "USEPA Tier 2 standards outfitted with California ARB Level 3 VDECS or equivalent." Changes have been made in the following locations:

- Page III.H-24, Impact AQ-2, first and second bullets:
  - Construction equipment used for the Project ~~will~~ would utilize a phased-in emission control technology in advance of a regulatory requirement such that 50 percent of the fleet will meet USEPA Tier ~~4 engine~~2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~ the first two years of construction activities, increasing to 75 percent of the fleet in ~~2012~~ the third year and 100 percent of the fleet starting in ~~2013~~ the fourth year and for the duration of the Project
  - Construction equipment used in the Alice Griffith parcels (CP01 through CP06) would utilize equipment which meets the USEPA Tier ~~4 engine~~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~~.~~
- Page III.H-25, mitigation measure MM AQ-2.1 has been revised to reflect the correct standard:

MM AQ-2.1 Implement Emission Control Device Installation on Construction. *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 USEPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~the first two years of construction activities, increasing to 75% of the fleet in ~~2012~~the third year and 100% of the fleet starting in ~~2013~~the fourth year and for the duration of the Project.*

Appendix H3, Attachment 1, of the Draft EIR, entitled *Human Health Risk Assessment of Construction-Related Diesel Particulate Matter* discusses the evaluation analysis used to evaluate Impact AQ-2. Though not explicitly discussed in the Draft EIR, the Appendix provides the necessary information to determine the

health impacts without mitigation. In response to this comment, the unmitigated impacts have been added to the Draft EIR in the following locations:

- Page III.H-25, Impact AQ-2a discussion:

  As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks. The HRA, which took into account the mitigation measures described above, concluded that the cancer risk at the MEI would be 3.3 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during Candlestick Point construction activities. Exposure to DPM from construction activities associated with Candlestick Point would not exceed the threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.007, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

  The impact of Candlestick Point construction activities without the mitigation described above would result in an estimated cancer risk at the MEI of 11 in one million, above the significance threshold of 10 in one million and, therefore, significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.027, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

  Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

  As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds with mitigation, this impact is less than significant with mitigation measure MM AQ-2.1:

- Pages III.H-25 to -26, Impact AQ-2b discussion:

  As noted above, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI would be 3.8 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during HPS-Phase II construction activities. Construction activities associated with HPS- Phase II would not exceed the threshold. In addition, the HRA concluded the maximum chronic non-cancer HI to be 0.01, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the~~The impact of ~~Candlestick Point~~HPS Phase II construction activities without the mitigation described above~~; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts~~ would ~~be potentially above the BAAQMD's~~ result in an estimated cancer risk at the MEI of 8.4 in one million, which is below the significance threshold of 10 in one million and ~~would be potentially~~, therefore, less than significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.024, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

  Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

  As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of HPS- Phase II have been determined to be below established thresholds with and without mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1.

- Page III.H-26, Impact AQ-2c discussion:

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI inside Alice Griffith would be 4.5 in one million. This represents the maximum level of DPM experienced by all on-site sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the threshold. In addition, the HRA concluded the maximum chronic non-cancer HI to be 0.02, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

The impact of Candlestick Point and HPS Phase II construction activities without the mitigation described above would result in an estimated cancer risk at the on-site MEI (sensitive receptors inside Alice Griffith) of 20 in one million, above the significance threshold of 10 in one million and therefore significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.09, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of the Project have been determined to be below established thresholds with mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1 and mitigation measure MM AQ-2.2:

MM AQ-2.2 Implement Accelerated Emission Control Device Installation on Construction Equipment Used for Alice Griffith Parcels. *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 though CP06) ~~would~~ utilize equipment which meets the USEPA Tier ~~4 engine~~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.*

Response to Comment 47-45

Refer to Response to Comment 47-42 for a discussion of the application of mitigation measures used to evaluate impacts associated with construction dust. The analysis in the Draft EIR demonstrates that the impacts would be less than significant with mitigation; therefore, the analysis complies with CEQA.

Response to Comment 47-46

Double Rock is a formation of two rock outcroppings visible in the waters of South Basin, approximately 500 feet from the shoreline of CPSRA. Double Rock is visible from some shoreline areas of CPSRA and Hunters Point Shipyard. Double Rock as a local name was adopted for the Double Rock War Dwellings, developed in 1943/44 as part of Hunters Point Shipyard housing. The Alice Griffith public housing now at Candlestick Point replaced the Double Rock dwellings in 1964; Double Rock Street is a short cul-de-sac within the Alice Griffith site. Double Rock Community Garden near Griffith Street and Fitzgerald Avenue is maintained at the Alice Griffith public housing site. It is noted that the Alice Griffith housing is often

referred to as "Double Rock" by local residents. Double Rock Baptist Church is at 1595 Shafter Avenue, one block east of Third Street, and almost a mile west of South Basin. Double Rock Grocery is at 2830 Ingalls Street, about one-half mile from South Basin. Other than the local use of the name, Double Rock does not have documented cultural associations.

The Project would not alter the existing Double Rock formation in any way. Double Rock would continue to be visible from the CPSRA shoreline, including the improved CPSRA lands near Yosemite Slough and from shoreline open space proposed as part of Hunters Point Shipyard Phase II. The east side of the Yosemite Slough bridge would include pedestrian-bicycle lanes that would provide views of Double Rock. Visitors to the proposed restored Yosemite Slough area west of the bridge would in some cases have views of Double Rock blocked by the bridge. Figure C&R-10 through Figure C&R-13 of this document presents visual simulations of views of the Yosemite Slough bridge from the Yosemite Slough area. From some of those locations, as shown in Figure C&R-10 and Figure C&R-12, Double Rock would be seen below the bridge structure. Overall, however, the Project would maintain or enhance views of Double Rock. Refer also to Response 47-20 above, discussing viewpoints of the Bay and shoreline that would be available from the proposed Bay Trail and from the Yosemite Slough bridge. The Project would have a less-than-significant adverse effect on Double Rock as visual or cultural resource.

Response to Comment 47-47

Please see Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) with respect to the Draft EIR's analysis of the bridge's potential impacts. Moreover, Yosemite Slough is a tidally dominated system with a large flow area within which tidal waters move in and out during ebb and flood tides. The proposed Yosemite Slough Restoration Project will make the tidal prism substantially larger than present conditions. The size and orientation of the proposed bridge piers will not constrict tidal flow in or out of Yosemite Slough, which will not result in an alteration of tidal currents. Even if the Restoration Project does not move forward, the effects of tidal constriction posed by bridge construction can be eliminated by sizing the bridge piers appropriately, which is the Project's intent. Evidence of this intent is shown in "Impact of Yosemite Slough Bridge," pages III.M-104 to -105 of the Draft EIR, which states (as revised in Section F [Draft EIR Revisions]):

> The bridge across Yosemite Slough would not place structures within a SFHA that could generate high-velocity flood forces that could cause damage to the structure itself or adjacent structures. The Yosemite Slough bridge would be designed such that the superstructure would be well above the current 100-year flood hazard elevation in Zone V, to account for future sea level rise. Because t~~T~~he bridge ~~was~~ would be designed to avoid potential impedance of flood flows~~; therefore~~, the impacts would be less than significant. No mitigation is required.

It is recognized that there is a tidal restoration project for the Yosemite Slough area. It is not uncommon to design bridge piers and openings such that the net effect on tidal hydraulics is minimal or non-existent. The bridge project will incorporate this criterion into its design.

SOURCE: RHAA; Endres Ware, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

YOSEMITE SLOUGH BRIDGE
PANORAMIC VIEW FROM NORTHSIDE PICNIC KNOLL

SOURCE: RHAA; Endres Ware, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-11

Candlestick Point — Hunters Point Shipyard Phase II EIR

YOSEMITE SLOUGH BRIDGE
PANORAMIC VIEW FROM NORTHSIDE PLAZA

SOURCE: RHAA; Endres Ware, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-12

Candlestick Point — Hunters Point Shipyard Phase II EIR

YOSEMITE SLOUGH BRIDGE
PANORAMIC VIEW FROM NORTHSIDE BAY TRAIL

SOURCE: RHAA; Endres Ware, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE C&R-13

Candlestick Point — Hunters Point Shipyard Phase II EIR

YOSEMITE SLOUGH BRIDGE
PANORAMIC VIEW FROM SOUTHSIDE BAY TRAIL

Response to Comment 47-48

Draft EIR Section III.F (Shadows), analyzes Project shadow effects on existing and proposed open space in the Project site and vicinity, including CPSRA. The analysis conclusions are based on significance criteria presented on Draft EIR page III.F-5 (the underlined text corrects only a typographical error):

> The CCSF and Agency have not formally adopted significance standards for impacts related to shadows, but generally consider that implementation of the Project would have significant impacts if it were to:
>
> F.a Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas
>
> In addition, shadow effects would be significant if they would affect, in an adverse manner, the use of any park ~~of~~ <u>or</u> open space under the jurisdiction of the SFRPD, or significantly detract from the usability of other existing publicly accessible open space.

The comment requested that the Draft EIR apply *Planning Code* Section 295 criteria and methodology to evaluate Project effects on CPSRA. The Draft EIR discusses *Planning Code* Section 295, "The Sunlight Ordinance," on pages III.F-4 to -5; Draft EIR page III.F-5 states:

> As noted above, parks and open space within the Project site or in the Project vicinity that are under the jurisdiction of the SFRPD include Candlestick Park, Bayview Park, Gilman Park, India Basin Shoreline Park, and India Basin Open Space. Development near these parks is subject to shadow review under *Planning Code* Section 295, except for Candlestick Park, which would be removed from the jurisdiction of the Recreation and Park Department as a result of the Project.

CPSRA is not under SFRPD jurisdiction, and Draft EIR page III.F-8 describes the approach to shadow effects on CPSRA (the deleted text in the first sentence of the second paragraph corrects only typographical errors in the Draft EIR):

> For parks and open space that are not subject to the review requirements <u>of</u> *Planning Code* Section 295, only ~~provides~~ a qualitative assessment of shadow effects is provided, to determine whether enjoyment of the park or public space by users would be substantially and adversely affected by shadow effects. …

Consistent with the significance criteria, the Draft EIR evaluates the shadow effects on CPSRA based on the extent of the area shaded, the time of day, and shade patterns at different seasons. Draft EIR pages III.F-9 through III.F-26 and Figure III.F-3 through Figure III.F-14 present the range of shadow conditions that would occur at the CPSRA throughout the year from 10:00 A.M. to 3:00 P.M., that are, as stated, the periods of most intensive open space use. As noted in the text and figures, other than winter months, when the sun angles are lowest and buildings shadows would therefore be at their longest extent, new shading in midday and afternoon periods would affect only 1 percent or less of the CPSRA. In December, midday shading would affect about 2 percent of the CPRSA, increasing to about 12 percent at 3:00 P.M. Refer to Figure III.F-4 (Candlestick Point: Shadow Patterns: December 21 [Noon PST]), and Figure III.F-5 (Candlestick Point: Shadow Patterns: December 21 [3 PM PST]), illustrating those December shadow conditions. As shown in Figure III.F-5, during mid-afternoon in winter (the period with the longest shadows), most of the shoreline of CPSRA would be in sun, including the proposed Bay Trail alignment and other waterfront activity areas that may be developed at CPSRA, such as windsurfing launch areas.

In general, the maximum winter conditions would occur from November to January. The Project would not add substantial shade to CPSRA during most of the year.

Therefore, the Draft EIR concluded on page III.F-26 that Project shade would not have a significant adverse effect on use of CPSRA:

> The CPSRA would be affected by new shade in the afternoons, but most areas would experience limited to no new shadow from the Project. Other areas of the CPSRA would largely continue to remain in sun throughout the year. Project shadow would not interfere with the public's use or enjoyment of the CPSRA. Activities in these areas, such as windsurfing launching, walking, jogging, and fishing, would not be affected by the new shade.

With respect to comments on Section 295 criteria and methodology, Figure III.F-2 (Candlestick Point: Proposed Project Year-Round Shadow Trace) identifies the maximum extent of all Project-generated shadows from one hour after sunrise to one hour before sunset over an entire year at Candlestick Point, the periods specified in Section 295. While the shadow trace provides information on parks and open space that could be affected by new shading from Project structures over an entire year, it does not provide information on the shadow effects experienced by a park or open space at any particular time of the day or year. The trace is a "time-lapse" image of all shading during the year. The trace does indicate that in afternoon, up to hour before sunset, Project shade could affect CPSRA, extending across the CPSRA to the shoreline. Those effects would occur after 3:00 P.M., after the typical time of intensive use. (During late spring, summer and early fall months, after 3:00 P.M., some Project shading would occur, but most of CPSRA would not be affected.) Actual conditions would be as shown, for example, in Figure III.F-5 (Candlestick Point: Shadow Patterns: December 21 [3 PM PST]), when about 12 percent of CPRSA would be in shade, and the shade would not expend to the shoreline.

Adopted Section 295 criteria include a 1 percent limit for increased shading of larger parks (greater than two acres and having less than a 20 percent existing shadow load), and the commenter stated that this criterion should be applied to analysis of shading of CPSRA. As discussed on Draft EIR page III.F-5, the adopted Section 295 criteria use "Annual Available Sunlight" expressed in "square-foot-hours." That 1 percent limit is a calculation of change in square-foot-hours in sunlight on an SFRPD open space on an annual basis, and that approach is specific to Section 295. For the reasons noted above, that methodology was not applied to CPSRA. Further, page III.F-5 states that Section 295 criteria also consider shadow effects in light of "existing shadow profiles, important times of day, important seasons in the year, location of the new shadow, size, and duration of new shadows and the public good served by buildings casting new shadow." The Draft EIR evaluated shadow effects on CPSRA considering important times of day, important seasons in the year, location of the new shadow, size, and duration of new shadows.

A comment noted that CPSRA has typically cool and windy conditions and that shadow effects could preclude public use and enjoyment of any areas that are shaded for extended hours during park operating hours. As discussed above, the Draft EIR found that Project shade would occur on limited areas of the park, at limited times of day, and for limited periods of the year. Most of CPSRA would not be shaded, even during winter months when shadows are longest, and Project effects would not be expected to preclude public use and enjoyment of CPSRA.

Therefore, as discussed in this response, the Draft EIR does not require revision with regard to conclusions on shadow effects on CPSRA. Project effects on CPSRA would be less than significant.

Refer to Section F (Draft EIR Revisions) of this document, which presents a revised Tower Variant 3C. The revised Tower Variant would include changes in tower locations and heights at Candlestick Point that

would reduce shade effects at CPSRA, compared to Project shadow effects presented in Draft EIR Section III.F, and discussed in the response above.

Response to Comment 47-49

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the potential effects of shading impacts on biological resources of Yosemite Slough, as discussed in Impact BI-4c of the Draft EIR.

Response to Comment 47-50

The commenter suggests that the Draft EIR defers to laws protecting resources such as wetlands rather than independently analyzing impacts. However, Impact BI-4a of the Draft EIR analyzes impacts to jurisdictional habitats, quantifying them in Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]), Draft EIR page III.N-57. Table III.N-4 has since been modified and is presented in Section F (Draft EIR Revisions). Although mitigation measure MM BI-4a.1 on pages III.N-59 to -62 requires the applicant to obtain regulatory permits and indicates that mitigation for impacts to jurisdictional habitats will be identified by regulatory agencies during the permitting process, this measure also independently prescribes the minimum mitigation that will be required for CEQA compliance purposes, as follows:

> 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).

Likewise, mitigation for shading impacts to jurisdictional/regulated waters is described in mitigation measure MM BI-4c on page III.N-68 of the Draft EIR as follows:

> Mitigation for Shading Impacts to Jurisdictional/Regulated Waters. 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.

Shading impacts of the Yosemite Slough bridge are further discussed in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]).

Refer to Response to Comment 17-1 for a discussion of how the City would prohibit use of the bridge by private automobiles.

Response to Comment 47-51

Under CEQA, an analysis of cumulative impacts must consider whether "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." CEQA Guidelines

Section 15065(a)(3). The Yosemite Slough Restoration Project will not have any adverse impacts related to recreation. Thus, it will have no effects that might combine with the incremental effects of the Project to create significant cumulative impacts. Regarding the Project's potential impacts *on* the slough, refer to Response to Comment 47-20 (regarding impacts on future recreational uses) and. Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]). As Master Response 3 demonstrates, the Project will not have a significant impact on the Restoration Project area itself or on the slough's ecology or habitat, and therefore will not impede its mitigation of prior projects' impacts.

Response to Comment 47-52

This is a summary of comments in this letter, specifically that the full scope of impacts to the slough and CPSRA have not been examined, and the project objectives need to be clarified regarding the 49ers stadium. With regard to defining the Project Objectives regarding the 49ers stadium, refer to Response to Comment 47-14. With regard to examining the full scope of impacts to the slough and CPSRA, refer to Responses to Comments 47-18 through 47-51, which are specific comments on the EIR analysis relative to the slough and CPSRA. No new substantive changes to the Draft EIR analysis have been identified and therefore no changes are necessary for the analysis of alternatives. Refer to Response to Comment 48-3 regarding the selection and evaluation of alternatives.

With regard to clarifying the Project objective relative to the 49ers stadium, page VI-3 of the Draft EIR includes within the list of Project Objectives "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 necessary infrastructure." While the City and Agency would like a stadium to be part of the Project, development of a NFL stadium is not within the City's or Agency's control, and is a business decision of the NFL. Therefore, while the Project includes development of a stadium, several variants and alternatives to the Project were developed to address a non-stadium scenario. To maintain the same major elements of the Project, while accounting for the very real potential for the 49ers to relocate to Santa Clara or another location, the City identified Variant 1 and Variant 2, which would develop R&D or housing, respectively, in lieu of a stadium, and at levels that would be consistent with population and employment levels associated with a stadium scenario. Similarly, the alternatives analysis includes both stadium and non-stadium scenarios. Alternative 2 addresses a new stadium, without a bridge and Alternative 3 re-uses the existing stadium. Alternatives 4 and 5 include no-stadium scenarios.

As discussed previously in responses to this letter, the impacts to the CPSRA were adequately identified and disclosed in the Draft EIR. A re-examination of the alternatives analysis is not required and no changes to the Draft EIR are proposed.

Response to Comment 47-53

This comment contains introductory information and summarizes an attached letter from Tom Brohard and Associates (Comments 47-101 through 47-114). Responses to specific comments from that letter are provided in Responses to Comments 47-101 through 47-114. Also refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of transportation issues relating to the Yosemite Slough bridge.

Response to Comment 47-54

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) with regard to impacts on CPSRA and the slough from the bridge. With regard to the three no-bridge options outlined by the commenter, most of these are addressed by existing analysis in the Draft EIR (the tunnel option is not). CEQA does not require a comprehensive evaluation of every conceivable alternative. Alternatives can be rejected because they are infeasible and/or if they fail to meet most of the Project objectives. Chapter VI (Alternatives) of the EIR describes several alternatives that were considered but rejected from further consideration. The range of development options of stadium or no stadium, and bridge or no bridge, [stadium/bridge is the Project; no stadium/bridge are Variant 1 and 2; stadium/no bridge is Alternative 2; and no stadium/no bridge are Alternatives 4 and 5] are covered by the existing analysis in the Draft EIR. Refer to Response to Comment 48-3 regarding the selection and analysis of alternatives. Because the Draft EIR includes no-bridge alternatives, these issues are addressed within the EIR.

Response to Comment 47-55

Section III.B (Land Use and Plans) discusses the Project's consistency with all applicable land use plans on pages III.B-7 through III.B-32. This comment is an introduction to the more detailed comments regarding plan consistency that follow. Refer to Responses to Comments 47-56 through 47-59 for responses to these concerns.

Response to Comment 47-56

The Lead Agencies have determined that the Project would not degrade scenic values. In fact, as noted on page III.B-12 of the Draft EIR, the Project would result in an overall benefit to the CPSRA. Two-thirds of the park that is currently unused, underutilized, or that is used for Candlestick Park stadium parking would be substantially improved to enhance overall park aesthetics and landscape ecology; reconnect visitors to the Bay shoreline; and provide direct access to the Bay for swimming, fishing, kayaking, and windsurfing. Proposed improvements include shoreline restoration and stabilization, a bio-filtration pond to cleanse stormwater, the provision of habitat and opportunities for environmental education, 'Eco-Gardens,' and salt-marsh restoration (refer to III.P [Recreation]).

The commenter states that the Project is inconsistent with the CPSRA General Plan and misinterprets the statement in the Draft EIR, page III.B-12, that, "To the extent that the final improvements to the reconfigured CPSRA would be inconsistent with the CPSRA General Plan, these improvements would be addressed through the State Parks General Plan amendment process." Prior to this sentence, these "inconsistencies" are identified as a boundary change and proposed new uses that would be located on lands removed from the park following the reconfiguration. The amendment to the CPSRA General Plan would correct the inconsistency that would arise over the boundary changes and the lands removed from the CPSRA by the Project. Pursuant to SB 792, no CPSRA General Plan amendment is required for the reconfiguration of the recreation area.

As explained in the Draft EIR, page III.B-12, the Project would be inconsistent with the CPSRA General Plan to the extent that it would result in a park boundary different from that shown in the General Plan and to the extent that it proposes new uses to be located on lands removed from the park following the reconfiguration. An amendment to the CPSRA General Plan would eliminate these inconsistencies.

Pursuant to SB 792, no CPSRA General Plan amendment is required for the reconfiguration of the recreation area.

As discussed above and in Response to Comments 47-3 and Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), the Project would not a have significant impact on the Park's scenic values, natural resources, or recreational value. The Project therefore is not inconsistent with the referenced General Plan policy.

Response to Comment 47-57

As noted on page III.B-12 of the Draft EIR, consistent with the goals and objectives of the CPSRA General Plan, the Project would develop recreational resources, including parks, picnic areas, shade shelters, tidal marsh restoration; park ranger station/visitor's center, a meadow, a bio-filtration pond, and a restaurant/café at The Last Rubble; pedestrian pathways, upgraded restrooms, overlooks, an interpretive amphitheater, parking, and a windsurf/kayak launch at Heart of the Park, The Point, and The Neck; and swimming, kayaking, and windsurfing at The Last Port. The Project also would connect the Bay Trail through the Project site, resulting in 9.6 miles of continuous public access through a diversity of natural and historic environments. The Project's passive and active recreation areas that would be accessed along the Bay Trail would encourage a longer stay than walking or bicycling would occasion. The Project would, therefore, benefit the CPSRA and further its objectives, and would be consistent with SB 792.

Response to Comment 47-58

Chapter VI (Alternatives) of the Draft EIR includes an analysis of Alternatives 2, 4, and 5, all of which do not include a bridge over Yosemite Slough and route traffic upland of the slough. Also refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge), which includes the rationale for providing the bridge.

With regard to the aesthetic impacts of the Yosemite Slough bridge, refer to Responses to Comments 31-14, 47-34, 47-36, 47-46, 47-73, and 47-76. The bridge would contain pedestrian paths from which pedestrians can view the slough and the Bay. In fact, the bridge would provide an intimate viewing experience from its position over the water from which to watch ducks, water birds, and other wildlife that utilize the slough. While the Draft EIR included a preliminary design of the Yosemite Slough bride, the final design would be fully developed through consultation with BCDC and CDPR. The bridge design would be integrated with its surroundings visually and spatially, and would only partially obstruct views of the Bay from close-up vantage points. From a mid- and long-range distance, the Bay would remain visible. With regard to the second policy quoted by the commenter, that towers, bridges or other structures near or over the Bay should be designed as landmarks that suggest the location of the waterfront when it is not visible, especially in flat areas, the bridge would act as a landmark. Visitors to the slough inland from the bridge could utilize the bridge as a landmark of the Bay entrance, and, similarly, boaters and kayakers could use the bridge as a visual landmark of the entrance to the Yosemite Slough when using the Bay. As noted in Section III.E (Aesthetics), the bridge would not have a substantial adverse impact on views of the large expanse of the Bay; views would be obstructed only partially and from close-in viewpoints.

The CDPR would ultimately establish the configuration of improvements to various areas of the CPSRA through the public general plan process. Page III.B-15 of the Draft EIR states:

> The Project is consistent with the intent of the Bay Plan as it relates to the Candlestick Point area. The Project would provide park improvements, and on-going funding for park operation and maintenance. The ultimate configuration of improvements to various areas of the CPSRA would be determined by the ~~CPDR~~CDPR but the Project would not preclude a water trail camping site or fishing, windsurfing, hiking and viewing opportunities. The inclusion of the Yosemite Slough bridge would not conflict with the Bay Plan's policy regarding additional bridges over the Bay, which aims to preserve the visual impact of the large expanse of the Bay. Expansive views of the Bay would remain from numerous vantage points, even with inclusion of the bridge over the neck of the slough.
>
> The Project is also consistent with the Bay Plan policies to minimize Bay fill and to preserve the shoreline for uses that are regionally important, water-oriented uses needing or historically located on shoreline sites, such as ports, water-related industry, water-related recreation, airports, and wildlife refuges. The Project involves minimal filling associated with the Yosemite Slough bridge, a marina and improvement of the existing shoreline, waterfront bulkhead, piers and seawall structures. The Project includes improved access to the shoreline through shoreline improvements, open spaces and a waterfront promenade. …

With respect to the Project's inconsistency with the Bay Plan's biological resources policies, a summary of the Bay Plan policies related to wildlife, wetlands, and other biological resources are provided in the Regulatory Framework in Section III.N (Biological Resources) on pages III.N-44 and -45 of the Draft EIR:

> **Policies Concerning Fish, Other Aquatic Organisms and Wildlife in the Bay, Tidal Marshes and Tidal Flats Around the Bay, and Subtidal Areas in the Bay[777]**
>
> The SFBCDC shall protect native fish species, other aquatic organisms, other listed wildlife species and their specific habitats under the *California Endangered Species Act or federal Marine Mammal Protection Act* within the Bay's tidal marshes, tidal flats, and subtidal habitat. To the greatest extent feasible, specific habitats such as tidal marsh, tidal flats, and subtidal habitats shall be conserved, restored, and increased. Specific habitats that are needed to conserve, increase or prevent the extinction of any native species, species threatened or endangered, species that the CDFG has determined are candidates for listing as endangered or threatened under the California *Endangered Species Act*, or any species that provides substantial public benefits, should be protected, whether in the Bay or behind dikes. In reviewing or approving habitat restoration programs the SFBCDC should follow the recommendations in the Baylands Ecosystem Habitat Goals and provide a diversity of habitats for native aquatic and terrestrial plant and animal species. For projects that may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species the SFBCDC should consult and give appropriate consideration to the recommendations of the California Department of Fish and Game and the US Fish and Wildlife Service or the National Marine Fisheries Service and not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal endangered species acts, or species that are candidates for listing under the CESA, unless the project applicant has obtained the appropriate "take" authorization from the US Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Game. However, the SFBCDC may permit a minor amount of fill or dredging in wildlife refuges, shown on the Plan Maps, necessary to enhance fish, other aquatic organisms and wildlife habitat or to provide public facilities for wildlife observation, interpretation and education.

In consideration of these and other policies protecting biological resources, an analysis of the effects of Project construction activities on wetlands (including tidal marshes, tidal flats, and non-tidal marshes) and jurisdictional waters is provided in Impacts BI-4a, BI-4b, and BI-4c of the Draft EIR, pages III.N-56 through III.N-68. Mitigation measure MM BI-4a.1 on page III.N-59 of the Draft EIR explicitly states that

wetlands and jurisdictional waters shall be avoided to the maximum extent practicable, and that permits shall be obtained only where avoidance of existing wetlands and drainages is not feasible:

> *MM BI-4a.1* *Wetlands and Jurisdictional/Regulated 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: …*

Therefore, the Project is consistent with the Bay Plan policies provided by the commenter.

In response to the comment that the bridge does not provide adequate clearance for vessels navigating the waterway, the bridge has been designed to facilitate passage of non-motorized recreational vessels, such as canoes and kayaks. The clearance at the middle of the span would be over 18 feet at mean tide levels (accounting for sea level rise), which would be adequate for this type of use. During 100-year flood events, the clearance would decrease to approximately nine feet. Thus, the bridge would allow sufficient clearance for kayaks to continue to navigate the slough.

Response to Comment 47-59

The Project would not impede or obstruct implementation of the Yosemite Slough Restoration Project. Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]). Refer to Response to Comment 47-4 with regard to no-bridge alternatives that include routing traffic around the slough that are analyzed in the EIR.

Response to Comment 47-60

With respect to recirculation, Section 15088.5 of the CEQA Guidelines requires recirculation of an EIR if any one of the following circumstances arise after circulation of a Draft EIR: (1) a new significant environmental impact; (2) a substantial increase in the severity of an environmental impact; (3) a feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the significant impacts of the project (but the project's proponents decline to adopt it); or (4) precluding meaningful public review and comment. These circumstances must be supported by substantial evidence in the record. The comments raised on the Draft EIR, beyond those submitted by just this commenter, have not resulted in any of the circumstances described by items (1) through (3), above, as demonstrated by this Comments & Responses document. Further, in terms of providing meaningful public review and comment, refer to Responses to Comments 80-1 and 84-11 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. In addition, refer to Response to Comment 96-1 for a discussion of the other opportunities for providing public comment prior to publication of the Draft EIR. Refer to Response to Comment 85-5 for a discussion of the extensive planning process for the Project.

Response to Comment 47-61

With respect to the preparation of a joint CEQA/NEPA document, there are several reasons why a joint document was not prepared, as follows:

- While Section 15170 of the CEQA Guidelines allows the use of joint document where a Project must comply with both NEPA and CEQA, CEQA does not require the use of a joint document. Similarly, while CEQA allows the use of an Environmental Impact Statement (EIS) in lieu of an EIR where a project requires both, it does not require use of an EIS. On both points, CEQA provides permissive, rather than prescriptive, language.
- The City/Agency and Navy previously made efforts to produce a joint EIS/EIR for the original HPS Redevelopment Plan. While a joint draft EIS/EIR was produced, the final documents were separated due to a schedule limitation of the City/Agency that was not shared by the Navy. At the time of the adoption of the HPS Redevelopment Plan, the City and Agency relied upon 1996 legislation (AB 2736) that granted a temporary exception of up to 18 months after the effective date of the ordinance adopting the Redevelopment Plan to satisfy the provisions of CEQA. In 1998, SB 1615 extended the temporary exception for another 12 months for a total of 30 months after the effective date of the ordinance adopting the Redevelopment Plan to complete the CEQA process. The original Redevelopment Plan was adopted on July 14, 1997, and it became effective 30 days later. Thirty months after the effective date meant that the City/Agency deadline for adopting a final CEQA document was February 14, 2000. The Final EIR was certified on February 8, 2000. The Navy did not issue a ROD for the FEIS until October 16, 2000. While every endeavor was made to produce the final documents according to the same schedule, the practical reality was that the City/Agency and the Navy had different schedule considerations.
- For the CP-HPS Phase II Project, and with the previous experience in mind, the City/Agency consulted with the Navy early on to determine whether a joint document should be prepared, and it was mutually agreed that it would be best to produce separate documents for several reasons. First, the project that the City/Agency proposed encompassed more than the HPS Redevelopment Plan area. Therefore, rather than producing a subsequent EIR, the City/Agency determined that a new EIR that would address the expanded Project site (to include Candlestick Point) would be more appropriate. Second, the CP-HPS Phase II Project would include amendments not only to the HPS Plan, but also to the BVHP Plan, which was not a project element over which the Navy had any involvement. The Navy saw its NEPA task as more limited. It determined that the only reason it needed to do a supplement to its FEIS was because the land uses at HPS were changing sufficiently (e.g. the stadium use) to require them to do a supplemental EIS before they transferred the property. The Navy intends to use its 2000 FEIS as a starting point to produce a supplement, focusing only on the HPS area. Third, the schedule considerations for both processes are different, with the City/Agency CP-HPS Phase II EIR proceeding ahead of the Navy's HPS Supplemental EIS. While the Navy needs its Supplemental EIS before it transfers more property to the Agency, the City/Agency undertaking involves many more approval actions than the Navy's single transfer action. Therefore, the City desired to go through its local approval process for amendments to two redevelopment plans and related documents before the Navy was expected to be in a position to transfer more property.
- Since the City/Agency was going to be studying a larger area than the Navy would need to study, it was agreed that the City would provide all background data that it collected to the Navy, so that the Navy would not need to duplicate the City/Agency work and that both documents would be consistent with one another.

Further, other federal agencies (beyond the Navy) with approval authority over an aspect of the Project, such as the USACE, would follow their respective federal regulatory procedures for compliance with NEPA, as needed.

Response to Comment 47-62

Section III.N.3 (Biological Resources, Regulatory Framework) of the Draft EIR discusses Section 404 Clean Water Act permitting beginning on page III.N-37, and indicates that the USACE grants three types of permits: individual, general and nationwide, and that Project-specific individual permits would be required for certain activities that may have a potential for more than a minimal impact. Section III.M.3 (Hydrology and Water Quality, Regulatory Framework) indicates on page III.M-32, that Section 404(b)(1) Guidelines (Guidelines for Specification of Disposal Sites for Dredged or Fill Material) are in 40 CFR 230.

40 Code of Federal Regulations (CFR) Part 230.5 states that if a General Permit is applicable, the applicant needs merely to comply with its terms, and no further action by the permitting authority is necessary. An examination of practicable alternatives to the proposed discharge is not required for activities covered by General Permits.

The types of permits that would be issued for the Project by the USACE would be determined during the Clean Water Act (CWA) Section 404 permitting process. The Nationwide permits are considered to be a type of General Permit, and do not require an alternatives analysis. For Project activities for which USACE determines that an individual permit is required, the Project Applicant would comply with CWA Section 404(b)(1) by supplying the USACE with an evaluation of practicable alternatives during the permit application process. The USACE would issue individual permits following a full public interest review of the permit application, and the USACE may only issue a permit for the least environmentally damaging practicable alternative.

Per 40 CFR Part 230.10 (a)(5), to the extent that practicable alternatives have been identified and evaluated under a Coastal Zone Management program or other planning process, such evaluation would be considered by the permitting authority as part of the consideration of alternatives under the Section 404(b)(1) guidelines. The USACE determines the completeness of the alternatives analysis and may require for it to be supplemented accordingly. Therefore, in summary a practicable alternatives analysis for CWA Section 404 permitting is not required to be included in the Draft EIR, but would be conducted during the CWA Section 404 permitting process (if an individual permit is required), under the direction of the USACE. If the General Permit were found to be applicable, no practicable alternatives analysis would be required.

Response to Comment 47-63

The federal *Land and Water Conservation Fund Act of 1965*, 16 USC 460l-4 (LWCFA) provides for federal grants to assist in the acquisition and development of state and local public outdoor recreation land. Lands that have received LWCFA assistance may be converted to uses other than public outdoor recreation only if replacement outdoor recreation land is provided and approved by the National Park Service. Parts of the CPSRA were developed with LWCFA funds and are therefore subject to the conversion requirement, including a portion of the lands to be removed from the CPSRA as part of the proposed CPSRA reconfiguration. It is anticipated that the Project's substantial acreage of new public outdoor recreation

land, illustrated in Figure III.P-2 (Proposed Parks and Open Space), will be sufficient to meet the LWCFA's requirement for replacement public outdoor recreation land. Consistent with the requirements of the LWCFA and SB 792, any agreement implementing the proposed park reconfiguration will require compliance with CPSRA and approval by the National Park Service prior to any removal of LWCFA land from the CPSRA for non-park purposes.

Response to Comment 47-64

These statutory requirements are preempted by Section 26(f) of SB 792, and therefore do not apply to the proposed CPSRA reconfiguration.

Response to Comment 47-65

These statutory requirements are preempted by Section 26(f) of SB 792, and therefore do not apply to the proposed CPSRA reconfiguration.

Response to Comment 47-66

This comment contains closing or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 47-67

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 47-68

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on the existing biological resources of Yosemite Slough, and potential impacts of the Yosemite Slough bridge on wetlands proposed to be created as part of the Yosemite Slough Restoration Project. Refer to Response to Comment 31-5 for a discussion of Project effects on views, and Response to Comment 47-20 for a discussion of Project effects on pedestrian trails.

Response to Comment 47-69

Refer to Response to Comment 47-4 about excluding the bridge from the Project site and analysis of Project impacts on Yosemite Slough.

Response to Comment 47-70

The Draft EIR considered the City's General Plan policies and CPSRA policies, as required by Section 15125(d) of the Public Resources Code, and the Yosemite Slough Restoration Project is not a local general plan or a regional land use plan within the scope Section 15125 (d).

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's consistency with, and potential effects on, the biological resources proposed as

part of the Yosemite Slough Restoration Project. Also, refer to Master Response 3 for a discussion of text added to quantify potential impacts of the Yosemite Slough bridge on wetlands proposed to be created as part of the Restoration Project. Refer also to Response to Comment 47-4 for discussion of the Project's consistency with the goals and objectives of the Yosemite Slough Restoration Project.

Response to Comment 47-71

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the project on the Yosemite Slough Restoration Project and its biological goals.

Response to Comment 47-72

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Project, including a quantitative analysis, on the wetlands that will be constructed as part of the Yosemite Slough Restoration Project.

Response to Comment 47-73

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) and Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge), which contain a discussion of the Project's impacts on the slough, including the Yosemite Slough Restoration Project. The Yosemite Slough Restoration Project was considered in the cumulative analyses for the technical sections of the Draft EIR. Refer to Response to Comment 47-20 for a comprehensive discussion of the recreational experience in the slough.

With regard to the aesthetic impacts of the Project on the restored slough, the Yosemite Slough bridge would change the appearance of a portion of the slough, with the addition of a bridge structure and roadway approaches (refer to Figure III.E-8). The Project would alter the scenic nature of the Project site in that it would create a dense urbanized setting where one does not currently exist. The bridge would cross the extreme eastern edge of the area to be improved under the Yosemite Slough Restoration Project and would replace views of open water as seen from some nearby locations. The bridge would contain "green" auto lanes, with plantings in the middle providing a green boardwalk. The bridge would be low profile and integrated into the open space on either side of the slough to blend as much as possible into the environment through the use of openwork, materials, and color. Further, it would contain piers and lookout points for a pedestrian viewing experience that would not otherwise be provided. Yosemite Slough would continue as a waterway bordered by open space opening from a narrow channel to the west to the wider South Basin to the east and would remain a scenic resource on the site. The Project would complete the Bay Trail along the waterfront and provide substantial areas of parks and open space that would complement the slough restoration. The mid- and close-range views of the entire area would include the restored slough and the high-quality development of the Project, including substantial parks and open space. Inclusion of the bridge would not substantially damage a resource that contributes to a scenic public setting. The Slough restoration could proceed with or without the Project, and the inclusion of the bridge would not adversely affect the goals of the Restoration Project.

As shown by the various photographs and simulations presented in Section III.E (Aesthetics), the Project would provide extensive areas of open space integrated with new development and existing open space that would enhance the positive features of Bayview Hunters Point, with its immediate proximity to the shoreline, and would not substantially obstruct views of the Bay, the East Bay hills, and the San Bruno Mountains from adjacent neighborhoods. It should be pointed out that the visual simulations prepared for the Project do not include already approved development, including HPS Phase I (not part of the Project) and other cumulative projects, which would substantially increase the amount of development in the vicinity of the Project site. The simulations also do not show conditions that would exist with completion of the Yosemite Slough Restoration Project, as that project is still undergoing design and it would be speculative to provide graphics of an assumed condition. The discussion provided in the analysis of the Project's consistency with the Urban Design Element of the City's General Plan supplements the impact analysis by providing a narrative discussion of the visual character of each of the Project's districts with respect to design patterns, connectivity, neighborhood image, and visual compatibility with existing development. While the bridge would insert a structure into an improved open space area on completion of the Restoration Project, it would connect two already urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is out of character or scale with surrounding development.

The proposed shoreline improvements would improve the aesthetic quality of the shoreline along the Project frontage, reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would correlate with the improvements to the tidal wetlands planned under the Yosemite Slough Restoration Project to provide expanded open space opportunities, including recreational trails linked to other regional trails and wildlife viewing. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline.

Development of the Project would not substantially block publicly accessible views of the Bay or other scenic areas. The Project would provide a continuation of the existing street grid, thereby maintaining existing view corridors to the Bay and East Bay hills. The Project would also provide new parks and open space facilities. Public access areas (City and State parks) would provide views from the Project site toward the East Bay and the Bay. The Yosemite Slough Restoration Project would include continuation of the Bay Trail and viewpoints/interpretative signage. The bridge component of the Project would place a low bridge structure across the neck of the slough that would partially obstruct a scenic view from the slough toward the Bay from some vantage points. Views of the Bay and the remainder of the slough would be retained from numerous other vantage points, including along the shoreline, from the view corridors within the Project site, the CPSRA, and the proposed bridge itself. The Project would improve access to the entire area, allowing a greater number of people to take advantage of the scenic resources at CPSRA and the slough.

Lighting impacts on biological resources of the slough are discussed in Master Response 3 (Impacts of the Project on the Yosemite Slough [Biological Resources]). With regard to lighting impacts on recreational users of the slough, the increase in ambient light as a result of the Project would be consistent with the urban character and associated ambient lighting of the City as a whole. Because the Project site is located immediately adjacent to a developed urban area, existing views of the night sky are diminished as is typical in all urban areas. Nighttime lighting from the Project structures, the stadium, and traffic would not affect users of the restored Yosemite Slough after completion of the Yosemite Slough Restoration Project, as the

CPSRA is closed after dark. Therefore, the light and glare as a result of the Project would not substantially interfere with these currently limited views.

Response to Comment 47-74

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Project, including a quantitative analysis, on the wetlands that will be constructed as part of the Yosemite Slough Restoration Project.

Response to Comment 47-75

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Yosemite Slough bridge, including noise effects, on wildlife use of Yosemite Slough under the Yosemite Slough Restoration Project. Refer also to Responses to Comments 47-39, 47-40, and 47-41 regarding noise-related impacts during construction and operation of the proposed project to recreational users and noise-sensitive receptors.

Response to Comment 47-76

It is acknowledged that the bridge would partially obstruct views of the Bay, including Double Rock, and the slough from some vantage points, particularly short-range views. The bridge would also block views from the slough to the open water. However, the bridge would be designed to be as open as possible to maximize views, and views of the Bay, Yosemite Slough, Double Rock, and the East Bay skyline would remain from numerous other vantage points. Four graphics (Figure C&R-10, Figure C&R-11, Figure C&R-12, and Figure C&R-13) of various viewpoints of the Yosemite Slough bridge are provided in Response to Comment 47-46 within this document. For this reason, it was determined that the impact of the bridge on views is less than significant.

Response to Comment 47-77

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Yosemite Slough bridge, including shading effects, on wetlands.

Response to Comment 47-78

Refer to Responses to Comments 31-14, 47-34, 47-36, 47-46, 47-58, 47-73, and 47-76 for discussions relating to the obstruction of views resulting from construction of the Yosemite Slough Bridge. Figure C&R-10, Figure C&R-11, Figure C&R-12, and Figure C&R-13 provide various viewpoints of the Yosemite Slough bridge, as provided in Response to Comment 47-46.

Response to Comment 47-79

Refer to Responses to Comments 31-14, 47-34, 47-36, 47-46, 47-58, 47-73, and 47-76 for discussion regarding the obstruction of views resulting from construction of the Yosemite Slough Bridge. Views of Double Rock would remain from numerous vantage points in the area.

Response to Comment 47-80

The commenter states that the Project is inconsistent with *San Francisco Bay Plan* Policies 2, 4, 6, and 10. These policies state the following:

Policy 2	All bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore. To this end, planning of waterfront development should include participation by professionals who are knowledgeable of the (Planning) Commission's concerns, such as landscape architects, urban designers, or architects, working in conjunction with engineers and professionals in other fields.
Policy 4	Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline. However, some small parking areas for fishing access and Bay viewing may be allowed in exposed locations.
Policy 6	Additional bridges over the Bay should be avoided, to the extent possible, to preserve the visual impact of the large expanse of the Bay. The design of new crossings deemed necessary should relate to others nearby and should be located between promontories or other land forms that naturally suggest themselves as connections reaching across the Bay (but without destroying the obvious character of the promontory). New or remodeled bridges across the Bay should be designed to permit maximum viewing of the Bay and its surroundings by both motorist and pedestrians. Guardrails and bridge supports should be designed with views in mind.
Policy 10	Towers, bridges, or other structures near or over the Bay should be designed as landmarks that suggest the location of the waterfront when it is not visible, especially in flat areas. But such landmarks should be low enough to assure the continued visual dominance of the hills around the Bay.

With regard to the aesthetic impacts of the Yosemite Slough bridge, refer to Responses to Comments 31-14, 47-34, 47-36, 47-46, 47-73, and 47-76. The Project has been designed to preserve view corridors. The Project will connect the existing street grid in an orientation that will allow an uninterrupted view toward the Bay from numerous area streets. Project towers have been situated in zones that would allow the provision of view corridors. Numerous open space areas and waterfront pedestrian pathways would provide expansive viewing opportunities as well. Buildings and structures have been designed to be complementary to the surroundings. Parking structures are not proposed for the shoreline areas. Policy 6 likely refers to large bridges across the Bay such as the Golden Gate Bridge and not to small, local bridges as is proposed under the Project. However, the proposed bridge would be low in height and would connect two urban areas and relates to the adjacent developed and to be redeveloped land uses. The proposed bridge would provide unique viewing opportunities that are not currently available. The bridge would not substantially obstruct views of the Bay or affect the visual dominance of the hills around the Bay. The Project and, in particular, the Yosemite Slough bridge, would not be inconsistent with the policies of the Bay Plan, as commenter asserts.

Response to Comment 47-81

The commenter suggests that Figure III.N-2 (Study Area Habitats) does not indicate any mapped habitat types within the portion of the Study Area overlapping the Yosemite Slough Restoration Project area. In actuality, this figure does show habitats within this area. The habitats currently present within this area are mapped as tidal salt marsh and mud flat and open water, though at the scale of the figure, the tidal salt marsh habitat may be difficult to discern on this figure.

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Project after implementation of the Yosemite Slough Restoration Project, the Draft EIR's analysis of impacts to areas both on-site and off-site, including Yosemite Slough, and clarification of the study areas shown on Figure III.N-1 (Biological Resources Study Area) and Figure III.N-2. Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) also provides a discussion of text added to quantify potential impacts of the Yosemite Slough bridge on wetlands proposed to be created as part of the Restoration Project.

Response to Comment 47-82

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the project on the Yosemite Slough Restoration Project, the Draft EIR's analysis of impacts to areas both on-site and off-site, including Yosemite Slough, and clarification of the study areas shown on Figure III.N-1 and Figure III.N-2. Also, refer to Response to Comment 47-23 for a discussion of the Draft EIR's analysis of biological impacts to Yosemite Slough, including clarification of the statement that off-site aquatic resources analyzed included "Yosemite Slough (except the area of construction)."

Response to Comment 47-83

In response to the comment, the text in Section III.N (Biological Resources), page III.N-40, first paragraph after the four bullets, has been revised:

> The tidal aquatic habitats adjacent to the Project site are considered EFH by NMFS for a species assemblage that includes anchovies, sardines, rockfish, sharks, sole, and flounder.[768,769] Areas supporting the native Olympia oyster found in San Francisco Bay are also considered EFH by NMFS because oyster beds generally increase fish abundance. <u>In addition, eelgrass beds are considered EFH.</u> …

Response to Comment 47-84

The commenter requests that impacts to wetlands that are considered self-mitigating be explicitly shown on the impacts map and identified in Table III.N-4. Table III.N-4 has since been modified and is presented in Section F (Draft EIR Revisions).As discussed in Impact BI-4a, page III.N-59 of the Draft EIR:

> Shoreline improvements at Candlestick Point would result in the removal of approximately 2.86 acres of fill, and the placement of approximately 3.46 acres of fill. A net decrease of approximately 0.42 acre of open waters would occur at Candlestick Point. These impacts would occur entirely along the Candlestick Point shoreline as a result of construction of revetments to minimize flooding and shoreline erosion, and as a result of the placement of soils or sand to enhance beach or marsh habitat. For example, along most of the northern and southern edges of Candlestick Point, marsh soils would be placed in jurisdictional areas following completion of the revetment to provide a gentler slope

> than is currently present, which would allow for colonization by marsh vegetation. As a result, much of the fill of jurisdictional areas (as reflected in Table III.N 4 and Figure III.N 5) would result in an enhancement of habitat and, thus, would be self-mitigating.

The precise locations of wetland impacts that will be self-mitigating will be determined as detailed project design occurs, and as potential wetland creation areas are determined in greater detail. Wetlands that are impacted by beneficial shoreline improvement activities that allow for wetland restoration *in situ* will be considered self-mitigating, while all other wetland impacts will require compensatory mitigation *ex situ*. Although the precise locations of self-mitigating wetlands cannot be known at this time, the Draft EIR identifies the process by which mitigation will be required for permanently impacted wetlands (i.e., those wetland impacts that are not self-mitigating) in MM BI-4a.1 on pages III.N-59 to III.N-62. Thus, no further clarification or specificity can be provided at this stage of the Project.

Response to Comment 47-85

In response to the comment, the text in Section III.N (Biological Resources), MM BI-4a.1, pages III.N-61 to -62, last bullet on page III.N-61 and first bullet on page III.N-62, has been revised as follows:

> …
>
> - *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 ~~40~~95 percent of the vegetation in the preserve wetland.*
> - *Year 5 after restored areas reach colonization 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 ~~65~~95 percent of the vegetation in the preserve wetlands.*
>
> …

Response to Comment 47-86

In response to the comment, the Impact BI-4c discussion, Draft EIR page III.N-67, last paragraph, fourth sentence, has been revised as follows:

> … The "shadow fill" produced by the Yosemite Slough bridge may change the biological functions and values of aquatic and mud flat habitats below to some extent; such an impact would cover approximately ~~0.96~~1.48 acres based on the acreage of mud flat below the immediate bridge surface. …

Also, the Impact BI-4c discussion, Draft EIR page III.N-68, second paragraph, fourth sentence, has been revised as follows:

> … However, shading of ~~0.94~~1.48 acres of mud flats and aquatic habitats would have only moderate effects on the functions and values of these habitats and would not result in the loss of these habitats. Mitigation measure MM BI-4a.2 shall be implemented to minimize indirect construction-related impacts on wetlands and other jurisdictional waters. Further, shading impacts to mud flats and aquatic habitats would be reduced by implementation of mitigation measure MM BI-4c.

Also, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of shading from the Yosemite Slough bridge on sensitive habitats.

Response to Comment 47-87

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of shading from the Yosemite Slough bridge on sensitive habitats.

Response to Comment 47-88

In response to the comment, Impact BI-5b and its following discussion, Draft EIR pages III.N-69 and -70 (and Table ES-2, pages ES-97 to -98), have been revised as follows:

Impact of Hunters Point Shipyard Phase II and Yosemite Slough Bridge

Impact BI-5b **Construction at HPS Phase II and construction of the Yosemite Slough bridge 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. (Less than Significant with Mitigation) *[Criterion N.b]***

Within HPS Phase II a total of 1.99 acres of eelgrass ~~occurs~~ has been mapped at two locations (refer to Figure III.N-2). A small eelgrass occurrence was reported along the north shore of the South Basin directly across from Candlestick Point. The only other reported occurrence of eelgrass within HPS Phase II is on the north shore, east of the northern end of Earl Street. This eelgrass bed extends from the end of Earl Street to the pier that forms Drydock 5. These eelgrass beds are mapped as being below mean sea level and, therefore, are spatially separated from areas where shoreline treatments would occur. There are no mapped eelgrass beds where the marina improvements would occur or where the Yosemite Slough bridge would be constructed. However, because the locations of eelgrass occurrence may vary over time, eelgrass not detected during previous surveys could potentially occur in the shallow waters in or near the Yosemite Slough bridge construction footprint, either now or in the future.

The shoreline improvements associated with HPS Phase II include transforming the revetment edge in wave-protected reaches to a more natural looking shoreline by placing suitable fill to cover the revetment that would be constructed by the Navy, which may include Articulated Concrete Block (ACB) mats and/or marsh soils. Shoreline wave berms may be included along the southwest facing shoreline at the bayward end of the ACB mats. If wave berms or other shoreline improvements, or the Yosemite Slough bridge, were constructed in ~~either of the two~~ areas where eelgrass beds ~~are known to~~ exist, they could directly impact them through excavation/removal or placement of fill material. Construction of these features or other shoreline treatments near eelgrass beds could also result in the mobilization of some sediment, which, if it were to settle out on eelgrass, could reduce photosynthesis and, therefore, productivity and survival. Because of the ecological importance but regional scarcity of eelgrass beds and the potential contribution of eelgrass beds in the Study Area to populations of aquatic species (and their predators) throughout larger portions of the Bay, any impacts would be considered a substantial reduction in the local population and, therefore, a substantial adverse effect.

To reduce this impact, the following mitigation measures shall be implemented.

MM BI-5b.1 Avoidance of Impacts to Eelgrass. *As the design of shoreline treatments progresses, and a specific Shoreline Treatment Plan is determined, the Plan shall minimize any in-water construction required for installation of any treatment measures near either of the two eelgrass locations noted above.~~ If in water work is completely avoided within 750 feet of these areas, there would be no impact and no further mitigation would be required. If complete avoidance of work within 750 feet of these areas is not feasible, measure MM BI-5b.2 shall be implemented.~~*

MM BI-5b.2 Eelgrass Survey. ~~*If avoidance of work within 750 feet of two known eelgrass locations is not feasible*~~*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, tThis 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.

If the shoreline treatments can be adjusted so that no direct impacts to eelgrass beds would occur, no 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.

Response to Comment 47-89

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Yosemite Slough bridge, including noise effects, on wildlife near the bridge. Even if noise were to impact birds nesting or roosting on Double Rock, the impact would be less than significant due to the low effects such impacts would have on regional populations of the species in question. Double Rock supports fewer than 10 pairs of western gulls. If these birds were displaced as a result of noise associated with the bridge, they would likely find alternative nesting habitat (possibly on the piers that will be enhanced as waterbird habitat on Hunters Point Shipyard, providing vastly more potential nesting habitat than Double Rock). In addition, roosting habitat for waterbirds that might roost on Double Rock does not limit regional waterbird populations; again, the piers that will be enhanced by being separated from the mainland on Hunters Point Shipyard would provide extensive potential roosting habitat for shorebirds, gulls, terns, or other birds that might roost on Double Rock. Thus, noise associated with the Yosemite Slough bridge would not result in a significant impact to birds.

Response to Comment 47-90

With respect to whether project impacts to the western red bat could reach the threshold of significance, Impact BI-8a discusses in detail the reasons why such impacts, if they were to occur at all, would be considered less than significant. Therefore, no further response is required.

Response to Comment 47-91

The commenter suggests that low-frequency noise emitted by construction equipment may not be detectable by western red bats, and thus may not be sufficient to alert bats to disturbance in sufficient time to allow them to flee the area before individuals are impacted. The bats may hear the noise or feel the vibrations of approaching heavy equipment and flush, but even if they do not, they will flush as soon as

any tree in which they are roosting is disturbed. As a result, there is a very low potential for mortality of individual western red bats due to project activities.

Response to Comment 47-92

The commenter suggests that temporal loss of oyster habitat should be considered a significant impact requiring mitigation. Based on examination of riprap and other hardened substrates along the Candlestick Point and Hunters Point Shipyard shorelines, there is no evidence that large or mature oyster beds are present anywhere in the project area, and ample hard substrate providing potential oyster habitat will be present during any project activities that result in modification or replacement of hard substrate along the project's shoreline areas. Therefore, any temporal impacts to oysters resulting from shoreline modifications are expected to affect only small, low-density, and/or immature oyster beds rather than large, high-density, long-established beds. Impacts to oysters will be less than significant.

Response to Comment 47-93

The commenter suggests that shading from the Yosemite Slough bridge will adversely affect Essential Fish Habitat (EFH) and special-status fish species and that mitigation should be proposed to offset these impacts. Potential shading impacts to aquatic habitats were discussed in Impact BI-4c, pages III.N-67 to III.N-68 of the Draft EIR, and MM BI-4c on page III.N-68 of the Draft EIR will help to offset any adverse effects of shading from the bridge on aquatic species, including fish. Shading impacts from the bridge are further discussed in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]).

In response to the comment, the Impact BI-12c discussion, Draft EIR page III.N-93, first and second paragraphs, has been revised as follows:

> Construction of the Yosemite Slough bridge would impact EFH through the construction of pilings required to support the bridge. As detailed in Table III.N-4, the amount of area impacted is approximately 1.28 acres of temporary impacts and 0.40 acre of permanent impacts, which includes both on site and off site areas. These impacts would have a substantial adverse ~~a~~effect on EFH because the function of portions of the impacted habitat would be permanently altered by the Project, a significant impact. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c).
>
> Any loss or modification of EFH that would result from the Yosemite Slough bridge would be mitigated via the compensatory mitigation for impacts to jurisdictional waters (mitigation measures MM BI-4a.1 and MM BI-4c). …

Also, in the discussion following Impact BI-11c, Draft EIR page III.N-87, a sentence has been added to the first paragraph after the sixth sentence, and the second sentence of the second paragraph has been revised, as follows:

> Construction of the Yosemite Slough bridge would impact designated critical habitat for green sturgeon and … loss of 0.11 acre of mudflat and aquatic habitat in the footprints of the bridge piers. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c). Because of the regional rarity of all these special-status fish, any impacts to individuals or to habitat used by these fish would be significant.
>
> As described under Impact BI-11b above, some Project components would benefit these fish by increasing the extent of open water in the Project area through removal of existing structures and by

> reducing coastal erosion. In addition, compensatory mitigation for impacts of the bridge to aquatic habitat would be provided as described by mitigation measures MM BI-4a.1 and MM BI-4c, and mitigation measure MM BI-4a.2 shall be implemented to minimize impacts to wetlands, aquatic habitats, and water quality during construction. Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

Response to Comment 47-94

The commenter suggests that creation of EFH in San Francisco Bay has not generally been successful, and that this mitigation measure has thus not proven to be feasible. For the purpose of the impact assessment in the Draft EIR, all tidal aquatic and mud flat habitats were considered EFH without regard for habitat quality. With the exception of a small amount of permanent impact within Yosemite Slough, areas of permanent project impacts to EFH will be limited to relatively low-quality habitat along developed/disturbed shorelines of Candlestick Point and Hunters Point Shipyard. In contrast, restoration of tidal waters of equal or greater quality to fish, which would be feasible by removing fill and restoring natural habitat in any number of areas within the Bay, would feasibly mitigate Project impacts to EFH. The Project applicant will be consulting with the NMFS regarding project impacts to federally listed fish and EFH and associated mitigation.

Response to Comment 47-95

The commenter suggests that long-term impacts to EFH may occur as a result of operation of the marina aside from maintenance dredging but that such impacts, such as fuel spillage and motorized boat use, were not analyzed in the Draft EIR. However, MM BI-12b.1, page III.N-91 of the Draft EIR includes the following measure:

> - *Use Best Management Practices (BMPs) for controlling pollution from marina operations, boatyards, and fueling facilities that meet, as applicable, the BMPs listed in the National Management Measures to Control Nonpoint Source Pollution from Marinas and Recreational Boating*[819]

Thus, mitigation for such impacts has already been identified. Nevertheless, for purposes of clarification, the text for Impact BI-12b, pages III.N-89 to -90 of the Draft EIR has been revised as follows in response to this comment:

> The same three fishery management plans and the species covered in those plans discussed in the previous impact statement apply to HPS Phase II. The modifications to EFH that could arise from HPS Phase II are associated with the proposed marina, placement of rock fill to buttress existing bulkheads, and the shoreline treatments. Marina operations could affect EFH through potential impacts to water quality and fish habitat resulting primarily from spills or intentional discharges of fuel or other harmful substances from boats using, or fueling facilities associated with, the marina. The most substantial loss of EFH would result from the placement of rock buttress fill necessary to protect the integrity of existing bulkheads. Although aquatic habitat would remain above the buttresses, this rock would occupy existing fish habitat, and the Project would thus substantially modify EFH within the waters adjacent to the HPS Phase II site.

Response to Comment 47-96

Refer to Response to Comment 47-58 for a discussion of the project's consistency with the BCDC San Francisco Bay Plan.

Response to Comment 47-97

As discussed in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), the Project will not cause any significant harm to the slough. Refer to Response to Comment 47-47 for a discussion of the potential for the proposed bridge pilings to impede or alter currents in Yosemite Slough.

Response to Comment 47-98

Please refer to Response to Comment 47-20 regarding the bridge's impact on future recreational boaters using Yosemite Slough. As noted in that discussion, clearance under the bridge would be between 8 feet 7 inches and 13 feet, depending on the magnitude of future sea level rise. The commenter refers to a diagram from Appendix N2 to the Draft EIR, showing a 4-foot clearance under the bridge. As explained in the annotations to this diagram depicts the bridge with Yosemite Slough at its 100-year flood level and assumes the sea level rise of 55 inches—the high end of the range of seal level rise estimates used in the Draft EIR. Although some amount of sea-level rise is likely, this scenario was chosen to represent extreme conditions in order to determine the bridge's design parameters and is not meant to be a prediction about the typical future level of the slough surface, nor an analysis of its effect on navigation. A 100-year flood is a very rare event, and such conditions do not represent the recreational experience. In any event, it is highly unlikely that recreational boaters would attempt to navigate the slough during a 100-year flood event. On the vast majority of days, as explained in Response to Comment 47-20, the bridge would not pose an obstacle to watercraft.

Response to Comment 47-99

Refer to Responses to Comments 47-3 and 47-28 for a discussion of the role of the proposed improvements in the analysis of impacts to CPSRA.

Response to Comment 47-100

Refer to Responses to Comments 31-9 and 31-11 regarding the Bay Trail alignment.

Response to Comment 47-101

This comment contains introductory, closing, or general background information and also reflects the commenter's opinions. No response is required. However, each of the commenter's general issues is specifically responded to in Responses to Comments 47-67 through 47-101.

Response to Comment 47-102

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 47-103

The comment is acknowledged. No response is required.

Response to Comment 47-104

The game-day stadium traffic control plan, as shown in Figure III.D-13 in the Draft EIR and revised in Response to Comment 7-17 to reflect a transit only lane along Harney Way to Bayshore Boulevard, includes a total of eleven traffic lanes exiting the Hunters Point Shipyard site as well as two travel lanes entering the site (one on Griffith Street/Crisp Avenue providing access to the south side of the Hunters Point Shipyard site and another on Innes Avenue providing access to the north side of the Hunters Point Shipyard site). The commenter suggests that these lanes that are proposed to provide "inbound" traffic access to the Hunters Point Shipyard site following football games could be reversed to provide additional "outbound" traffic capacity exiting the stadium. In this case there would be no vehicular traffic lanes providing "inbound" access to the Hunters Point Shipyard site. The commenter notes that if this were done, emergency vehicle access would continue to be provided via the transit only lanes along the BRT route and along Palou Avenue, which would be closed to through traffic on game days.

However, these two "inbound" lanes provide the only vehicular access to the Hunters Point Shipyard, which in addition to the NFL stadium, would include:

- 2,650 residential dwelling units
- 125,000 square feet of neighborhood retail
- 2,500,000 square feet of research and development space
- 255,000 square feet of artists studios
- 50,000 square feet of community services facilities
- 231 acres of public parks

It is unclear from the comment how non-stadium traffic, particularly residents of the 2,650 residential units, would access their destinations in the Hunters Point Shipyard if the only two inbound travel lanes providing access were reversed. Therefore, the modification to the game-day traffic configuration proposed is considered infeasible.

The commenter also suggests that on-street parking be prohibited on the north side of Carroll Avenue, Gilman Avenue, and Ingerson Avenue, between Third Street and Ingalls Street, as well as on Paul Avenue, between San Bruno Avenue and Third Street. The parking lanes on Carroll Avenue and Gilman Avenue are planned to be seven feet wide. This would not be adequate width to provide an additional travel lane on either of these streets.

However, even if additional travel lanes were possible on these streets, stadium exit capacity would not be increased. The exiting capacity of the stadium is limited by the number of lanes exiting the stadium area on Crisp Road. Without the Yosemite Slough bridge, there would only be three exiting lanes on the route along Crisp Road, Griffith Street, Thomas Avenue, and Ingalls Street. These three lanes then split into one lane along Carroll Avenue and two lanes on Gilman Avenue. If additional east-west capacity were provided along Carroll Avenue, Gilman Avenue, and/or Ingerson Avenue, there would continue to be just three lanes exiting the route along Crisp Road, Griffith Street, Thomas Avenue, and Ingalls Street, which represents the exiting capacity constraint. It is not feasible to widen these streets to provide additional exit

capacity along this route because that would involve severe reductions in sidewalk width, which would be inconsistent with the City's Draft Better Streets Plan, or require acquisition of private property. This would be considered infeasible, particularly because the property in question is a PDR use, which the City has made considerable effort to retain. In particular, the *San Francisco General Plan* Policy 8.1 (Maintain industrial zones for production, distribution, and repair activities in the Northern Gateway, South Basin, Oakinba, and India Basin Industrial Park subdistricts) supports retention of PDR uses in the Bayview.

The commenter also questions whether there is evidence to support the statement that the NFL would not be willing to consider a stadium with severely increased exit times as would be the case without the Yosemite Slough bridge. This statement was the product of previous conversations between the City of San Francisco and the NFL. Further evidence is provided in Comment 92-1, a letter drafted by the NFL to the City of San Francisco dated January 12, 2010. In this letter, the NFL notes that the Yosemite Slough bridge is a critical piece of infrastructure for providing access to the stadium.

Also, refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) regarding the necessity of the Yosemite Slough bridge.

Response to Comment 47-105

The commenter suggests that the "reverse" of the post-game lane configuration shown in Figure III.D-13 in the Draft EIR (i.e., the pre-game configuration) would not be required to provide eleven inbound lanes since traffic arrival patterns would be dispersed over time. (Figure III.D-13 has been revised in Response to Comment 7-17 to reflect a transit only lane along Harney Way to Bayshore Boulevard.) While the commenter is correct in one sense, that is, that pre-game conditions are not as critical as post-game conditions, traffic volumes prior to games are still substantially increased over non-game-day conditions and additional inbound capacity is certainly warranted. The pre-game configuration has been designed to be similar to the post-game configuration because it reduces driver confusion since patrons know they can exit the way in which they arrive. Further, anecdotal evidence suggests that patrons have a higher tolerance for traffic congestion following a major sporting event than prior to the event. Thus, fans expect to be able to enter the venue reasonably quickly, but typically expect some congestion leaving the event. So, even if arriving patrons are spread out over a longer time, the additional capacity is warranted to maximize ingress. Ultimately, though, the game-day roadway configuration was primarily designed for the critical post-game period, in which eleven travel lanes would be required.

The commenter notes that although the Yosemite Slough bridge allows for a quicker clearance time, congestion on regional facilities may last for some time following the clearance of the parking lot and that fans would still have the same overall travel times between the proposed stadium and their homes as they do today. The commenter is partially correct, that congestion along primary exit routes, including freeway facilities, may not dissipate immediately following the parking lot clearance. However, providing additional egress routes would spread out the post-game congestion, and provide a quicker parking lot clearance time, and therefore the overall travel times for patrons to leave the stadium would be improved over existing conditions. Refer to the discussion associated with Impact TR-38: (Stadium 49ers Game Site Access and Traffic Impacts) on Draft EIR pages III.D-127 to III.D-133.

The improved stadium exit capacity is due to its location (combined with the proposed infrastructure, including the Yosemite Slough bridge). Whereas the existing stadium is connected to regional freeway facilities through a single primary connection, at Harney Way, the new stadium site offers both a northern and southern exit route. The Yosemite Slough bridge provides the needed connection to the southern route at the Harney Way interchange, and Innes Avenue/Evans Avenue/Cargo Way offer an alternate northern exit route toward I-280 and US-101 north of the stadium. By spreading out the traffic to multiple freeway interchanges, rather than overloading a single interchange as is the case today, egress from the stadium would be more efficient and travel times would improve.

Response to Comment 47-106

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 47-107

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 47-108

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 47-109

Refer to Response to Comment 47-15 for discussion of rail-readiness of the bridge. Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Response to Comment 47-110

Refer to Master Response 4 (Purpose and Benefits of Yosemite Slough Bridge) regarding the necessity of the Yosemite Slough bridge. It would be prohibitively costly to tunnel under the neck of the slough for a BRT crossing due to the relatively short length (less than 1,000 feet) of the crossing. In general, tunnel construction is several times more expensive than the cost of a bridge. Tunnel construction at the site would require boring through soft soil conditions, rubble fill, and bedrock, which would require several different tunneling methods, and would likely add significant additional costs.

In addition, a tunnel would require more extensive approaches than an aboveground bridge—a tunnel would need to be approximately 2,400 feet long, and would extend 700 feet into Candlestick Point and about 800 feet into Hunters Point Shipyard—which could create additional environmental impacts or increase the severity of impacts identified for the Project. On the Hunters Point Shipyard side, extending the tunnel 800 feet would bring the tunnel into an area that will require substantial remedial actions under the Navy's cleanup program, due to the presence of a landfill. Trying to place a tunnel through this area raises a number of issues concerning hazardous materials, water quality, and geology.

Response to Comment 47-111

Although, as noted by the commenter, a scenario without the bridge would not constitute a significant impact to pedestrian circulation, the Yosemite Slough bridge does provide a substantial benefit to cyclists and pedestrians. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) regarding the necessity of the Yosemite Slough bridge.

In conversations with ABAG Bay Trail planners in January 2010, SFMTA staff confirmed that one of the purposes of the Bay Trail extends beyond recreational function and is indeed to provide attractive bicycle and pedestrian circulation alternatives to driving as a form of commuting and meeting other transportation and access needs. At that meeting, it was recognized that the directness and short length of the Yosemite Slough bridge's exclusive bicycle and pedestrian lanes as links between the two neighborhoods (Candlestick Point and Hunters Point Shipyard) would make them a more useful and convenient path for this purpose than the much longer and more circuitous path along the shoreline.

Response to Comment 47-112

Under conditions with a new NFL stadium, the proposed Yosemite Slough bridge would be 81 feet wide, and would provide a 12-foot-wide Class I bicycle path and 7-foot-wide sidewalk on the east side and a 40-foot bicycle/pedestrian promenade on the west side. Under conditions without a new stadium, the bridge would provide a bicycle path and a sidewalk on the east side of the bridge. In either case, the proposed facilities would comply with minimum design standards, including the Caltrans Highway Design Manual, as cited by the commenter. Although the Highway Design Manual notes that pedestrians and bicycles should be separated if significant volumes are expected, it does not specify a threshold at which separate facilities are recommended; instead, the Highway Design Manual relies on the engineering judgment of designers and planners. Although the facility is expected to form an important connection between Candlestick Point and the Hunters Point Shipyard, bicycle and pedestrian volumes are not expected to be so high as to warrant separating the uses.

On game days, pedestrian and bicycle travel on the bridge would be limited to the 12-foot shared path on the east side of the bridge. As noted in Impact TR-41 on page III.D-137 of the Draft EIR, before and after games, pedestrian travel near the new stadium would experience crowding. However, the Draft EIR notes that pedestrian crowding and conflicts with traffic and bicycles is expected and understandable for large events. This phenomenon would apply also to the facility on Yosemite Slough bridge, where pedestrian volumes would be heavy before and after games. However, these circumstances are expected at large events and no special treatment to the 12-foot facility is required.

Response to Comment 47-113

The commenter notes that the Yosemite Slough bridge would cross the Bay Trail route around Yosemite Slough. South of Yosemite Slough, it is anticipated that the Bay Trail would veer to the south of the edge of the slough by about 250 feet to the signalized intersection of Arelious Walker Drive and Carroll Avenue. Pedestrian- and bicycle-actuated signals and crosswalks would be provided at the intersection. A separate path would also be provided to connect with overlook decks on either side of the bridge, to the 12-foot wide Class I bicycle lane and 7-foot-wide sidewalk on the east side of the bridge, and to the 40-foot-wide

bicycle/pedestrian pathway on the west side of the bridge. North of Yosemite Slough, it is anticipated that the Bay Trail would veer to the south of the proposed Bay Trail alignment to a pedestrian- and bicycle-actuated crossing of Yosemite Slough Bridge about 150 feet north of the slough. The crossing would also connect with the Class I bicycle path and the sidewalk that would be provided on the east side of the Yosemite Slough Bridge and to the 40-foot wide bicycle/pedestrian parkway.

Response to Comment 47-114

Intersection LOS is a qualitative description of traffic operating conditions commonly used to assess traffic operating conditions because intersections typically form the constraints to traffic flow in a network. Crossing streams of pedestrians, bicycles, transit, and vehicular traffic create the need to control certain movements through the use of signals and stop signs. These periodic stops in traffic flow create "bottlenecks" and as a result, intersection capacity typically dictates the capacity of the overall transportation network.

Although intended as a qualitative description as described in the Highway Capacity Manual, intersection LOS is determined based on average vehicular delay, which is calculated based on traffic volumes, pedestrian and bicycle volumes, parking maneuvers, and intersection control devices (i.e., signals or stop signs). The calculations account for the statistical variation in vehicle arrivals over time and the regularity of control devices at restricting vehicular capacity.

In the approximately one to two hour period following a football game at the new stadium, at many locations, intersection control would be manually overridden, either by an on-site traffic control officer or remotely through the proposed Traffic Management Center at the stadium. This manual control would allow the controller to prioritize large streams of traffic exiting the stadium for longer than normal periods of time. As a result of these unique circumstances, it is impossible to forecast the resulting average delay per vehicle at intersections using methodologies that were developed for application in more typical settings.

Rather, the analysis describes traffic operating conditions along primary stadium exit routes qualitatively, based on magnitude, duration, and location of congestion. Although not based on average vehicular delay, which is not possible to calculate under these circumstances, this qualitative description is consistent with the intent of automobile LOS as defined by the Highway Capacity Manual (Transportation Research Board 2000), which is to provide:

> … a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Response to Comment 47-115

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

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Letter 48: McRee, Richard (1/12/10)

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Letter 48: McRee, Richard (1/12/10)

Response to Comment 48-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 48-2

Alternative 3, which is presented and analyzed on pages VI-60 through VI-92 of the Draft EIR, evaluates an alternative that retains the existing Candlestick Stadium.

Response to Comment 48-3

With regard to the range of alternatives and alternatives considered and rejected, as described in Chapter VI (Alternatives), page VI-1, of the Draft EIR, alternatives are by definition supposed to address the impacts of the Project. Alternatives should provide alternative designs or features that would reduce the Project's impacts, including reduced development scenarios. Chapter VI states:

> In accordance with CEQA Guidelines Section 15126.6, EIRs are required to include a discussion of alternatives to a proposed Project. Section 15126.6(a) states that an EIR should describe a range of reasonable alternatives to a Project that would attain most of the basic objectives of a Project while reducing one or more of the significant impacts of the Project, and should evaluate the comparative merits of those alternatives.
>
> *Public Resources Code* Section 21002 states, in pertinent part:
>
>> In determining the nature and scope of alternatives to be examined in an EIR, the Legislature has decreed that local agencies shall be guided by the doctrine of "feasibility." It is the policy of the state that public agencies should not approve Projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such Projects. In the event specific economic, social, or other conditions make infeasible such Project alternatives or such mitigation measures, individual Projects may be approved in spite of one or more significant effects thereof.
>
> California has declared that the statutory requirements for consideration of alternatives must be judged against a rule of reason. CEQA Guidelines Section 15126.6(f) defines the "Rule of Reason," which requires that an EIR set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the Project. Of those alternatives, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the Project. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is (i) failure to meet most of the basic Project Objectives, (ii) infeasibility, or (iii) inability to offer substantial environmental advantages over the Project proposal (CEQA Guidelines Section 15126.6(c))."

The methodology for identifying alternatives involved a several step process.

> The general process for identifying alternatives for consideration in the document included these steps:
>
> 1. Review the significant effects resulting from the Project and identify possible strategies to avoid or lessen such impacts
> 2. Review ideas and alternative concepts suggested during the Project scoping process and any presented to the lead agencies during the preparation of the DEIR

3. Categorize and evaluate strategies and concepts for the ability to meet the basic Project Objectives and avoid or lessen significant impacts
4. Develop preliminary alternatives based on the strategies and concepts retained from preliminary screening and evaluate feasibility with respect to technical, institutional, costs and regulatory considerations
5. Select and refine a final set of alternatives for CEQA analysis

From this process, four alternatives, in addition to the required No Project Alternative, were selected for further evaluation and comparison to the Project and the Project Variants. Together, this set of five alternatives represents a broad range of options in terms of how key aspects of the proposed Project could be implemented. Each alternative differs from the Project in one or more of the following ways:

1. In the treatment of the Yosemite Slough bridge, either by changing the design or removing the Bridge proposal from the Project and substituting an alternative transportation component
2. In the intensity of development
3. In the location and type of land uses
4. In the treatment of the Candlestick Point State Recreation Area (CPSRA), either by changing the reconfiguration proposed or removing the CPSRA from the Project
5. In the treatment of the 49ers Stadium, either by changing the location of the Stadium or removing the Stadium from the Project
6. In the preservation of historic structures

The alternatives selected were judged the best to represent the range of identified strategies and concepts. Mitigation measures that have been identified for Project impacts would apply to impacts of the alternatives if the alternatives analysis indicates that mitigation is required to minimize a similar significant impact.

CEQA Guidelines require that the range of alternatives addressed in an EIR be governed by a rule of reason. Not every conceivable alternative must be addressed, nor do infeasible alternatives need to be considered (CEQA Guidelines Section 15126.6). Section 15126.6 of the CEQA Guidelines states that the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, other plans or regulatory limitations, and jurisdictional boundaries. The discussion of alternatives must focus on alternatives capable of either avoiding or substantially lessening any significant environmental effects of the Project, even if the alternative would impede, to some degree, the attainment of the Project Objectives or would be more costly. The alternatives discussion should not consider alternatives whose implementation is remote or speculative, and the analysis need not be presented in the same level of detail as the assessment of the Project.

A full analysis of alternatives is provided in Chapter VI (Alternatives to the Proposed Project) of the Draft EIR. The alternatives evaluated in the Draft EIR constitute a reasonable range of alternatives that would accomplish the major objectives of the Project, while avoiding or lessening the magnitude of the physical environmental effects of the Project, as is required under CEQA. The alternatives analysis includes an evaluation of five alternatives to the Project, including the No Project alternative. To develop the alternatives analysis, the objectives of the Project, as identified on page VI-3, and the significant impacts of the Project, as identified in Chapter V (Other CEQA Considerations), pages V-1 through V-4, were considered. The alternatives were developed to reduce the identified impacts with consideration for the Project Objectives. For each alternative, the purpose of the alternative is identified on page VI-3 through VI-5, as the second paragraph under each alternative. As stated on page VI-3, Alternative 1 is required by

CEQA as a comparison with baseline development; Alternative 2 is intended to reduce biological impacts from bridge construction; Alternative 3 is intended to reduce construction impacts and growth-related operational impacts by reducing the total development and using the existing stadium; Alternative 4 is intended to reduce construction impacts and growth-related operational impacts by reducing the total development by 30 percent and would also preserve historical resources; Subalternative 4A is intended to provide a preservation alternative combined with the land use plan of the Project, and Alternative 5 is intended to reduce construction impacts and growth-related operational impacts by reducing not constructing the stadium or affecting the biological resources adjacent to the Yosemite Slough bridge.

Chapter VI, Section VI.D.1 (Alternatives Considered but Eliminated from Further Analysis in the Draft EIR), describes why certain alternatives identified during the public scoping process were not evaluated in the EIR. As stated on page VI-161:

> Alternatives considered, but eliminated from further analysis in the EIR, were evaluated in concept, but were eliminated for one or more factors, including (1) they did not reduce significant environmental effects; (2) they did not achieve most of the basic Project Objectives; and/or (3) they were not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors. As stated above, according to CEQA Guidelines Section 15126.6(f)(1), factors that may be considered when a Lead Agency is assessing the feasibility of an alternative include:
>
> [S]ite suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (Projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent) (CEQA Guidelines, Section 15126.6(f)(1)).
>
> The alternatives considered but eliminated from further analysis in this EIR include:
>
> - Alternative San Francisco 49ers stadium locations (City of Brisbane or Port of San Francisco sites)
> - Alternative land use plans and locations for the 49ers Stadium on HPS Phase II
> - Alternative land use plan for Candlestick Point
> - Develop Candlestick Point for parks and open space only
> - Alternative locations for the Project within the City of San Francisco

Alternative locations for the Project outside the City of San Francisco are discussed in Chapter VI (Alternatives) (pages VI-160 through VI-173). Page VI-167 states:

> Overall, the Arc Ecology land use alternatives are rejected because they do not reduce or avoid environmental effects of the Project in ways different from the Alternatives examined above. …

Response to Comment 48-4

As stated on page III.S-24:

> ### *Short-Term (One-Time) Impacts*
>
> Short-term or one-time emissions from the development of this Project are associated with vegetation removal and re-vegetation on the Project site and construction-related activities. Construction activities also include a life-cycle analysis estimating the GHG associated with the manufacture and transport of building materials and infrastructure. As previously mentioned, this estimate for life-cycle emissions is used for comparison purposes only and is not included in the final inventory as these emissions would be accounted for under AB 32 in other industry sectors.

Further, on pages III.S-25 and -26, the Draft EIR identifies that an analysis of the embedded energy is speculative for the purposes of CEQA analysis:

> … Furthermore, somewhat arbitrary boundaries must be drawn to define the processes considered in the life-cycle analysis of building materials.[1154] Recognizing the uncertainties associated with a life-cycle analysis, the California Air Pollution Control Officers Association (CAPCOA) released a white paper that states: "The full life-cycle of GHG emissions from construction activities is not accounted for in the modeling tools available, and the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level."[1155]

The Draft EIR did utilize a Life Cycle Assessment (LCA) for the embedded energy for the production of the materials that would be used to develop the Project's commercial and residential structures, including the new stadium. As stated, on page III.S-26:

> The LCA estimated the life-cycle GHG emissions for buildings by conducting an analysis of available literature on LCAs for buildings. According to these studies, approximately 75 to 97 percent of GHG emissions from buildings is associated with energy usage during the operational phase; the other 3 to 25 percent of the GHG emissions is due to material manufacture and transport. Using the GHG emissions from the operation of buildings, 3 to 25 percent of building emissions corresponds to approximately 0.9 to 9 percent of the Project emissions.

Further, the Project would be required to comply with the City of San Francisco Construction and Demolition Debris Recovery Ordinance, requiring all construction and demolition debris to be transported to a registered facility that can divert a minimum of 65 percent of the material from landfills, and the City's Green Building Ordinance. The City's Green Building Ordinance includes a requirement to redirect at least 75 percent of construction and demolition waste from landfills. As such, the majority of the construction debris would be recycled, which would offset the loss of the embedded energy utilized in the construction of the original Candlestick Stadium.

Response to Comment 48-5

Refer to Response to Comment 39-4 on the evaluation of Candlestick Park stadium under NRHP and CRHR criteria. As discussed in that Response, Candlestick Park stadium would not meet NRHP or CRHR criteria as an historic resource.

Response to Comment 48-6

Refer to Response to Comment 47-14 about the 49ers stadium as a Project Objective. One of the Project Objectives is to "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 necessary infrastructure." The comment regarding the retention of Candlestick Park stadium for NFL use is not a direct comment on the content or adequacy of the Draft EIR.

Alternative 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), Draft EIR pages VI-60 through VI-92, would be a Project Alternative that would retain Candlestick Park Stadium.

Letter 49: Neighborhood Parks Council (1/12/10)

1 of 2

2 of 2

Letter 49: Neighborhood Parks Council (1/12/10)

All of the comments provided in this letter are exactly the same as the comments provided in Letter 44. Letter 49 was submitted to the Agency, while Letter 44 was submitted to the San Francisco Planning Department. Full responses are provided in Letter 44.

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A dot (●) indicates material that has been revised since publication of the Draft EIR.

CANDLESTICK POINT–HUNTERS POINT SHIPYARD PHASE II DEVELOPMENT PLAN PROJECT

Comments & Responses

Volume V: Final EIR Comments & Responses
(Letter 50 through Letter 86)

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San Francisco Redevelopment Agency
One South Van Ness Avenue, Fifth Floor, San Francisco, California 94103, *and*
City and County of San Francisco Planning Department
1650 Mission Street, Suite 400, San Francisco, California 94103

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Response to Comment 50-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment 50-2

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. The commenter's opinion regarding Supervisor Antonini's participation in decisions concerning the Draft EIR is noted.

Response to Comment 50-3

Where the commenter specifically requests a particular label or designation on one of the figures (in other comments), those have been added to the figure in question. While not every figure in the Draft EIR has been revised, where the Lead Agencies determined that clarification or revision was necessary to provide greater detail, select figures have been revised. A complete list of revised figures can be found in the table of contents of this Final EIR.

Response to Comment 50-4

Revised Figure III.K-5 (Hunters Point Shipyard Phase II Navy Parcel Overlay), Draft EIR page III.K-51, and new Figure III.K-6 (Status of CERCLA Process) provide illustration of the parcels discussed in the EIR (the figures are presented in Master Response 9 [Status of CERCLA Process]). Figure C&R-14 (Hunters Point Shipyard Navy Parcel Overlay on Project Land Use Plan) illustrates how the Navy parcel nomenclature relates to the Project land use plan.

While Figure III.K-5 and Figure III.K-6 do not show the specific location of Parcel B-Prime, Parcel B-Prime is located entirely within Parcel B, which is illustrated on Figure III.K-5 and Figure III.K-6, and none of the analysis or findings of the Draft EIR would be altered by illustrating this "subset" of Parcel B. However, for ease of reference, the location of Parcel B-Prime (and Parcel A-Prime) is provided in Figure C&R-15 (Location of Parcels A' and B') of this document. The use of the "prime" designation for Parcels A and B is not used by the Navy, but, instead, is used by the San Francisco Redevelopment Agency for parcels transferred from the Navy to the City.

Area C, by contrast, refers to an area outside of the Shipyard and outside of the Project site that was designated by the Agency for purposes of its Bayview Hunters Point Survey Area. Figure C&R-16 (Bayview Hunters Point—Area C Survey Area) shows this area. The Project does not propose any development of Area C.

Response to Comment 50-5

Refer to Response to Comment 50-4 for a discussion of the various places that an illustration of parcels or areas can be found.

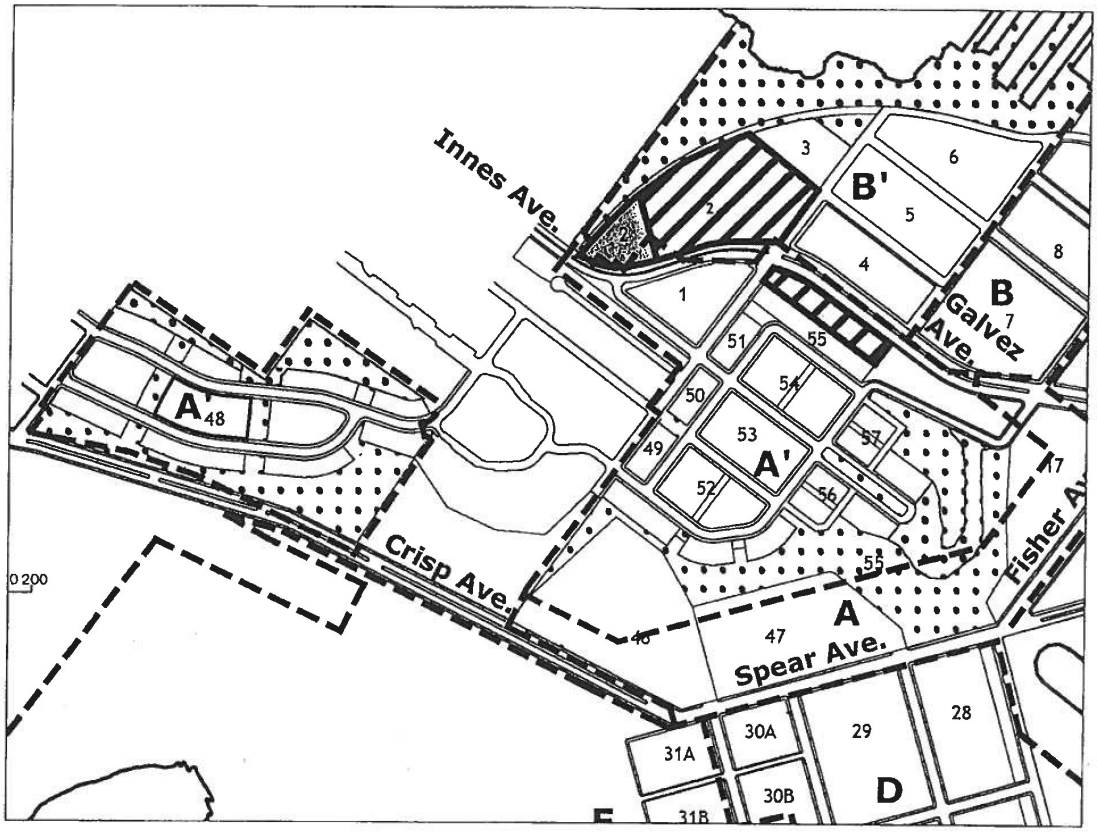
SOURCE: Lennar Urban, 2010.

PBS&J 04.21.10 02056 | JCS | 10

FIGURE C&R-14

Candlestick Point — Hunters Point Shipyard Phase II EIR

HUNTERS POINT SHIPYARD NAVY PARCEL OVERLAY ON PROJECT LAND USE PLAN



Community Parcels

Open Space

NOT TO SCALE

SOURCE: San Francisco Redevelopment Agency, March 20, 2006; PBS&J, 2010.

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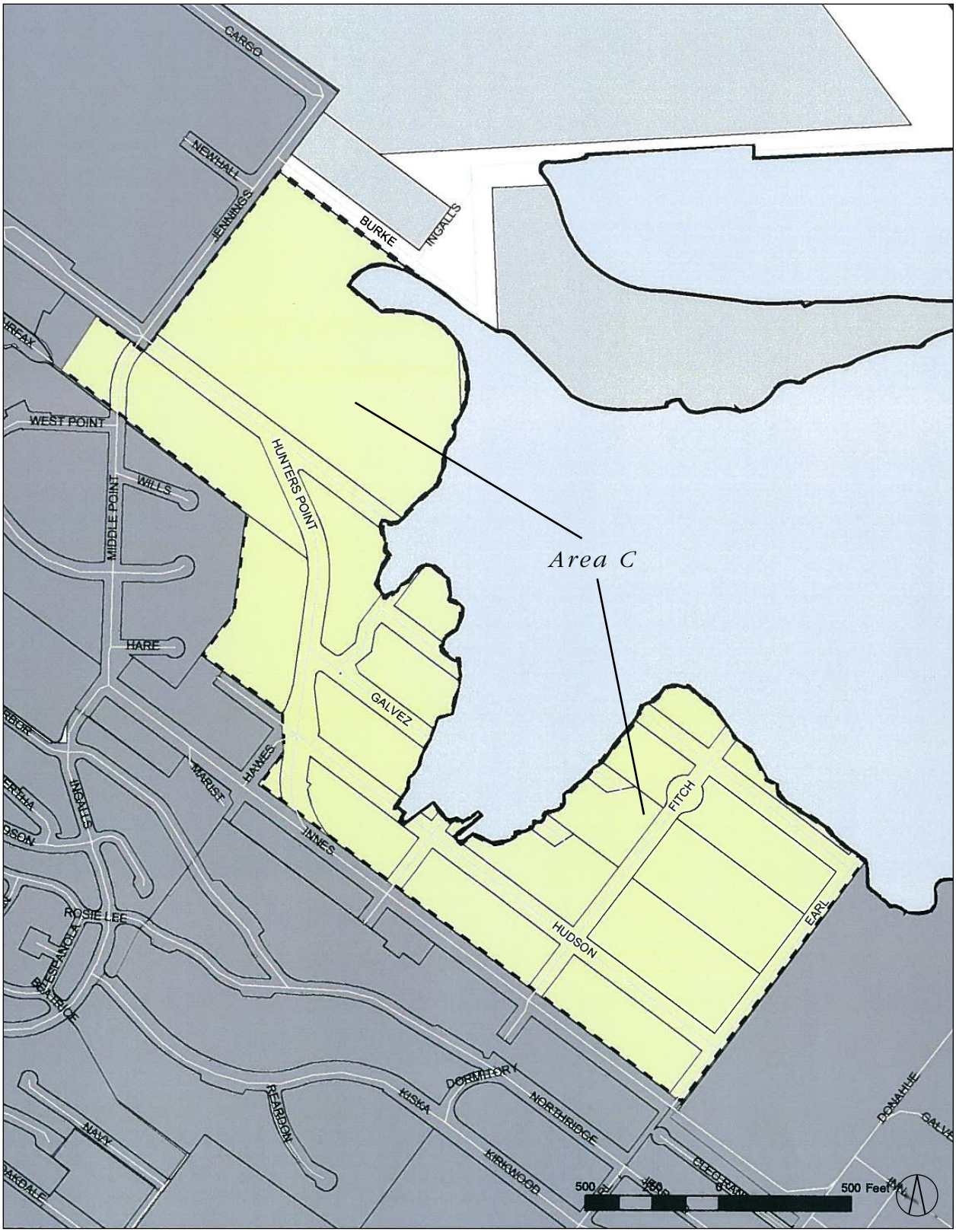
FIGURE C&R-15

Candlestick Point — Hunters Point Shipyard Phase II EIR

LOCATION OF PARCELS A' AND B'



SOURCE: San Francisco Redevelopment Agency, March 20, 2006; PBS&J, 2010.

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FIGURE C&R-16

Candlestick Point — Hunters Point Shipyard Phase II EIR

BAYVIEW HUNTERS POINT- AREA C SURVEY AREA

Response to Comment 50-6

The text of Proposition G is provided in its entirety in Appendix B of the Draft EIR. Further, a specific reference to Appendix B is provided on pages ES-2, I-5, II-5, III.B-7, and III.B-21 of the Draft EIR. The Navy is responsible for remediating the Shipyard. The process for the Navy and regulators to determine cleanup levels for the Shipyard and the status of that process is explained in Master Response 9 (Status of the CERCLA Process). The expected environmental condition of the Shipyard property after the Navy transfers it to the Agency is explained in Master Response 13 (Post-Transfer Shipyard Cleanup).

Response to Comment 50-7

According to Section 15381 of the CEQA Guidelines:

> "Responsible Agency" means a public agency which proposes to carry out or approve a project, for which lead agency is preparing or has prepared an EIR or negative declaration. For the purposes of CEQA, the term "responsible agency" includes all public agencies other than the lead agency which have discretionary approval power over the project.

The potential responsible agencies include, but are not necessarily limited to, those identified in Table ES-1 on page ES-4 of the Draft EIR and in Table II-16 on page II-80 of the Draft EIR.

Response to Comment 50-8

Refer to Response to Comment 47-14 about the 49ers stadium as a Project Objective. One of the Project Objectives, as stated in Proposition G, is to "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 necessary infrastructure." However, development of an NFL stadium is not the City's or Agency's decision, and is a business decision of the NFL.

The information within the Draft EIR regarding the parameters (size, access, parking) and design of the 49ers stadium has been developed by the 49ers and NFL to enable consideration of this ongoing possibility.

With regard to the financing of the stadium and financing of the EIR analysis of a stadium, this is not a question on the adequacy of the EIR. For information about financing of the Project and stadium, refer to the San Francisco Office of Economic and Workforce Development website at http://sfgov.org/site/frame.asp?u=http://www.oewd.org, which includes links to the Project and Project documents including a Financing Plan and Transaction Structure.

Response to Comment 50-9

In response to the comment, the note in Table II-1 (Project Site Area), Draft EIR page II-1, has been revised as follows:

> Candlestick Point includes the approximately 120.2-acre Candlestick Point State Recreation Area.

Response to Comment 50-10

Figure II-1 shows the location of the Candlestick Point–Hunters Point Shipyard Phase II Project, as that is the Project evaluated in this EIR. No change is necessary.

Response to Comment 50-11

In response to the comment, Figure II-2 (Project Site and Context) has been revised to indicate the boundaries of the CPSRA and of Area C, and to clarify the boundaries of HPS Phase I. Note that Figure III.A-1 (Cumulative Development in the Project Vicinity) of the Draft EIR indicates the boundaries of Area C as well as HPS Phase I. Figure III.A-1 has been revised in Section F (Draft EIR Revisions) to include the Yosemite Slough Restoration Project.

Response to Comment 50-12

Refer to Response to Comment 43-2 for information regarding the relative timing of this Draft EIR compared to the BTIP Draft EIR, which is currently being prepared and is as yet unpublished.

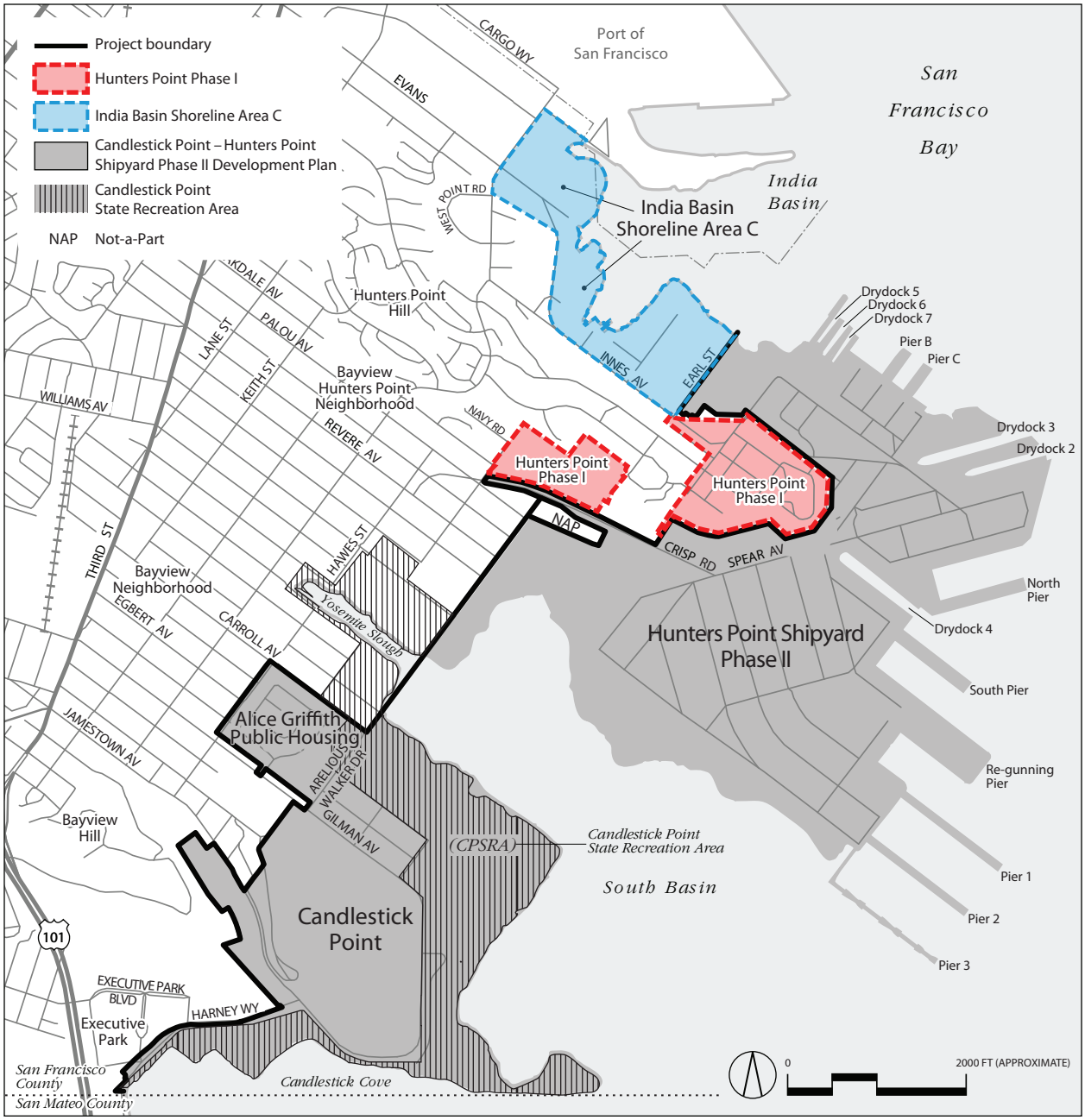
As indicated in Response to Comment 43-2, the objectives of the BTIP were considered in developing the transportation circulation network for the CP-HPS Phase II Development Plan, and the CP-HPS Phase II roadway cross-sections incorporate and expand upon the proposed BTIP improvements to meet the needs of the proposed mixed-use development at Candlestick Point and a new stadium at Hunters Point Shipyard. Therefore, the BTIP was included in the CPHPS Draft EIR in the cumulative analysis as a reasonably foreseeable project. However, because of the timing, some of the previously completed BTIP environmental studies were no longer considered relevant or consistent with the latest cumulative analyses in the area. For example, the transportation analysis conducted for BTIP did not assume the proposed CP-HPS Phase II development, and therefore the BTIP roadway improvements, future year traffic volumes, and operational analyses no longer represent an accurate assessment of the cumulative conditions in the area. Consequently, BTIP is now revising/updating certain technical studies (transportation, air quality, and noise) to reflect the newest updated information available from this Draft EIR, so that the cumulative analyses are consistent and so that public and decision makers do not have conflicting descriptions of improvements and analysis results.

Response to Comment 50-13

Refer to Response to Comment 22-3, which identifies the income requirements for affordable housing provided as part of the Project. With regard to what other development in the City is providing relative to affordable housing need, that question is outside the purview of this EIR.

Section III.C (Population, Housing, and Employment) of the Draft EIR defines market rate housing and identifies the housing need by income level for San Francisco. Page III.C-5 of the Draft EIR states:

> … Based on a US Department of Housing and Urban Development (HUD) formula, San Francisco's Area Median Income (AMI) in 2006 was estimated to be approximately $77,450 for a two-person household and approximately $87,100 for a three-person household.[74] San Francisco is estimated to have the income level distribution shown in Table III.C-3 (San Francisco Income Distribution).



SOURCE: San Francisco Redevelopment Agency, Lennar Urban, 2009; PBS&J, 2010.

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FIGURE II-2 Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT SITE AND CONTEXT

Table III.C-3 San Francisco Income Distribution

Income Group	*Income Level*	*Income Range*[a]
Very low	≤ 50% of AMI	≤ $38,725
Low	50–80% of AMI	$38,725–$61,960
Moderate	80–120% of AMI	$61,960–$92,940
Above Moderate	> 120% of AMI	> $92,940

SOURCES: City of San Francisco, General Plan Housing Element, 2004; City and County of San Francisco, Mayor's Office of Housing, *Income Limits and Sales Price Levels for MOH Homeownership Programs*. http://www.sfgov.org/site/moh_page.asp?id=62375 (accessed August 27, 2009).

a. Based on San Francisco's AMI in 2006 of $77,450 for a two-person household.

Page III.C-6 of the Draft EIR states:

> The distribution of future housing units needed by income level in San Francisco during the 2007–2014 period is shown in Table III.C-4 (San Francisco Housing Need, 2007–2014), below.

Table III.C-4 San Francisco Housing Need, 2007–2014

Income Group	*Number of Units*
Very low	6,589
Low	5,535
Moderate	6,754
Above moderate	12,315
Total	***31,193***

SOURCE: ABAG, *San Francisco Bay Area Housing Needs Plan, 2007 to 2014*, 2008.

As stated on page III.C-6 in Section III.C (Population, Employment, and Housing) of the Draft EIR:

> Although market conditions affect the City's ability to meet the RHNA targets, the City facilitates the development of housing by providing regulatory incentives for private housing developers. If the RHNA targets are not met, the resulting competition for the limited housing supply drives the price of housing up, making it less affordable to working families. The City did not meet its RHNA targets for the 1999–2006 period. However, over 17,470 new housing units, or almost 86 percent of the housing production targets, were met.[76] During this time, the City met approximately 83 percent of its Very Low Income housing goals, 52 percent of its Low Income goals, 13 percent of its Moderate Income goals, and 153 percent of its Above Moderate Income (market-rate) housing goals.

Response to Comment 50-14

Under Proposition G, San Francisco voters expressly adopted a City policy encouraging the 49ers to remain in San Francisco by offering the 49ers a world-class site for a new stadium on the Shipyard, together with supporting infrastructure, on certain specified terms and conditions, including that the Project and the Project Applicant, and not the City's General Fund, should bear the financial burden of providing $100,000,000 towards the costs of constructing the stadium and for providing stadium related infrastructure.

Consistent with Proposition G, the Project has been designed to provide the 49ers with a suitable site for a world-class waterfront stadium on the Shipyard, as well as all of the necessary parking and transportation improvements and $100,000,000 from the Developer towards the construction of the stadium itself. At the same time, Proposition G provided that the City's primary goal is to assure that the Project will deliver jobs, affordable housing, parks and public open space and the other enumerated public benefits. Thus, consistent with Proposition G, the Project is designed with both a stadium and non-stadium option so that the Project and attendant public benefits may go forward with or without the 49ers.

Even if the 49ers are successful in obtaining voter approval of a stadium plan in Santa Clara, it still makes sense for the Project to include a stadium. Because of significant uncertainties regarding the financial feasibility of the new stadium in Santa Clara, it will likely take a number of years before the actual location of a new 49ers stadium is finally determined.

Response to Comment 50-15

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment 50-16

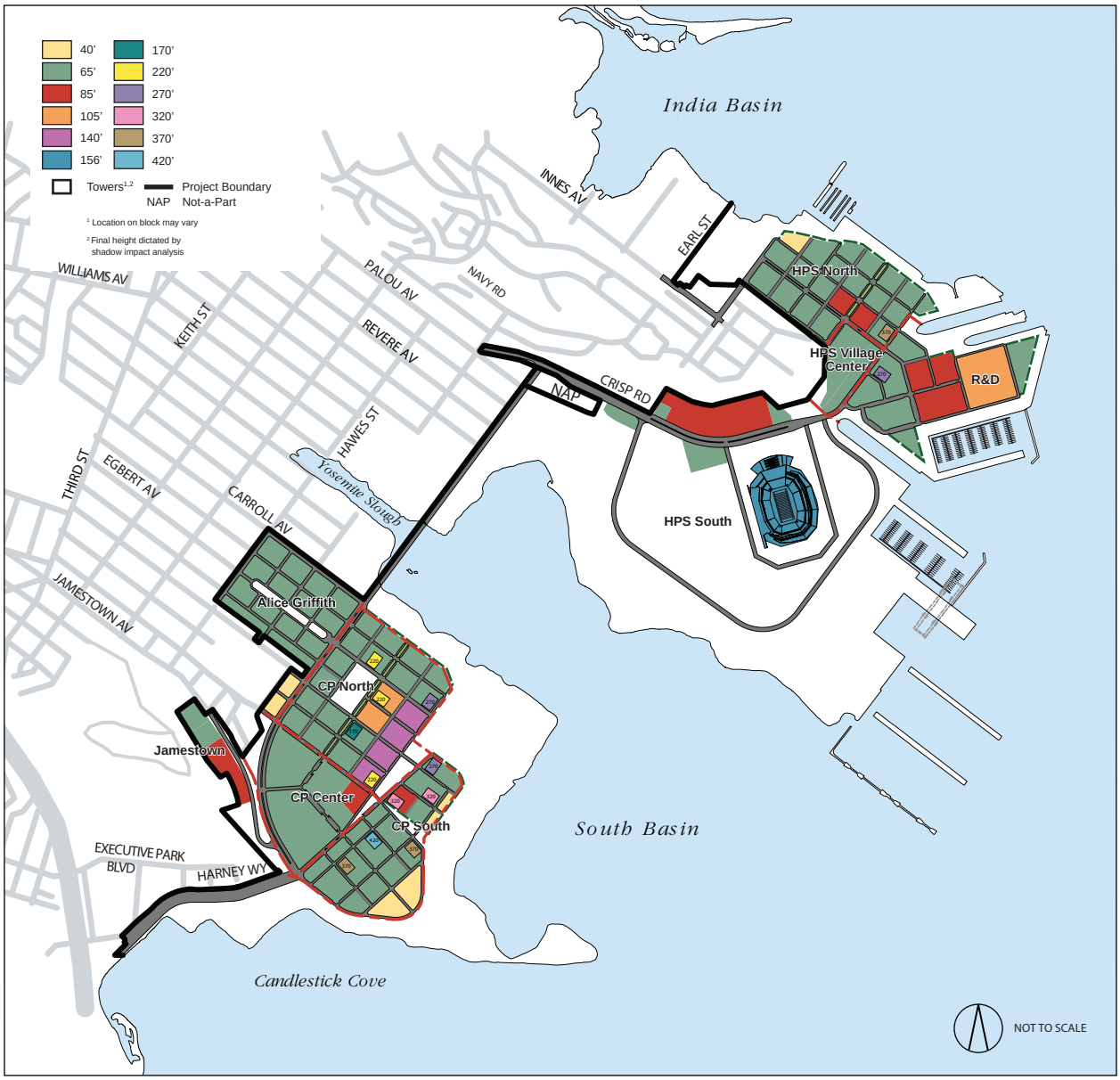
Refer to Response to Comment 50-3 regarding revisions made to figures in the Draft EIR. Section III.D (Transportation and Circulation) provides the names of the majority of roadways in the Project site and vicinity on all or most of its figures. It is not necessary to provide street maps for every graphic—the information is provided at a level of detail appropriate to the topic.

Response to Comment 50-17

Yosemite Slough bridge has a proposed width of approximately 81 feet (page II-38), which is difficult to show at the scale of map used in most of the Draft EIR figures. Appendix N2 (MACTEC, Yosemite Slough Bridge Drawings—Stadium and Non-Stadium Options) of the Draft EIR provides a cross-section of both the stadium and non-stadium dimensions of the Yosemite Slough bridge. The "black line" across the slough is meant to indicate an enclosed area that traverses the slough and connects Candlestick Point to Hunters Point Shipyard.

Response to Comment 50-18

In response to the comment, Figure II-5 (Proposed Maximum Building Heights), page II-12, has been revised to indicate major roadways, including Crisp Road.



SOURCE: Lennar Urban, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED MAXIMUM BUILDING HEIGHTS

FIGURE II-5

Response to Comment 50-19

Refer to Response to Comment 43-12 regarding transit access to neighborhood-serving retail spaces. Although a grocery store is not specifically proposed, it is possible that a grocery store would locate on the site as part of the neighborhood retail. The neighborhood retail proposed as part of the Project would be connected to the existing Bayview Hunters Point neighborhood through extension of the existing street grid, construction of new streets, and extension of numerous transit lines into the Project site. As indicated on Draft EIR page II-43, all commercial parking facilities would be paid parking facilities. This would include any parking developed for grocery store use.

Response to Comment 50-20

The type of hotel envisioned at the Project site is limited service category similar to a Hilton Garden Inn or Marriott Courtyard. Note that the comment is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment 50-21

As identified in Response to Comment 50-8, the size, access, parking, as well as other design features of the 49ers stadium have been developed by the 49ers and NFL. The proposed stadium analysis reflects the experience of the current stadium with regard to existing conditions (capacity, occupancy, traffic), as well as a review of stadiums and similar-sized facilities inside and outside the United States. The Project includes construction of a new 49ers stadium; it is unlikely that a stadium would be built without the support and participation of the NFL and 49ers.

A special event, such as a Super Bowl or if San Francisco were to be selected to host a future Olympic Game, would require the expansion of the proposed stadium to 80,000-person capacity. This is not the Project. The associated venue modifications (to 80,000-person capacity) and their configuration, along with regional transportation improvements and overall arrangement of the event, would require extensive planning, analysis, and approvals, all of which are beyond the scope of the Draft EIR.

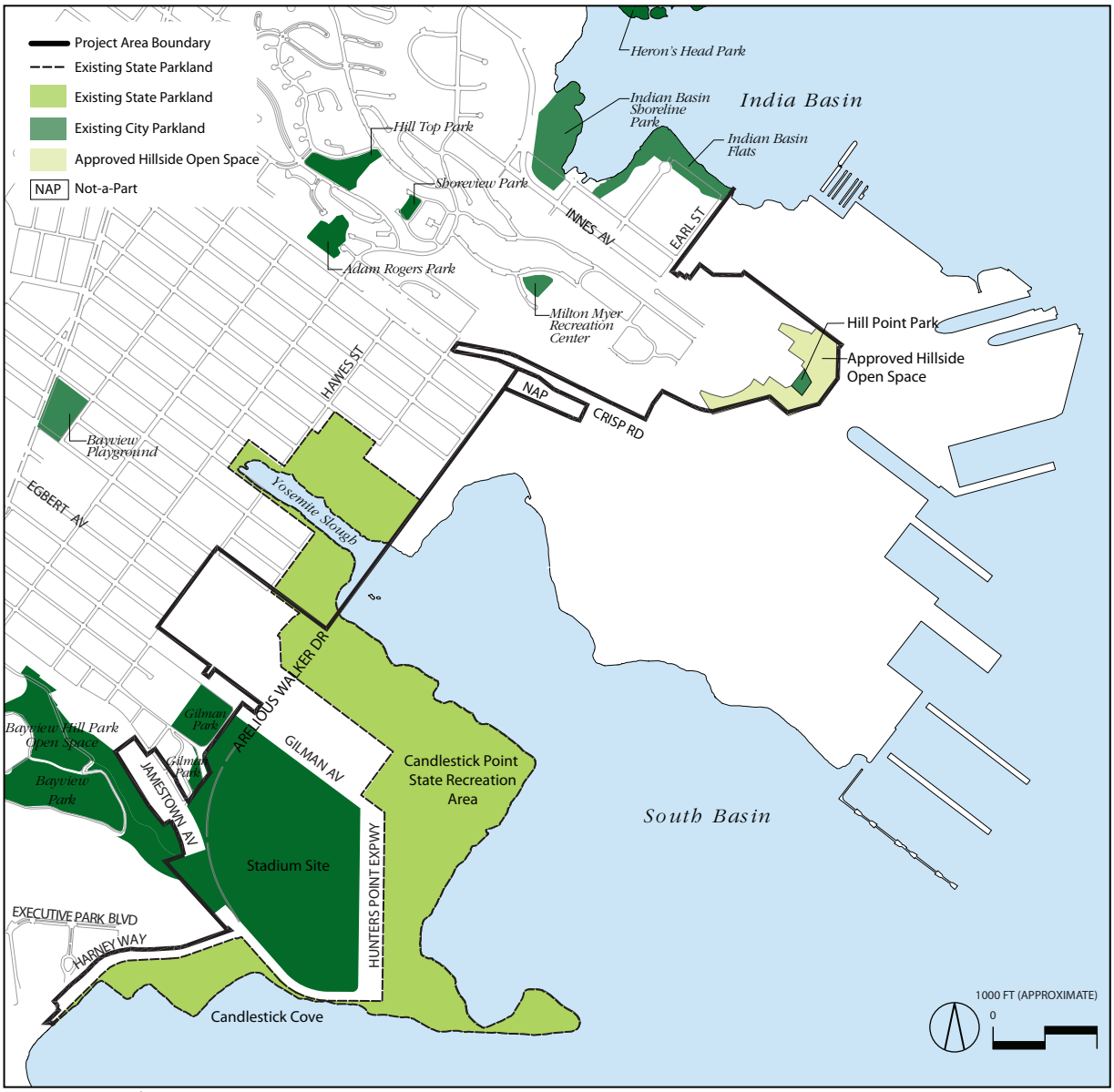
Response to Comment 50-22

In response to the comment, Chapter II (Project Description), Draft EIR page II-24, fifth paragraph, second sentence, in has been revised as follows:

> … Table II-7 (Candlestick Point Proposed State Parks Reconfiguration) presents the proposed acreage of the areas proposed to be added to or removed from the Park, as ~~required~~ identified by Senate Bill 792 (SB 792). …

Response to Comment 50-23

Figure II-8 (Existing and Approved Parks and Open Space), Draft EIR page II-26; Figure II-10 (Proposed CPSRA Reconfiguration), page II-29; Figure III.P-1 (Existing and Approved Parks and Open Space), page III.P-3; and Figure III.P-3 (Proposed CPSRA Reconfiguration), page III.P-18, include labels that identify existing state and city parkland. In addition, one label identifies hillside open space. This



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

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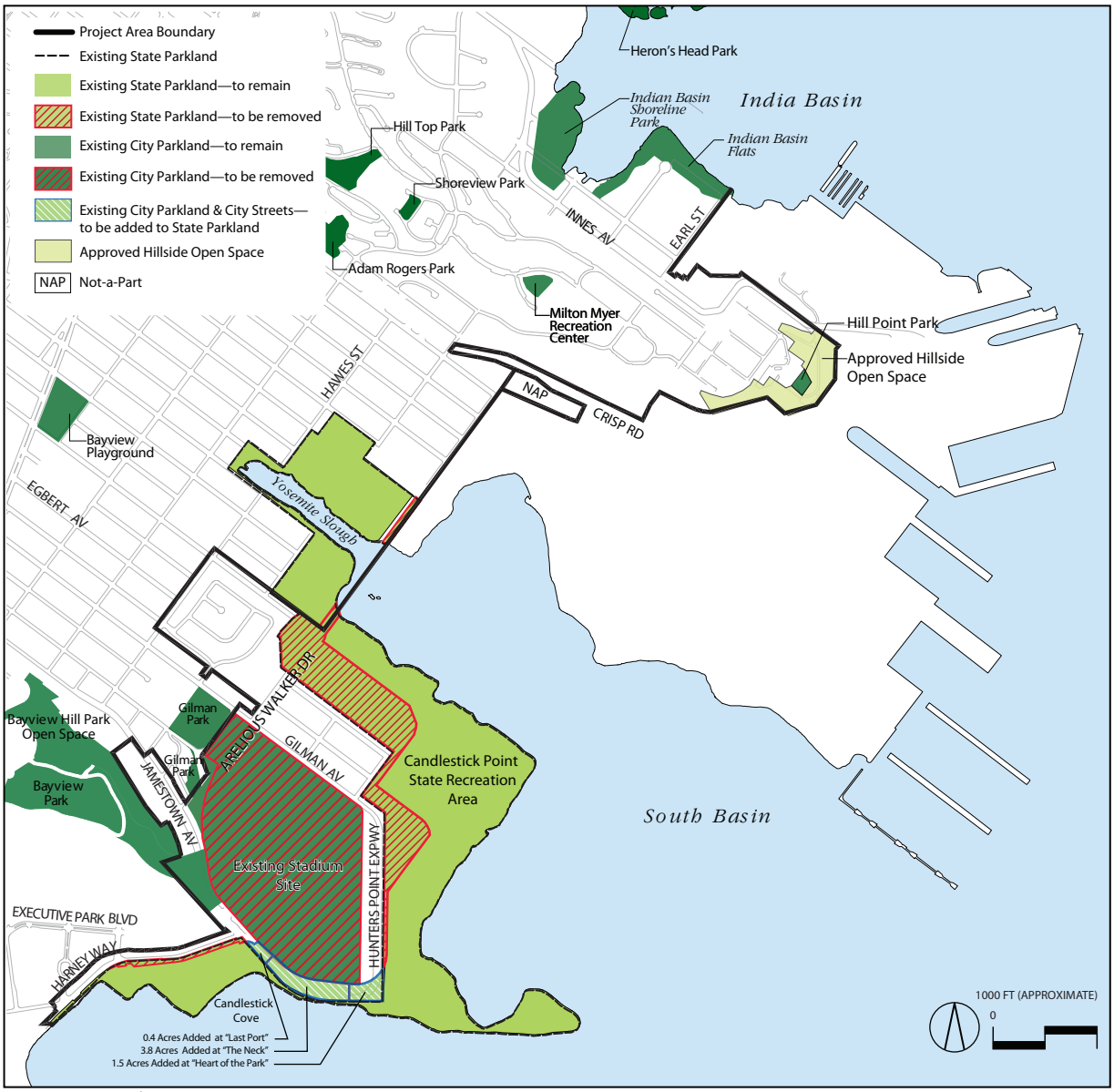
Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE

FIGURE II-8



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

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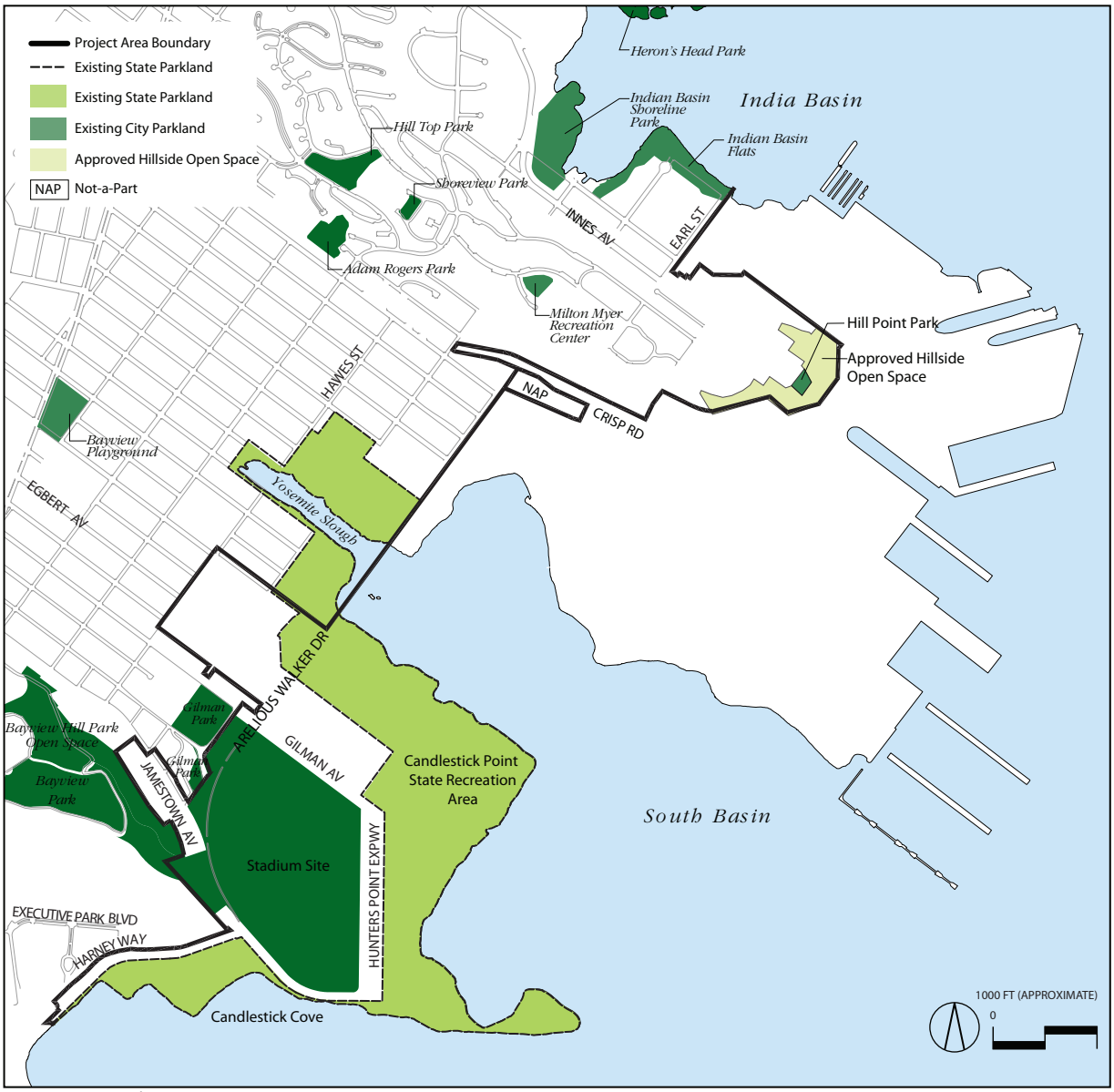
Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION

FIGURE II-10



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

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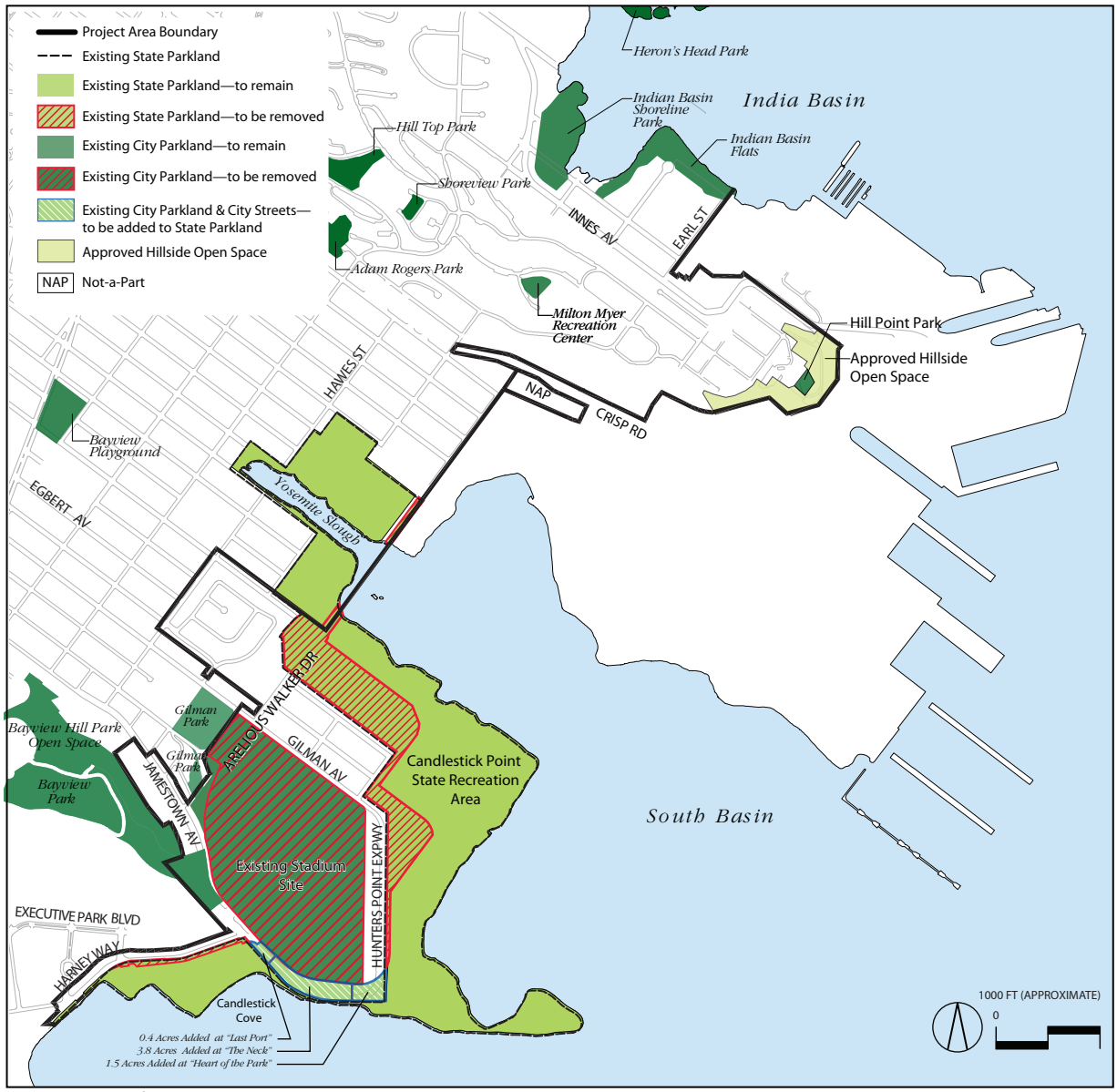
Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE

FIGURE III.P-1



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

PBS&J 04.16.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION

FIGURE III.P-3

open space is approved and not yet completed. In response to this comment, Figure II-8 has been revised to indicate "Approved Hillside Open Space." In addition, the boundaries of Bayview Park near Candlestick Stadium have been revised on Figures II-8 and II-10.

Response to Comment 50-24

Page II-28 of the Draft EIR describes the current approved plans for the CPSRA, and also describes the Project changes to the CPSRA. All changes to the CPSRA would be done as part of the Project. In response to this comment, the second paragraph on page II-28 has been revised:

> Consistent with the current CPSRA General Plan and the CDPR mission, after Project development, the CPSRA would primarily contain areas of passive uses and minimal formal landscaping. The portion of the park that is currently undeveloped or used for Candlestick Park stadium parking would be substantially improved as part of the Project to enhance overall park aesthetics and landscape ecology; reconnect visitors to the bay shoreline; and provide direct access to the bay for swimming, fishing, kayaking, and windsurfing. Proposed Project improvements include revegetation and landscaping, shoreline restoration and stabilization, infrastructure improvements (such as trails, pathways, and visitor facilities), a biofiltration pond to cleanse stormwater, the provision of habitat and opportunities for environmental education, 'Eco-Gardens,' and salt-marsh restoration. …

Refer also to text on pages III.P-17 through -25, which describes each of the Project changes to the CPSRA and includes photographs of the existing areas that would be modified.

Response to Comment 50-25

Figure II-10 (Proposed CPSRA Reconfiguration), Draft EIR page II-29, identifies the areas proposed to be added to, and removed from, existing city parkland and existing state parkland. The reconfiguration would include loss of some state parkland on either side of Yosemite Slough where a bridge would be built (this is the area shown in red crosshatching). This would also apply to some roadway frontage at Harney Way. Figure III.P-8, page III.P-24, also shows the proposed added and removed areas. Pages III.P-19 through -25 describe and illustrate those changes for each area. Page III.P-19, second paragraph, of the Draft EIR states:

> Figure III.P-4 (Photographs of Existing CPSRA—Areas 1 and 2) through Figure III.P-7 (Photographs of Existing CPSRA—Areas 7 and 8) provide a representative photograph of each of the eight designated areas within the CPSRA that are described below (and illustrated by Figure III.P-2). Figure III.P-8 (Aerial View of CPSRA within the Project Site [Excluding the Yosemite Slough]) shows the existing unimproved and improved areas of the CPSRA and indicates where land would be removed or added relative to the existing CPSRA uses.

Figure II-10 has been revised and presented in Response to Comment 50-23 to correct the legend and clarify the park boundaries around the stadium site.

Response to Comment 50-26

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on the potential movement of hazardous materials throughout the Project site, including parks areas, as well as mitigation measures that are designed to address those potential effects; potential effects of sea level rise on capped areas; and adaptive management strategies to address sea level rise that could include increasing open space by creating cobblestone beaches or tidal marshes to limit wave run-up.

Response to Comment 50-27

Figure II-12 (Proposed Roadway Improvements) in the Draft EIR has been revised to be consistent with Figure 4 (Proposed Roadway Network Improvements) in the Transportation Study (provided as Appendix D of the Draft EIR). The revised figure is presented in Response to Comment 7-1. Figure II-12 presents roadway improvements. The Project includes a new roadway network within the project boundaries, as well as improvements on location streets serving the Project vicinity. Specifically, roadway improvements would be made on the following streets connecting the Project site with Third Street:

- Innes Avenue / Hunters Point Boulevard (Project Boundary to Evans Avenue)
- Palou Avenue (Project Boundary to Third Street)
- Gilman Avenue (Project Boundary to Third Street)
- Ingerson Avenue (Project Boundary to Third Street)
- Jamestown Avenue (Project Boundary to Redondo Street)
- Harney Way (Project Boundary to US-101)

Improvements do not all consist of vehicular capacity increases, however, as discussed on Draft EIR pages III.D-40 to -48; improvements also include implementation of transit preferential treatments, improved streetscape amenities, and new bicycle facilities. Transportation impacts associated with on-site and off-site improvement are described in Impact TR-1, Draft EIR pages III.D-67 to -70.

Response to Comment 50-28

Refer to Master Response 18 (Transit Mitigation Measures) for a discussion of proposed changes to the roadway network and mitigation measures intended to reduce transit delays. SFMTA will be asked to approve transit service changes as envisioned in the Project transit service plan.

Draft EIR Figure III.D-13 (Stadium Game Day Traffic Control Plan), page III.D-128, presents the game day traffic control plan, including the intersections under traffic control officer or signal control during game days. Figure III.D-13 has been revised in Response to Comment 7-17 to reflect a transit-only lane along Harney Way to Bayshore Boulevard.

Response to Comment 50-29

Pages II-50 through II-53 of the Draft EIR describe the proposed site preparation schedule. Figure II-16 (Proposed Site Preparation Schedule), Draft EIR page II-51, provides an additional resource to differentiate the site preparation schedule across the Project site, while Figure II-17 (Proposed Building and Parks Construction Schedule), Draft EIR page II-52, illustrates the relative timing of parks and buildings construction across the Project site. With the description in hand, it is relatively easy to differentiate among the yellow, beige, pink and green legend colors. Similarly, the off-site improvements are labeled in blue, green, and yellow on off-site roadways.

As described in Section B (Project Refinements), the development schedule has been updated to reflect that site preparation activities would begin 1 to 2 years later than originally planned, and the completion of building construction would be extended from 2029 to 2031, with full occupancy by 2032. Refer to Section F (Draft EIR Revisions) for the updated text and revisions to Figure II-16 and Figure II-17.

Response to Comment 50-30

Section III.A (Introduction to the Environmental Analysis), and Figure III.A-1, page III.A-8, of the Draft EIR identifies Hunters Point Shipyard Phase I as a Project included within the cumulative analysis. Construction of Phase I is underway. Figure III.A-1 has been revised in Section F (Draft EIR Revisions) to include the Yosemite Slough Restoration Project.

Response to Comment 50-31

As stated in Section III.K on page III.K-15 of the draft EIR, the *Final Amended Parcel B Record of Decision* (ROD), dated January 14 2009, is on file for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103 as part of File No. 2007.0946E. The Navy provides all of its documents to repositories at the following San Francisco Public Libraries: Main Library Government Information Center, 5th Floor, 100 Larkin Street, San Francisco, CA 94102, (415) 557-4500 and the Bayview Anna E. Waden Branch Library, 5075 Third Street, San Francisco, CA 94124, (415) 355-5757.

Response to Comment 50-32

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on movement or exposure to hazardous materials and mitigation measures.

Response to Comment 50-33

In response to this comment and Comment 50-4, Figure C&R-14 (Hunters Point Shipyard Navy Parcel Overlay on Project Land Use Plan) provides an overlay of the Navy parcels on the Project land uses. (Note that for the variants, the figure would be much the same except for those uses included within the stadium footprint.) Refer to Master Response 8 (Sea Level Rise), "Other Sea Level Rise-Related Issues" section, regarding hazards from the interaction of sea level rise with fill material.

Response to Comment 50-34

While a market analysis for the R&D has not been done, the applicant believes that tenants most suited for the Project site would include campus-sized operations in the range of the 43- to 160-acre campuses proposed for Yahoo and Genentech, respectively. These could include a variety of high technology uses, such as those that comprise the dynamic technology sector. Draft EIR page II-14, first bullet, states:

> - **Research and Development:** Hunters Point Shipyard Phase II would be the site of up to 2,500,000 gsf of a possible wide range of office, laboratory, and light industrial uses including, but not limited to, emerging industries and technologies such as green technology and biotechnology…

Response to Comment 50-35

The EIR is not required to include a schedule of project approvals, and rather includes a list of anticipated project approvals in Table ES-1 (Major Project Approvals), pages ES-4 through ES-6, and in Table II-16, pages II-80 through II-82.

Response to Comment 50-36

In response to the comment, Figure III.B-1, page III.B-3, of the Draft EIR has switched the label colors between Residential and Commercial/Industrial. The text in this section is correct regarding these land uses. Refer to Response to Comment 5-2 for the revised figure.

Response to Comment 50-37

Refer to Figure C&R-14, which provides an overlay of the Navy parcels on the Project land uses.

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Letter 51: Simms, Robert (1/12/10)

1 of 2

2 of 2

Letter 51: Simms, Robert (1/12/10)

Response to Comment 51-1

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 51-2

The commenter's support for the Yosemite Slough bridge and preference that the bridge be made available for vehicular use year round is noted. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the purpose and benefit of the proposed bridge. Refer to Response to Comment 17-1, which describes that the Board of Supervisors will legislatively require that the bridge be closed to autos except on football game days by designating the bridge as a public right-of-way for transit only, except as specified. The Infrastructure Plan, which the Board will approve, will require a bridge design that controls access. Only the Board, after completion of any required additional environmental review could change the designation, but no such other designation is contemplated by the Project.

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Letter 52: People Organized to Win Employment Rights (1/12/10)

1 of 7

2 of 7

3 of 7

4 of 7

5 of 7

6 of 7

7 of 7

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Letter 52: People Organized to Win Employment Rights (1/12/10)

Response to Comment 52-1

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) for discussions of an unrestricted use alternative and Proposition P. The criteria used to determine cleanup levels are outlined in health risk assessments conducted as part of the Remedial Investigation (RI) step of the CERCLA process explained in Master Response 9 (Status of the CERCLA Process). The risk assessments and RI reports are approved by state and federal regulatory agencies. For a discussion of the contaminants on each parcel and the criteria used to determine safe levels of exposure, refer to the reports referenced in Section III.K.2 of the Draft EIR, which are available for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103, as part of File No. 2007.0946E. For a discussion of residual contamination following cleanup, refer to Master Response 13 (Post-Transfer Shipyard Cleanup). Upon completion of the environmental cleanup, institutional controls will be implemented to address deed restrictions, public notification, and monitoring and maintenance of landfill caps. The Draft EIR outlines mitigation measures in Section III.K.4 to address potential hazardous materials impacts and the City's Article 31 ordinance creates a process for the Department of Public Health to enforce certain hazardous materials mitigation measures identified in the Draft EIR. Also refer to Master Response 16 (Notification Regarding Environmental Restriction and Other Cleanup Issues).

Response to Comment 52-2

Refer to Master Response 7 (Liquefaction), Impact GE-5, and mitigation measure MM GE-5a for a discussion on liquefaction hazards. It is acknowledged that large portions of the site are within a "Zone of Required Investigation for liquefaction potential." This is not unique to the project site: much of the Bay Area is within such zones. However, with appropriate engineering design and mitigation measures as proposed in Section III.L, it is possible to construct in these areas. Site-specific final design geotechnical studies will be performed to determine what engineering and construction measures need to be implemented to mitigate liquefaction potential if present. Refer also to Impacts GE-4 and GE-5, and mitigation measures MM GE-4a.1, MM GE-4a.2, MM GE-4a.3, and MM GE-5a of the Draft EIR for a discussion of seismic and liquefaction hazards.

Response to Comment 52-3

The comments address caps and covers and potential hazards related to earthquakes, liquefaction, movement of contaminant plumes, and the mitigation planning and implementation process. Refer to Master Response 6 (Seismic Hazards) about the interaction of hazardous materials and earthquakes; Master Response 7 (Liquefaction) about the interaction of hazardous materials and potential liquefaction; Master Response 8 (Sea Level Rise) about the interaction of hazardous materials and rising ground water table; Master Response 9 (Status of the CERCLA Process) about treatment of and mitigation for hazardous materials; Master Response 11 (Parcel E-2 Landfill) specifically about Parcel E-2; Master Response 12 (Naturally Occurring Asbestos) about asbestos treatment and mitigation; Master Response 13 (Post-Transfer Shipyard Cleanup) about the process once HPS has been transferred; and Master Response 16

(Notification Regarding Environmental Restrictions and Other Cleanup Issues) about other hazardous materials planning and mitigation information. Refer also to Impacts GE-4 and GE-5, and mitigation measures MM GE-4a.1, MM GE-4a.2, MM GE-4a.3, and MM GE-5a of the Draft EIR for a discussion of seismic and liquefaction hazards. Master Response 6 (Seismic Hazards) states:

> Although residual chemicals may remain in soil after cleanup, the residual chemicals will be located under a physical barrier (e.g., soil cover, pavement, concrete building foundation) that prevents human exposure to these residual chemicals. It is also expected that Federal and State regulatory agencies will allow a group of naturally occurring metals associated with fill material derived from native bedrock to remain under a final cover in concentrations above risk levels. In this scenario, the cover will limit exposure and protect humans from long-term health risks even if breaches in the cover temporarily occur. Operation and maintenance plans for these covers will be carried out to periodically monitor and repair any breaches. Breach of the cover would be required to be repaired so that no long-term health risk would occur. Therefore, even if ground rupture were to occur, contaminants and naturally occurring metals would not be released at levels presenting a concern to human or ecological health.

In response to the comment, the text on Draft EIR page III.L-15, second paragraph, has been amended as shown:

> … Design-level liquefaction studies, which are further described in mitigation measure~~s~~ ~~MM GE-4~~MM GE-5a, would address five general types of localized potential hazards, and provide treatment methods, including the following:

Response to Comment 52-4

Refer to Master Response 8 (Sea Level Rise) for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

The EIR recognizes that the science related to climate change and sea level rise rates will continue into the future; therefore, Project plans do not include a specific upper limit of sea level rise such as 16 inches or 36 inches or 55 inches. Rather a risk-based analysis was conducted, based on which development elevations, setbacks, and a Project-specific Adaptation Strategy was prepared for the Project. The Adaptation Strategy includes preparing an Adaptive Management Plan which outlines an institutional framework, monitoring triggers, a decision-making process, and an entity with taxing authority that would pay for infrastructure improvements necessary to adapt to higher than anticipated sea levels.

Furthermore, as discussed in Chapter II (Project Description) starting on page II-69 of the Draft EIR, the Project would use an adaptive management strategy for protecting the shoreline from future sea level rise. This includes designing the shoreline and public access improvement areas with a development setback so that higher than expected sea level rise could be accommodated should it occur. Table II-13 (Summary of Shoreline Improvements at the Project Site), Draft EIR pages II-57 and -58, identifies the types of shoreline improvements that would be implemented within the state park and other portions of the Project, as described in the Project's Shoreline Structures Assessment report. Figure II-22 (Flood Zones [With Project]), Draft EIR page II-72, shows the areas that would be protected from sea level rise with implementation of the proposed shoreline improvements. These protected areas include the proposed park lands, as well as the other Project areas proposed for development. In addition, mitigation measure MM HY-14 requires implementation of the shoreline protection measures included in the Project's

Proposed Shoreline Improvement Report. Implementation of the Project's proposed shoreline improvements, as described in the Project Description and as required by mitigation measure MM HY-14, would reduce potential sea level rise impacts associated with flooding to state parkland to a less-than-significant level.

Soil will be imported from approved sources and will meet the guidelines for construction fill as specified by local, regional, and state guidelines. The type and extent of testing specified by these permits and guidelines will be followed. Transportation will be by truck and/or barge. California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), has identified procedures to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. In addition, Amendments to San Francisco Health Code Article 31, to include all of Hunters Point Shipyard, will require the preparation of a Soil Importation Plan that describes the procedures to be used to ensure that imported soil does not exceed established thresholds.

Response to Comment 52-5

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on movement or exposure to hazardous materials and mitigation measures. Also provided in Master Response 8 is a discussion of how Candlestick Point and Hunters Point Shipyard will be protected into the future from flooding.

Response to Comment 52-6

It is unclear whether the commenter is referring to the transportation improvements included as part of the CP-HPS Phase II Development Plan, or to the transportation improvements included as part of the BTIP EIR, which is currently being prepared and is as yet unpublished. The proposed transportation improvements included as part of the CP-HPS Phase II Development Plan, the Project's impacts to transportation, and mitigation measures to reduce severity of impacts, where feasible, were presented in Section III.D (Transportation and Circulation) of the Draft EIR. The Draft EIR analyzed impacts associated with both the land use program and the transportation plan for the Project. Additional detail regarding transportation-related changes associated with the Project was provided in the Project's Transportation Study, included as Appendix D of the Draft EIR. Refer to Response to Comment 43-2 for information regarding the relative timing of this Draft EIR compared to the BTIP Draft EIR, which is currently being prepared and is as yet unpublished. Response to Comment 43-2 also includes information regarding the BTIP project improvements and their relationship to the analysis of transportation improvements in the CP-HPS Phase II Development Plan.

The commenter notes that the Draft EIR identified significant impacts to transit routes 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy. The impacts and mitigation measures were identified and described in Impact TR-22 in the Draft EIR. Refer to Master Response 18 (Transit Mitigation Measures) for a discussion of proposed changes to the roadway network and mitigation measures intended to reduce transit delays. No additional response required.

The commenter also requests additional information regarding "transit priority technology." The Project would construct new traffic signals at intersections along Palou Avenue, between Third Street and the Project Boundary. These signals would be equipped with devices to anticipate arrivals of transit vehicles,

so that signal timings could be dynamically adjusted to improve the likelihood that transit vehicles get a "green" light. Similar systems have been deployed on other transit preferential streets in San Francisco, including Third Street and Mission Street. The effects to drivers at a given intersection are generally very minor; however, along an entire transit corridor, where the benefits are cumulative, the technology can provide substantial improvements to transit travel times and reliability.

As described in the Draft EIR in Impact TR-22 (pages III.D-106 through III.D-109), current plans call for the extension of overhead trolley wires along Palou Avenue into the Hunters Point Shipyard Transit Center. The current plans for extension of transit service into the Project site call for the 23-Monterey to be extended in the near-term because it would not require construction of overhead wires and would offer similar service to Third Street, where riders could transfer to the 24-Divisadero. The extension of the 24-Divisadero into the project site would occur later in the development process.

Finally, the commenter requests clarification of the statement in the Draft EIR that transportation improvements would require property acquisition. Refer to Responses to Comments 43-4 and 65-5 for a discussion of potential property acquisitions associated with construction and/or implementation of the Project.

Response to Comment 52-7

While these comments contain opinions, anecdotal, or general information and are not a direct comment on environmental issues or the content or adequacy of the Draft EIR, information from the Draft EIR has been referenced below. The comments will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

Neighborhood-serving retail (which includes grocery stores) and other services would be available and accessible to the larger Bayview community and also to the residents of Alice Griffith. Page II-16, second paragraph, of Chapter II (Project Description) of the Draft EIR states:

> Existing 256 public housing units would be demolished on the existing SFHA site and 844 new homes would be constructed in their place along with neighborhood serving retail and services, open space and new streets. The 844 new homes would include a mix of market-rate, affordable and below-market rental and homeownership and public housing replacement units.

Figure II-4 (Proposed Land Use), page II-11, identifies the location of neighborhood-serving retail with a pink striped overlay.

Parking would be available for new retail services. Free parking would not be provided to residents. Page II-43 of the Draft EIR states:

> …Commercial and visitor-serving land uses would be served by on- and off-street parking. All commercial parking facilities would be paid parking, with measures to discourage single-occupant automobile use, such as designation of preferred parking areas for bicycles, carpools, vanpools, and carshare vehicles. The performance venue/arena would share parking with proposed retail uses.

Section III.C (Population, Housing, and Employment) defines market rate housing and identifies the housing need by income level for San Francisco. Page III.C-5 of the Draft EIR states:

> … Based on a US Department of Housing and Urban Development (HUD) formula, San Francisco's Area Median Income (AMI) in 2006 was estimated to be approximately $77,450 for a

two-person household and approximately $87,100 for a three-person household.[74] San Francisco is estimated to have the income level distribution shown in Table III.C-3 (San Francisco Income Distribution)."

Table III.C-3 San Francisco Income Distribution

Income Group	*Income Level*	*Income Range*[a]
Very low	≤ 50% of AMI	≤ $38,725
Low	50–80% of AMI	$38,725–$61,960
Moderate	80–120% of AMI	$61,960–$92,940
Above Moderate	> 120% of AMI	> $92,940

SOURCES: City of San Francisco, General Plan Housing Element, 2004; City and County of San Francisco, Mayor's Office of Housing, *Income Limits and Sales Price Levels for MOH Homeownership Programs*. http://www.sfgov.org/site/moh_page.asp?id=62375 (accessed August 27, 2009).

a. Based on San Francisco's AMI in 2006 of $77,450 for a two-person household.

Page III.C-6 of the Draft EIR states:

The distribution of future housing units needed by income level in San Francisco during the 2007–2014 period is shown in Table III.C-4 (San Francisco Housing Need, 2007–2014), below.

Table III.C-4 San Francisco Housing Need, 2007–2014

Income Group	*Number of Units*
Very low	6,589
Low	5,535
Moderate	6,754
Above moderate	12,315
Total	***31,193***

SOURCE: ABAG, *San Francisco Bay Area Housing Needs Plan, 2007 to 2014*, 2008.

Response to Comment 52-8

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

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Letter 53: Stokes, Ernest (1/12/10)

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Letter 53: Stokes, Ernest (1/12/10)

Response to Comment 53-1

This comment primarily contains general or anecdotal information and is not a comment on the adequacy of the EIR. However, to provide a response, there is no requirement at this time to hire union workers for construction of the Project. However, as part of the Community Benefits Agreement, the Project Applicant will contribute to a workforce development fund that will be used for workforce development programs designed to create a gateway to career development for residents of the Bayview. This may or may not include interface with the local unions. With regard to a "full cleanup" of the Shipyard to unrestricted use, refer to Master Response 14 (Unrestricted Use Alternative).

Response to Comment 53-2

Refer to Response to Comment 47-28 for a discussion of the reconfiguration of CPSRA.

Response to Comment 53-3

According to the San Francisco County Transportation Authority (SFCTA) travel demand forecasting model, peak commute period auto travel times between the Bayview neighborhood and Downtown San Francisco would increase with implementation of the Project. Currently, travel times are approximately 20 minutes during the peak AM commute period. By year 2030, without the Project, travel times are expected to increase by about 5 percent (or about 1 minute), to 21 minutes. With the Project, year 2030 travel times from the Bayview neighborhood would increase by another minute, to approximately 22 minutes. Thus, by year 2030, with the Project and other cumulative development, travel times between the Bayview neighborhood and Downtown San Francisco are expected to increase by about 10 percent, half of which would be attributable to traffic added by the Project.

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Letter 54: Stancil, Esselene (1/12/10)

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Letter 54: Stancil, Esselene (1/12/10)

Response to Comment 54-1

The Draft EIR does include an analysis of the potential impact associated with Project-related changes to Palou Street. Impact TR-34 specifically addresses the impacts associated with additional vehicle traffic and the improved streetscape amenities, including street trees and new traffic signals.

The discussion of transit preferential treatments on Palou Avenue generally refers to the improved transit amenities and service and the transit priority signals (refer to Response to Comment 52-6 regarding plans for extension of the 24-Divisadero and potential extension of overhead wires). These treatments are expected to be in place full-time, but are not expected to have negative effects to existing residents. The commenter may have also been referring to the game-day situation, in which Palou Avenue would be closed to through-traffic, except for transit vehicles. In this case, residents would still have access to their homes. These conditions would likely only be in place for approximately two hours prior to and two hours after games on football-game days only.

Mitigation measure MM TR-22 involves slight widening of Palou Avenue to accommodate one travel lane and one transit-only lane in each direction. On-street parking would be maintained on both sides of Palou Avenue and sidewalks would be 12 feet wide, which would be consistent with the City's Draft Better Streets Plan guidelines. Refer to Master Response 18 (Transit Mitigation Measures), which presents a detailed discussion and graphics of the Project's transit mitigation measures, including transit improvements on Palou Avenue (i.e., MM TR-22.1).

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Letter 55: Breast Cancer Action (1/12/10)

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Letter 55: Breast Cancer Action (1/12/10)

Response to Comment 55-1

The criteria used to determine cleanup levels are outlined in health risk assessments conducted as part of the Remedial Investigation (RI) step of the CERCLA process explained in Master Response 9 (Status of the CERCLA Process). The risk assessments and Remedial Investigation (RI) reports are approved by state and federal regulatory agencies. For a discussion of the contaminants on each parcel and the criteria used to determine safe levels of exposure, refer to the reports referenced in Section III.K.2 of the Draft EIR, which are available for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103, as part of File No. 2007.0946E. For a discussion of residual contamination following cleanup, refer to Master Response 13 (Post-Transfer Shipyard Cleanup). Upon completion of the environmental cleanup, institutional controls will be implemented to address deed restrictions, public notification, and monitoring and maintenance of landfill caps. The Draft EIR outlines mitigation measures to address potential hazardous materials impacts and the City's Article 31 ordinance creates a process for the Department of Public Health (DPH) to enforce certain hazardous materials mitigation measures identified in the Draft EIR. Regarding the concern that toxins may remain beneath a cap at HPS, please note that a cover or cap is a physical barrier that eliminates the pathway between these chemicals and exposure to humans. Long-term monitoring and controls are in-place to ensure that the cap remains an effective barrier in the future.

Response to Comment 55-2

Refer to Response to Comment 50-4 regarding an HPS parcel overlay on the proposed land uses. An evaluation of the hazards associated with each area of the HPS is presented in Section III.K (Hazards and Hazardous Materials). Pages III.K-53 through -109 identify the hazards that could occur during construction, and pages III.K-110 through -124 identify operational and cumulative impacts that could occur.

Response to Comment 55-3

Refer to Response to Comment 55-1 regarding cleanup. The remediation work will be conducted following remedial action work plans or Risk Management Plans that have been approved by regulatory agencies and will outline the methods that will be used to minimize dust emissions. These plans will specify the details for "clean soil" to be used for backfilling. Presently, Article 31 regulations establish minimum criteria for soil importation plans applicable to Parcel A. The City anticipates it will amend Article 31 to apply its requirements to the HPS Phase II area, as discussed in Section III.K (refer to Section III.K.3, page III.K-38). As amended, Article 31 would provide similar minimum criteria for soil importation plans in Phase II. Also refer to Master Response 7 (Liquefaction) and Master Response 6 (Seismic Hazards). Refer to Impacts HZ-1a and HZ-2a and mitigation measures MM HZ-1b and MM HZ-2a.1 for further details.

Response to Comment 55-4

Refer to Master Response 9 (Status of the CERCLA Process) for a summary of the cleanup process. Land Use Control Remedial Designs approved by the regulatory agencies for each parcel will layout the inspection and reporting requirements for institutional controls and activity and land use restrictions. These restrictions will be recorded on the property deeds. In addition, a Covenant to Restrict Use of Property (CRUP) will be entered into by the Navy, the Agency, and the DTSC which will set forth protective provisions, covenants, restrictions, and conditions applicable to the property and binding on all subsequent owners, lessors, and occupants. The Draft EIR outlines mitigation measures in Section III.K.4 to address potential hazardous materials impacts and the City's Article 31 ordinance creates a process for the DPH to enforce certain hazardous materials mitigation measures identified in the Draft EIR, including confirming, prior to any development activity, that the development will be carried out in compliance with any applicable restrictions that apply to the property. For further details on notice requirements to be implemented, refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues).

Response to Comment 55-5

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving through Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) regarding cleanup of the HPS Phase II site to residential standards. Refer to Response to Comment 48-3 regarding the range of alternatives considered in the Draft EIR. As identified in Section III.K (Hazards and Hazardous Materials), each of the significant impacts of the Project are addressed by mitigation that reduces those impacts to less than significant. Requiring remediation of the Project site to below levels required by the existing regulatory regime, which requires remediation to protect public health and the environment in light of proposed future uses, was not identified as an objective or goal of the Project and is not needed to mitigate Project impacts to a less-than-significant level.

Response to Comment 55-6

Refer to Master Response 15 (Proposition P and the Precautionary Principle) regarding protection of the community from toxins.

Letter 56: Indian Canyon Nation (1/12/10)

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Letter 56: Indian Canyon Nation (1/12/10)

Response to Comment 56-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-2

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-3

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-4

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-5

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-6

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-7

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 56-8

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites).

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Letter 57: Franklin, Alice (1/12/10)

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Letter 57: Franklin, Alice (1/12/10)

Response to Comment 57-1

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2 and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

The Draft EIR mitigation measures MM HY-12a.1 and MM HY-12a.2, pages II.M-100 to -102, recognize that the science related to climate change and sea level rise rates will continue into the future; therefore, Project plans do not include a specific upper limit of sea level rise, such as 16 inches or 36 inches or 55 inches. Rather a risk-based analysis was conducted, based on which development elevations, setbacks, and a Project-specific Adaptation Strategy was prepared for the Project. The Adaptation Strategy includes preparing an Adaptive Management Plan which outlines an institutional framework, monitoring triggers, a decision-making process, and an entity with taxing authority that would pay for infrastructure improvements necessary to adapt to higher than anticipated sea levels.

Response to Comment 57-2

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur. The Adaptation Strategy includes measures to provide continued flood protection beyond the 16-inches of sea level rise that it is initially built to, thereby ensuring that open-space and public uses continue. Also, refer to Master Response 8 (Sea Level Rise) for a discussion of adaptive management strategies that would include increasing open space in response to sea level rise by creating cobblestone beaches or tidal marshes to limit wave run-up.

Response to Comment 57-3

As discussed in Chapter II (Project Description) starting on page II-69 of the Draft EIR, the Project would use an adaptive management approach for protecting the shoreline from future sea level rise. This includes designing the shoreline and public access improvement areas with a development setback so that higher than expected sea level rise could be accommodated should it occur. Table II-13 (Summary of Shoreline Improvements at the Project Site), starting on Draft EIR page II-57, identifies the types of shoreline improvements that would be implemented within the state park and other portions of the Project, as described in the Project's Shoreline Structures Assessment report. Figure II-22 (Flood Zones [With Project]), Draft EIR page II-72, when viewed in comparison with Figure II-21 (Flood Zones [Existing and with a 36-Inch Sea Level Rise]), Draft EIR page II-71, shows the areas that would be protected from sea level rise with implementation of the proposed shoreline improvements. In addition, mitigation measure MM HY-14, Draft EIR page III.M-106, requires implementation of the shoreline protection measures included in the Project's Proposed Shoreline Improvement Report. Implementation of the Project's proposed shoreline improvements, as described in the Project Description and as required by mitigation measure MM HY-14, would reduce potential sea level rise impacts associated with flooding to State Park land and shorebird habitat

to a less-than-significant level. Also refer to Master Response 8 (Sea Level Rise) for a discussion of the Project's adaptive management strategy for protecting the shoreline from sea level rise.

With respect to flooding associated with sea level rise and potential impacts on habitat for shorebirds, in the absence of the proposed shoreline improvements, shoreline habitat would be lost to sea level rise, and high waters of the Bay may encroach into developed areas that do not provide suitable habitat for shoreline species such as shore birds. However, the proposed shoreline improvements will allow for shoreline conditions to be adapted as sea level rises. Furthermore, sediment accretion on the outboard sides of these shoreline treatments may keep pace with sea level rise so that at least some mud flat, and possible a narrow strip of tidal marsh, could be maintained in areas that currently provide such habitat (i.e., in more sheltered areas such as South Basin that are not subject to erosion).

Further, as discussed in Section III.N (Biological Resources) in Impact BI-4a (page III.N-56) and Impact BI-4b (III.N-64) of the Draft EIR, shoreline improvements would result in construction of revetments to minimize flooding and shoreline erosion, including placement of soils or sand to enhance beach or marsh habitat. For example, along most of the northern and southern edges of Candlestick Point, marsh soils would be placed in jurisdictional areas following completion of the revetment to provide a gentler slope than is currently present, which would allow for colonization by marsh vegetation. As a result, much of the fill of jurisdictional areas (as reflected in Table III.N-4 and Figure III.N-5) would result in an enhancement of habitat (i.e., shorebird habitat). Table III.N-4 and Figure III.N-5 have since been modified and are presented in Section F (Draft EIR Revisions).

Response to Comment 57-4

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise taken into account for various Project components. As discussed in Chapter II (Project Description) starting on page II-69 of the Draft EIR, the Project would use an adaptive management strategy for protecting the shoreline from future sea level rise. This includes designing the shoreline and public access improvement areas with a development setback so that higher than expected sea level rise could be accommodated should it occur. Table II-13 (Summary of Shoreline Improvements at the Project Site), pages II-57 and -58 of the Draft EIR, identifies the types of shoreline improvements that would be implemented within the state park and other portions of the Project, as described in the Project's Shoreline Structures Assessment report. Figure II-22 (Flood Zones [With Project]), page II-72 of the Draft EIR, shows the areas that would be protected from sea level rise with implementation of the proposed shoreline improvements. In addition, mitigation measure MM HY-14 requires implementation of the shoreline protection measures included in the Project's Proposed Shoreline Improvement Report. Implementation of the Project's proposed shoreline improvements, as described in the Project Description and as required by mitigation measure MM HY-14, would reduce potential sea level rise impacts associated with flooding to development areas, such as Harney Way.

Response to Comment 57-5

Soil will be imported from approved sources and will meet the guidelines for construction fill as specified by local, regional, and state guidelines. The type and extent of testing specified by these permits and guidelines will be followed. Transportation will be by truck and/or barge. California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), has identified procedures to

minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. In addition, Amendments to San Francisco Health Code Article 31, to include all of Hunters Point Shipyard, will require the preparation of a Soil Importation Plan that describes the procedures to be used to ensure that imported soil does not exceed established thresholds.

Response to Comment 57-6

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on movement or exposure to hazardous materials and mitigation measures.

Response to Comment 57-7

As stated on page I-7 of the Draft EIR:

> The EIR is an informational document that informs public agency decision-makers and the general public of the significant environmental effects and the ways in which those impacts can be reduced to less-than-significant levels, either through the imposition of mitigation measures or through the implementation of specific alternatives to the Project as proposed.

In total, there are approximately 111 mitigation measures that have been designed for the express purpose of avoiding or reducing environmental impacts. In addition, the commenter requests that all concerns are addressed. Responses are provided in Responses to Comments 57-1 through 57-6.

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Letter 58: Green Action Health and Environmental Justice (1/12/10)

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Letter 58: Green Action Health and Environmental Justice (1/12/10)

Response to Comment 58-1

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise taken into account for various Project components, and Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) regarding concerns about toxins. As part of the Remedial Design step in the CERCLA process, regulatory agency approved LUC RDs for each parcel will lay out the inspection and reporting requirements for the institutional controls (ICs) and activity and land use restrictions.

Response to Comment 58-2

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) regarding Proposition P.

Response to Comment 58-3

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2 and 57-1 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment 58-4

The comment is acknowledged. No response is required.

Response to Comment 58-5

Refer to Master Response 8 (Sea Level Rise) for a discussion of recent sea level rise predictions and timelines for these changes to occur. As indicated in Master Response 8, the sea level rise predictions used as a basis for this Project's planning are within the range of estimates reported recently in the literature for changes occurring by the end of this century. This timeframe encompasses the foreseeable life of the Project. Climate change impacts such as sea level rise do not occur in short time frames. Ice sheet collapse, which accounts for a major uncertainty with respect to sea level rise, would occur over several decades[111] or centuries[112]; therefore, it is unlikely that an emergency response will be necessary. Instead, strategic planning for adaptive management strategies is a realistic strategy for dealing with sea level rise. The need to address sea level rise is not isolated to the Project. Several urban locations within the San Francisco Bay Area are anticipated to be vulnerable to sea level rise. At an increase of 16 inches significant portions of the South Bay and San Francisco Airport, is vulnerable.[113] Given the uncertainty associated with sea level

[111] Hansen, J.E. 2007. Scientific reticence and sea level rise. Environmental Research Letters. 2: 1-6.
[112] BCDC (San Francisco Bay Conservation and Development Commission). 2009. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline, Draft Staff Report. April 7, 2009, p. 17.
[113] This is illustrated in several figures contained in BCDC. 2009. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline, Draft Staff Report. They are also available online at http://www.bcdc.ca.gov/planning/climate_change/climate_change.shtml.

rise predictions at this time, the strategy proposed for this project, which involves adjusting the grade for a reasonable level of rise and relying on adaptive management strategies to accommodate higher levels, is consistent with recommendations by the California Natural Resources Agency (CNRA), which states, "adaptation is the only way to deal with the impacts of sea-level rise that is anticipated under either emissions scenario during the twenty-first century."[114]

Response to Comment 58-6

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

With respect to the amount of fill necessary to reach higher elevations related to increases in sea level the existing site varies in elevation from the shore of the bay to elevation 3 within 50 feet of the bay; the parcel E2 then slopes up to elevation 11 and continues to be topped off at elevation 20.8 (all in city datum). Based on the plans to address sea level rise as described in Master Response 8 (Sea Level Rise) to attain higher elevations the project will need to provide minor amounts of fill to improve shoreline protection.

Response to Comment 58-7

With respect to the potential for garages and backyards to flood as sea levels rise the proposed grading plan and storm drain system design will not add any new runoff into existing creeks, or result in ponding that will affect garages or backyards. Further, in Impact HY-11, page III.M-98 of the Draft EIR, states:

> A new separate storm sewer system would be constructed at the Project site in accordance with the design standards and criteria issued by the SFPUC and criteria in the San Francisco Subdivision Regulations. … As discussed in Impact HY-10, above, overall Project site development would result in an average of approximately 39 percent reduction in peak storm flows and would also reduce runoff volumes from frequently occurring storms.

Refer to Master Response 8 (Sea Level Rise) for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment 58-8

Refer to Master Response 6 (Seismic Hazards), Impact GE-4a, and mitigation measure MM GE-4a.3 for a discussion on seismic design for bridges. As discussed on page III.L-20 of the Draft EIR, state guidelines protecting bridges and overpasses on state roads from geologic and seismic hazards are contained in Caltrans Bridge Design Specifications, Bridge Memo to Designers, Bridge Design Practice Manual, and Bridge Design Aids Manual. The Caltrans Seismic Design Criteria specify the minimum seismic design requirements that are necessary to meet the performance goals established in Section 20 of Bridge Memo to Designers. The bridge and alignment will be designed to prevent collapse and protect public safety during a major seismic event. Pages III.L-19 and -20 of the Draft EIR state:

[114] CNRA (California Natural Resources Agency). 2009. 2009 California Climate Adaptation Strategy. Discussion Draft. A report to the Governor of the State of California in response to Executive Order S-13-2008.

Caltrans Bridge Design Specifications and San Francisco Department of Public Works Standard Specifications

State guidelines protecting bridges and overpasses on state roads from geologic and seismic hazards are contained in Caltrans *Bridge Design Specifications*,[393] *Bridge Memo to Designers*,[394] *Bridge Design Practice Manual*,[395] and *Bridge Design Aids Manual*.[396] The manuals provide state-of-the-art information to address geo-seismic issues that affect the design of transportation infrastructure in California. Bridge design is required to be based on the "Load Factor Design methodology with HS20-44 live loading (a procedure to incorporate the estimated weight of the vehicles and/or pedestrians on the bridge with the weight of the bridge for loading calculations)" in the *Bridge Design Specifications*. Seismic-resistant design is required to conform to the *Bridge Design Specifications* and Section 20 of *Bridge Memo to Designers*, as well as Caltrans *Seismic Design Criteria*.[397] Section 20 of *Bridge Memo to Designers* outlines the category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components, and seismic design practices that collectively make up Caltrans' seismic design methodology. The methodology applies to all bridges and highways designed in California. A bridge's category and classification determines its seismic performance level and which methods would be used to estimate the seismic demands and structural capacities. The performance criteria include functional and safety evaluations of ground motion, level of service to be attained following a major earthquake, and the level of damage the structure must be designed to withstand.

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Letter 59: Jefferson, Simon (1/12/10)

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Letter 59: Jefferson, Simon (1/12/10)

Response to Comment 59-1

As described in the Draft EIR, the Project would construct new traffic signals at intersections along Palou Avenue. The Project would also provide a number of streetscape improvements, including sidewalk bulb-outs, cross walks, curb ramps, street trees and planting, bus shelters, and other site furnishings and pavement treatments that would visually tie together the Project with Bayview neighborhood.

Although not specifically proposed as part of the project, mitigation measure MM TR-22 would require slight widening of Palou Avenue to accommodate one travel lane and one transit-only lane in each direction. This measure would mitigate Project-related impacts to transit travel times along Palou Avenue, and would be implemented only at such time as the Project causes specific levels of transit delays. With the mitigation measure in place, on-street parking would be maintained on both sides of Palou Avenue and sidewalks would be 12 feet wide, which would be consistent with the City's Draft Better Streets Plan guidelines. Refer to Master Response 18 (Transit Mitigation Measures), which presents discussion and graphics of the Project's transit mitigation measures, including transit improvements on Palou Avenue (i.e., MM TR-22.1).

Refer to Response to Comment 43-2 for information regarding the relative timing of this Draft EIR compared to the BTIP Draft EIR, which is currently being prepared. Response to Comment 43-2 also includes information regarding the BTIP project improvements and their relationship to the analysis of transportation improvements in the CP-HPS Phase II Development Plan.

The Draft EIR does include an assessment of the Project's impacts to traffic on Palou Avenue. Specifically, Table III.D-10-12, on pages III.D-73-81 present existing, future year without the project, and future year with the project intersection operating conditions at four key intersections on Palou Avenue for the weekday AM and PM and Saturday peak hours, respectively. The specific traffic impacts on Palou Avenue associated with the Project are discussed in Impacts TR-3, TR-4, and TR-5.

Additional detail regarding traffic volumes can be found in the Project's Transportation Study, included as Appendix D of the Draft EIR. Specifically, Figure 31A through Figure 31D illustrate the project-generated traffic volume increases forecasted to occur at all study intersections, including those on Palou Avenue.

Finally, the commenter notes that the Draft EIR should include a discussion of safety issues associated with Palau Avenue. Impact TR-34 on Draft EIR pages III.D-119 and -120 presents the assessment of impacts related to increased traffic volumes on area roadways on pedestrian circulation and safety. There are a number of factors that contribute to increased pedestrian-vehicle and bicycle-vehicle collisions, and the number of collisions at an intersection is a function of the traffic volumes, travel speeds, intersection configuration, traffic control, surrounding land uses, location, and the number of pedestrians and bicyclists. The Project would not result in a substantial change in the street network, and would include street improvements that would enhance pedestrian and bicycle travel through the area. Overall, pedestrian and bicycle access and the environment would improve within and in the vicinity of the Project site, and Project impacts would be less than significant.

Response to Comment 59-2

Refer to Response to Comment 54-1 for a discussion of transit preferential treatments on Palou Avenue. During game-day conditions, Palou Avenue would be closed to through-traffic, except for transit vehicles. In this case, residents would still have access to their homes. The closure would be for through-traffic only. These conditions would likely only be in place for approximately two hours prior to and two hours after games on football game days only.

To date, over the past three years City staff have conducted more than 190 public meetings and workshops on the Project. In the spring of 2008, City staff held a series of four land use workshops on transportation, urban design, and open space, which included the referenced proposal for Palou Avenue. Additionally, the City has conducted numerous Transportation Plan workshops with committees of both the Bayview Hunters Point Project Area Committee (PAC) and Citizens Advisory Committee (CAC). Feedback has generally expressed a desire for better transit service, improved pedestrian amenities, and concern regarding Project traffic impacts.

Response to Comment 59-3

The importance of transit circulation on multiple lines (e.g., the 23-Monterey, 24-Divisadero, and 44-O'Shaughnessey) on Palou Avenue is address in the Project with the transit priority upgrades it proposes to ensure that transit operations would be enhanced and traffic conflicts minimized. To address potential impacts to transit circulation should traffic conditions begin to render these improvements ineffectual in protecting transit operations, mitigation measures are identified. Specifically, Project mitigation measure MM TR-22.1 identifies a series of improvements to Palou Avenue to improve transit travel times and reduce Project impacts. Generally, the improvements consist of providing a dedicated transit-only lane in each direction along Palou Avenue between Crisp Avenue and Third Street. Refer to Master Response 18 (Transit Mitigation Measures), which presents discussion and graphics of the Project's transit mitigation measures, including transit improvements on Palou Avenue (i.e., MM TR-22.1).

The traffic and transit impact analysis was conducted for future year 2030 conditions, which assumed substantial cumulative development in the Project vicinity (e.g., Executive Park, the Visitacion Valley Redevelopment program, Hunters View project, Brisbane Baylands) totaling about 7,000 new housing units and about 9.8 million square feet of commercial development. The amount of delay that would be experienced by transit riders on the 23-Monterey, the 24-Divisadero and the 44-O'Shaughnessy would vary by year, time of day and direction of travel, depending on a number of factors, including: the amount of background growth that is actually developed, the amount of Project development that is completed at the time, the phase of transit improvements that is implemented at that time, and implementation of the mitigation measures. However, by future year 2030 assuming all cumulative background development and the Project is built out, and with full implementation of the Project transit plan, riders on the 23-Monterey between Ingalls Street/Oakdale Avenue and Glen Park BART station would experience an additional 7 to 12 minutes of delay from existing conditions, riders on the 24-Divisadero between Hunters Point Shipyard and Mission Street would experience an additional 7 to 10 minutes of delay from existing conditions, and riders on the 44-O'Shaughnessy between Hunters Point Shipyard and the Glen Park BART station would experience 14 to 19 minutes of delay from existing conditions. Implementation of MM TR-22.1 would

reduce the projected increases in travel times. Details of the transit impact analysis are presented in Chapter 4 of the Transportation Study, included as Appendix D of the Draft EIR.

Chapter VI of the Draft EIR presents and assesses a series of Alternatives, many of which include less development, which would reduce the Project's impact to transit service along Palou Avenue.

Refer also to Response to Comment 54-1 for a discussion of transit preferential treatments on Palou Avenue.

Response to Comment 59-4

The Draft EIR provides adequate analysis and discussion of the Project and Project-related transportation impacts. Additional detail is available in the Transportation Study, included as Appendix D to the Draft EIR.

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Letter 60: Donahue, Vivien (1/12/10)

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Letter 60: Donahue, Vivien (1/12/10)

Response to Comment 60-1

Comment acknowledged. No response is necessary.

Response to Comment 60-2

Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) regarding the notice that will be given to property owners, residents, and neighbors regarding environmental restrictions and other cleanup issues.

Response to Comment 60-3

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) regarding removing toxins.

Response to Comment 60-4

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on movement or exposure to hazardous materials, liquefaction potential, and mitigation measures. Refer also to Master Response 7 (Liquefaction) for a discussion of how construction can be successfully accomplished in potentially liquefiable areas.

Response to Comment 60-5

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) regarding removing toxins. In addition, Variants 1, 2, and 2A, as well as Alternative 1, 3, 4, and 5 all evaluate scenarios that do not include a stadium at HPS Phase II.

Response to Comment 60-6

Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) regarding the notice that will be given to property owners, residents, and neighbors regarding environmental restrictions and other cleanup issues.

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Letter 61: Lee, Mishwa (1/12/10)

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Letter 61: Lee, Mishwa (1/12/10)

Response to Comment 61-1

The comment is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Data from the Equal Opportunity Employment program for the Hunters Point Shipyard Project Area indicate that for Hunters Point Phase I, 52.2 percent of all professional services contracts and 47.9 percent of all construction contracts were issued to San Francisco firms. With regard to employment, data for the 94124, 94134, and 94107 zip codes between 2005 and 2009 indicate the percentage of residents of those zip codes employed on Shipyard projects rose from 4.8 percent in 2005 to a high of 19.0 percent in 2008, dropping slightly to 17.7 percent in 2009.

Response to Comment 61-2

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the need for the Yosemite Slough bridge. In this comment, the commenter is identifying one of the six objectives of the Project. The Project Objectives are designed to describe the underlying purpose of the Project, as a whole, and to guide in the selection of alternatives. Sustainability practices have been incorporated into the Project, as a whole, which includes the Yosemite Slough bridge, as specifically described on pages II-49 to II-50 of the Draft EIR. Some examples of sustainability features includes an urban design that promotes walking and discourages driving; compliance with the San Francisco Green Building Ordinance; the use of drought tolerant plant species; and Lennar Urban's voluntary commitment to constructing all Project buildings to the Leadership in Energy and Environmental Design (LEED®)for Neighborhood Development Gold standard. With respect to the bridge, one of its sustainability features is the use of a mix of impervious (i.e., paved) and pervious (i.e., grassy) surfaces. The wheel tracks would be paved, while strips in the center of the land would be planted with grass. The bicycle and pedestrian paths would also have a combination of paved and unpaved surfaces.

Response to Comment 61-3

The commenter incorrectly states that the Draft EIR states "A planned restoration of Yosemite Slough includes restoring 12 acres of upland fill back to tidally influenced wetlands…A restoration project is being implemented by California State Parks Foundation in collaboration with local environmental groups." Rather, the Draft EIR refers to "12 acres of tidally influenced wetlands" in reference to the goals and objectives of the Yosemite Slough Restoration Project, which is provided on Draft EIR page III.N-46:

- Restore habitat diversity by adding 12 acres of tidally influenced wetlands and marsh area and remove chemically impacted soils from upland areas to improve the quality of existing habitat.

With respect to the current stage of the restoration, no restoration has taken place to date. Concerns about the amount of funding spent thus far on restoration is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

With respect to local employment, economic issues are not considered by CEQA to be environmental impacts; therefore the EIR is not required to, and does not address, economic issues. Economic issues are important to City, the community and the Project Sponsor, and those issues will be considered by the City decision makers through the Project review and approval process, outside of the EIR and CEQA process.

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the potential impacts of construction and operation of the Yosemite Slough bridge on the Yosemite Slough Restoration Project.

Response to Comment 61-4

The comment does not identify where the information referred to is located in the Draft EIR. However, the Draft EIR, on pages III.M-6 through III.M-14, describes runoff and flooding conditions within the Project area and vicinity for the purpose of identifying the baseline physical conditions used to evaluate the significance of Project impacts. Project impacts that are evaluated as potential significant environmental impacts related to hydrology in accordance with CEQA are listed on page III.M-50 of the Draft EIR under the heading "Significance Criteria" and include placing housing or structures within a 100-year flood hazard area (M.g and M.h), and exposing people to a significant risk of loss, injury or death from flooding (M.i). A map showing road subsidence within one mile of the Project boundary is not needed to determine the potential significant environmental impacts of the Project with respect to runoff or flooding.

Response to Comment 61-5

Special flood hazard areas designated as Zone V associated with Project, as determined by FEMA, are shown on Figure III.M-4 (Preliminary 100-Year Flood Zones within and Adjacent to the Project), Draft EIR page III.M-12. The only land located in Zone V is the shoreline directly adjacent to San Francisco Bay.

Response to Comment 61-6

Construction of the Yosemite Slough bridge will require a CWA Section 404 permit due to construction activities that could discharge dredged material or fill material into Yosemite Slough. In this context, "dredged material" refers to material that is excavated or dredged from waters of the United States, including the redeposition of excavated material that is incidental to the excavation. The discussion for Impact BI-4c, on page III.N-67 of the Draft EIR, states that:

> … Construction of the piers' pilings would require the excavation of approximately 2,400 cubic yards of material from the slough; 167 cubic yards of material would be excavated from jurisdictional areas for construction of abutments and installation of riprap at the toe of the north and south bridge abutments.[793]

To excavate materials from the Yosemite Slough, review of such activities would be undertaken by the Dredged Material Management Office (DMMO), as described on Draft EIR pages III.M-42 through -43. Disposal of dredged materials would be managed in accordance with the goals of the San Francisco Bay Long Term Management Strategy (LTMS) for dredging, which call for a reduction of in-Bay disposal and an increase in upland beneficial reuse of dredged material. The disposal location for material dredged from Yosemite Slough would be determined through the DMMO/LTMS regulatory process. A CWA Section 404 permit would be required for in-Bay disposal of dredged material.

Response to Comment 61-7

As described on page III.M-23 of the Draft EIR, many pollutants can adhere to sediment particles. Dredging (if required for construction) and pile driving activities in the Bay to construct the Yosemite Slough bridge and the marina have the potential to disturb and resuspend sediments and pollutants associated with sediments within the Bay. Three hundred twenty (320) piles would be driven to support the Yosemite Slough bridge columns.

Impacts associated with construction within Yosemite Slough are described in Impact HY-1c, starting on page III.M-72 of the Draft EIR, and construction impacts to biological resources are primarily addressed in Section III.N (Biological Resources). Impact BI-4c, starting on page III.N-67 of the Draft EIR, addresses the impacts of bridge construction on federally protected wetlands. The impacts would be reduced to a less-than-significant level by implementing mitigation measures MM BI-4a.1 and MM BI-4a.2. Impact BI-12c, starting on page III.N-93 of the Draft EIR, addresses the impacts of Yosemite Slough bridge construction on essential fish habitat. The impacts would be reduced to a less-than-significant level by implementing mitigation measures MM BI-4a.1 and MM BI-4a.2, MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, and MM BI-12b.2. Also, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the Project on Yosemite Slough.

Mitigation measure MM BI-4a.1 requires the Project Applicant to obtain the appropriate permits prior to in-water construction activities, including but not limited to CWA Section 404 (Discharge of Dredged or Fill Material), CWA Section 401 (Water Quality Certification) and/or waste discharge requirements from the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), California Department of Fish and Game Section 1602 (Streambed Alteration Agreement), BCDC permits, and dredging permits obtained through the DMMO process. Such permits include requirements to protect biota, such as specifying work windows for dredging and pile driving activities, specifying receiving water limits for suspended sediment, dissolved oxygen, and other constituents potentially toxic to biota, and monitoring and reporting requirements. Mitigation measure MM BI-4a.1 also requires compensation for impacts to existing wetlands through creation or restoration of wetlands or aquatic habitat.

Mitigation measure MM BI-4a.2 requires implementation of best management practices to minimize sediment transport, such as working during periods of slack tide and low wind, and installing sediment curtains around the work area.

Mitigation measure MM BI-12.a.1 requires that in-water work occur between June 1 and November 30, to protect juvenile salmonids, groundfish and prey species. Mitigation measure MM BI-12a.2 requires all personnel involved in in-water construction activities to be trained by a qualified biologist experienced in construction monitoring. Mitigation measure MM BI-12.b.1 requires essential fish habitat avoidance and minimization measures, such as not dredging areas with submerged aquatic vegetation, especially where the action could affect groundfish, prey species, larval marine species, or habitat for native oysters. Mitigation measure MM BI-12.b.2 includes preparation of a seafloor debris minimization and removal plan for in-water construction or deconstruction activities. As required by the mitigation measure, activities will be monitored by a qualified biologist, and the plan will include measures to minimize the potential for debris to fall into aquatic habitats.

The impacts associated with marina dredging are discussed in Impact HY-6b, starting on page III.M-86 of the Draft EIR, and the impacts to biological resources are primary discussed in Section III.N (Biological Resources). Impact BI-18b, starting on page III.N-104, discusses the potential for marina maintenance dredging to adversely affect habitat or generate substantial increases in turbidity. Implementation of mitigation measures MM BI-18b.1 and MM BI-18b.2 would reduce maintenance dredging impacts to a less-than-significant level. The mitigation measures include surveys by qualified biologists, sediment plume modeling, compensatory mitigation if sediment plumes reach sensitive shoreline habitats, and implementation of best management practices for management of dredged material in accordance the LTMS for dredging.

In-Bay construction activities at HPS Phase II have the potential to resuspend sediment originating from the discharge of sediment-laden stormwater runoff from upland contaminated areas. This is addressed under Impact HY-1b, starting on page III.M-67 of the Draft EIR. Mitigation measure MM HY-1a.2 requires preparation of a Storm Water Pollution Prevention Plan to control erosion and the discharge of sediment-laden stormwater runoff into the Bay.

In-Bay and shoreline construction activities at HPS Phase II have the potential to disturb sediment or soil that may contain chemical contaminants originating from historic uses of the site. The potential impact related to disturbance of these contaminants is addressed under Impact HZ-10b, starting on page III.K-81 of the Draft EIR. Implementation of mitigation measure MM HZ-10b, which requires regulatory-agency approved workplans and permits for near shore (both in-Bay and shoreline) improvements, would reduce the impacts of resuspending contaminated sediment or soil originating from historic uses of the site to a less-than-significant level.

Maintenance dredging of the marina would be required to maintain sufficient water depth for berthing and maneuvering boats. The required frequency of maintenance dredging is currently not known, and would depend on factors such as the circulation and flushing characteristics of the marina, shoreline erosion, and sediment transport in the Bay. The duration of dredging activities would depend on the volume of sediment removed. The time frame for dredging activities would be determined through the regulatory permitting process described above.

Refer to Response to Comment 37-1 for information regarding the months of the year in which pile driving may occur. Conditions of the permits and implementation of the mitigation measures described above would prevent toxics associated with resuspended sediment from reaching levels that could adversely affect aquatic species.

Letter 62: Confederation of the Ohlone People (1/11/10)

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Letter 62: Confederation of the Ohlone People (1/11/10)

Response to Comment 62-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 62-2

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 62-3

Refer to Master Response 2 (Potential Native American Burial Sites) regarding the monitoring of sites that could contain prehistoric Native American cultural resources or human remains.

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Letter 63: Herrera, Catherine (1/11/10)

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Letter 63: Herrera, Catherine (1/11/10)

Response to Comment 63-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

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Letter 64: San Francisco Tomorrow (1/12/10)

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Letter 64: San Francisco Tomorrow (1/12/10)

Response to Comment 64-1

The Draft EIR contains comprehensive analyses of the Project's impacts on biological resources and aesthetics, which are determined to be less than significant with mitigation. The Project is wholly consistent with Proposition G, as noted on pages III.B-21 through III.B-22 in Section III.B (Land Use and Plans). The Project includes an integrated street system that directly connects the Bayview community with the Project, including multi-modal transit opportunities. Table III.C-7, page III.C-12, of the Draft EIR identifies the 10,730 jobs that the Project would provide. Research & Development, and Retail account for about 8,000 jobs. It is likely that a range of jobs, with a range of skills and education levels would be accommodated within Project employment. Further, as part of the Community Benefits Agreement, the Project Applicant would contribute to a workforce development fund that would be used for workforce development programs designed to create a gateway to career development for residents of the Bayview (page II-48 of the Draft EIR).

Response to Comment 64-2

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on the biological resources of Yosemite Slough and on the proposed wetlands of the Yosemite Slough Restoration Project.

Refer to Responses to Comments 31-5, 47-46, 47-73, and 47-76 for a discussion of potential aesthetic impacts associated with the Yosemite Slough bridge. Refer to Responses to Comments 47-26 through 47-30 for discussions of the Draft EIR's analysis of the Project's impacts on existing recreational resources and facilities. Also refer to Section F (Draft EIR Revisions) of this document for additional text that analyzes the impacts of the Project on the Yosemite Slough from both a recreational and aesthetics standpoint.

Response to Comment 64-3

The comment questions the need for the Yosemite Slough bridge and references a comment letter prepared by LSA Associates (Comments 82-23 through 82-34). Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 82-23 through 82-24 for detailed discussion of these issues.

The comment also expresses a series of recommendations for the Project, which are summarized and discussed individually below. Generally, a number of the proposed recommendations are already included as part of the Project.

a. The Project should provide good transit connection to T-Third, Caltrain, and Balboa Park BART Stations

As described in the Draft EIR, the Project's transit plan calls for implementation of a new BRT route connecting both the Candlestick Point and Hunters Point Shipyard developments to regional transit hubs, including the T-Third, the Bayshore Caltrain Station, and the Balboa Park BART Station. In addition, the

Project would extend the 44-O'Shaughnessy and the 48-Quintara-24th Street into the Project site, which provide connections to the Glen Park and 24th Street BART Stations, respectively. Finally, the Project proposes to implement both the CPX and the Hunters Point Express (HPX) bus service during peak periods, connecting the Project with Downtown San Francisco at or near the Transbay Terminal, which would provide direct connections to a number of other regional transit services. Overall, the Project would provide a high level of connectivity to regional transit.

b. Improve priorities on the T-Third instead of new express service

The T-Third light rail route currently has extensive transit signal priority systems, which reduce travel times and improve reliability. Further, service on the T-Third is expected to increase with opening of the planned Central Subway, which would extend the route from Fourth and King Streets in South of Market Area through a new subway to Chinatown. While this is an important and useful transit improvement for the area and the Project, the analysis has shown that both the CPX and HPX are useful and cost-effective supplements to the T-Third route, which is projected to approach its capacity in the long-term.

c. Local service should be on transit priority streets

Streets within the Project site have been designed to promote transit travel. Further, a number of transit routes expected to provide service to the Project, including the 23-Monterey, 24-Divisadero, and 44-O'Shaughnessy would be located on Palou Avenue, which is proposed to be improved with transit preferential signals. Although not all local transit routes provide service on transit preferential streets, failure to do so does not constitute a significant impact.

d. Transit should be "limited" service after leaving the study area or BRT

The CPX and HPX would provide express service between the Project site and Downtown San Francisco. The proposed BRT route would provide service similar to "limited" bus service between the Hunters Point Shipyard, Candlestick Point, and other regional transit hubs and destinations along the Geneva Avenue corridor. Converting other existing routes outside of the study area to "limited" service is not proposed by the Project and was not considered in the analysis.

e. "Limited" service should extend to Balboa around Yosemite Slough

Refer to response to "d" above.

f. Retail should be provided under residential mixed-use

The comment is acknowledged. No response is required.

g. Parking should be unbundled and limited to 0.5 spaces per unit and include carshare spaces

Residential parking is proposed to be "unbundled" whereby the cost of a parking space is not "bundled" into the cost of a housing unit. The maximum allowed parking ratio, as proposed in the Project's Design for Development, would be one space per unit, consistent with other neighborhoods in San Francisco. The Project does include space for carsharing.

h. All curbside parking should be metered 24/7

The Project's Transportation Plan assumes that all on-street parking would be paid parking (i.e., metered), however, the duration of stay (e.g., 30-minute, 1-hour, 2-hour durations) and extent of time limits (e.g., between 7 AM and 3 PM) have not been determined by SFMTA. In general, SFMTA determines the curb parking regulations to most-efficiently manage curb space while accommodating the area-wide parking demands. San Francisco does not currently have any locations with paid on-street parking in effect 24-hours a day.

i. Each condo should receive Muni fast pass

Each residential unit would receive an "eco-pass" which could be used on any regional transit system, including Muni and could operate similar to a Muni fast pass. The monthly cost of the eco-pass would be included in homeowners' dues, such that transit agencies would have a guaranteed source of ongoing funding and residents would pay no additional out-of-pocket cost each time they opted to use transit.

Response to Comment 64-4

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on the biological resources of Yosemite Slough, including mud flats, and on the proposed Yosemite Slough Restoration Project. The commenter suggests that the USACE or the USEPA should deny any permit for the bridge. Permitting issues are outside the scope of this CEQA analysis, and the Project applicant has already engaged both agencies in discussions regarding permitting this Project. The applicant will continue to work with the USACE to address regulatory issues regarding impacts to special aquatic sites such as wetlands and mud flats. Master Response 3 also addresses potential impacts of the bridge on wildlife in Yosemite Slough, including the restoration site.

Refer to Response to Comment 47-89 for a discussion of potential impacts to bird use of Double Rock. Although black oystercatchers could potentially nest on Double Rock, the presence of nesting western gulls (a potential predator of oystercatcher eggs and young) would discourage such nesting, and oystercatchers are not known to nest there currently. Therefore, there is a low potential for impacts to oystercatcher young. In addition, impacts to a single brood of oystercatchers would not substantially impact the regional population, and thus such impacts would be less than significant in the unlikely event that such impacts were to occur.

In response to the comment suggesting that the Draft EIR acknowledge that mud flats are considered Special Aquatic Sites under Section 404 of the CWA, the first paragraph of Impact BI-4a on page III.N-56 of the Draft EIR has been revised as follows:

> As detailed in Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]) and depicted in Figure III.N-5 (Impacts to Wetlands and Other Waters), through site grading, materials laydown, facilities construction, vegetation removal, and installation of shoreline treatments, Project activities at Candlestick Point would permanently impact 0.29 acre of tidal salt marsh and 4.34 acres of Section 404 "other waters,"~~;~~ relative to existing conditions (i.e., prior to completion of remediation efforts by the Navy). Both wetlands and mud flats, the latter comprising a subset of Section 404 "other waters," are considered Special Aquatic Sites under Section 404 of the *Clean Water Act*. …

With respect to comments regarding potential impacts of the bridge's approach roads on reptiles and the slender salamander, Impact BI-2 included the following statement on Draft EIR page III.N-53:

> Local abundance of these species may decline in some areas due to a reduction in dispersal (resulting from trails, roads, and increased vehicular traffic and human presence) and possibly increased vehicular mortality, but all six of these species are regionally abundant, and the Project's impacts would have a negligible effect on regional populations. In addition, the new and improved parkland components of the Project would provide new and/or enhanced habitat for reptiles and amphibians, which would be a localized beneficial impact in portions of the site.

Thus, this impact was analyzed in the Draft EIR.

The commenter suggests that the biological resources impacts should have been analyzed in the context of the state park's function to preserve biodiversity. In Section III.N (Biological Resources), the Draft EIR analyzed impacts to biological resources on the entire site, including areas both inside and outside of the CPSRA. The significance of effects was gauged biologically rather than from the perspective of whether they occurred on one side of the CPSRA boundary or the other.

The commenter disagrees with the criterion for significance of impacts to wildlife that was used in the Draft EIR (i.e., whether or not the impact would result in substantial impacts to regional populations), arguing that wildlife species impacted by the Project may be regionally common but rare in the City of San Francisco. Impacts to biological resources were analyzed from a biological perspective rather than from the perspective of legal geographic boundaries. For example, virtually all of the bird species that use the site, as well as aquatic species present in adjacent portions of the Bay, either can move throughout the San Francisco Bay area (and beyond) or, in the case of more sedentary birds, are components of widespread populations in which genes and individuals are exchanged among sub-populations throughout the region. Impacts to these species resulting in loss of a small number of individuals in one small portion of the species' regional distribution are not expected to have substantial consequences for the regional population. The commenter suggests that based on this significance criterion, "all wildlife species could be eliminated from the site and yet have no significant ecological impact." The Project will have no such impacts. Rather, as described in Impact BI-2 on pages III.N-50 to III.N-55 of the Draft EIR, proposed revegetation and other measures will result in increases in many of the wildlife species currently using the site, birds in particular. The commenter suggests that many of the common wildlife species on the site are prey species for migratory and/or predatory birds. Impacts to raptors were discussed in Impacts BI-7a and BI-7b on pages III.N-76 to III.N-78 in the Draft EIR. As discussed in these impact sections, raptors that specialize on avian prey will benefit from the substantial enhancements in bird habitat provided by the planting of numerous trees and shrubs on the site, while MM BI-7b, described on page III.N-78, will mitigate impacts to grassland-foraging raptors to less than significant levels by ensuring that adequate acreage of grasslands and associated prey species are maintained and managed on the Project site.

The commenter suggests that the Draft EIR did not adequately describe the value of grasslands on CPSRA to birds and criticizes the discussion of the benefits of planting trees and shrubs and creating areas of multi-layered vegetation as a "generic statement of bird habitat needs." The value of multi-layered vegetation to bird diversity is well known, yet the commenter is correct in pointing out that structurally simpler habitats, such as grasslands, do provide valuable habitat to some species. For this reason, the Draft Parks, Open Space, and Habitat Concept Plan provided in Appendix N3 of the Draft EIR includes extensive grassland restoration and management on the site, and MM BI-7b, described on page III.N-78, requires the

restoration and management of such grassland on HPS to maintain grassland-associated species on the site. Given impacts to 48 acres of relatively low-quality, heavily disturbed grassland (much of which can be more accurately described as ruderal habitat given the degree of disturbance) on CPSRA and HPS combined, the provision of 43 acres of higher-quality, managed grassland on HPS (with the maintenance of additional grassland on CPSRA outside the Project's impact footprint) will adequately maintain the presence of grassland-associated species on the site.

The commenter states that the Draft EIR did not adequately identify cumulative impacts of the Project on wildlife in San Francisco. As discussed above, Chapter III.N analyzed impacts from a biological perspective rather than from the perspective of legal geographic boundaries. Furthermore, as described in Impact BI-2, for many of the common species using the site, the Project will result in a substantial increase in habitat value.

The commenter criticizes the Draft EIR for suggesting that native grasslands specifically managed for grassland species would provide higher-quality foraging habitat for raptors than the existing habitat. While the commenter is correct that raptors can forage successfully in habitats dominated by non-native plants (e.g., non-native annual grasslands), much of the grassland on the Project site is heavily disturbed, ruderal habitat. Replacement of this habitat with native grassland, and management of this grassland specifically for grassland wildlife species, will enhance foraging conditions for raptors relative to existing conditions. The commenter suggests that burrowing animals, which provide raptor prey, will have to be controlled on HPS to prevent them from penetrating any "cover" that will have to be placed over contaminated areas on HPS. The Project does not propose any such control of burrowing animals, as the EIR does not identify any potential significant impacts requiring such measures. On the contrary, the Project will ensure that any contamination remedy involving a cover on HPS does not preclude maintenance of burrowing animals on the site.

The commenter also suggests that restoration of grassland areas entirely to native grasses is unlikely to be successful, as non-native plants will invade these grasslands. The applicant recognizes the potential difficulty in preventing invasions, but will still commit to managing these grasslands with the intent of controlling invasions by non-native plants. The Lead Agencies disagree with the commenter's suggestion that plant invasions of these grasslands will be so great that the new grasslands will not provide habitat values superior to the existing, highly disturbed grasslands. For example, restored native bunchgrass habitat at Sunnyvale Baylands Park in Sunnyvale has been maintained for more than a decade despite the abundance of surrounding non-native grassland, and such native grassland provides habitat that is used by a variety of birds and mammals.

The commenter makes suggestions regarding modifications to the Project layout to reduce impacts to grasslands, then suggests that residual impacts to grasslands be mitigated by creation of grasslands at other, smaller sites in San Francisco. There is no evidence that creation of grasslands at other locations, especially other locations lacking the space for contiguous grassland management that will be present along the southern portion of HPS, would be more successful at creating high-quality grassland habitat than where such restoration is proposed on HPS.

The commenter suggests that the Yosemite Slough bridge and its approach roads will constrain movement of terrestrial animals between portions of the CPSRA and around the Project site as a whole. Impact BI-2 in the Draft EIR acknowledges that the Project will result in impacts to movement by less mobile species.

However, as discussed in Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), the Yosemite Slough bridge has been designed to provide areas where wildlife can move under the bridge, and above the high tide line, to allow movement of wildlife past the bridge and its approach roads to continue.

The commenter suggests that large numbers of migratory birds may be impacted by vehicular strikes on the Project site. While some such mortality may occur, vehicle speeds on the Project site are not expected to be so high that bird-vehicle collisions will be frequent, and restrictions on use of the Yosemite Slough bridge to buses except on a limited number of game-days will further limit the potential for bird-vehicle collisions on the bridge. Furthermore, the benefits to birds of the substantial revegetation proposed by the Project will more than offset the low level of avian mortality expected to occur as a result of the Project.

Response to Comment 64-5

The commenter suggests that the removal of 23.5 acres of land from the CPSRA is a significant impact that was not adequately analyzed in the Draft EIR; that wildlife impacts from increased human use of the SRA were not adequately analyzed; and that the loss of 5.13 acres of grassland in the CPSRA is significant.

In the Draft EIR, Impact BI-2 did discuss the potential impacts of increased human use of the site on page III.N-50, as follows:

> … Common species and habitats would be affected through the removal and construction of buildings, removal of trees, shoreline improvements, installation of trails, roads, and other facilities, construction and operation of the stadium and Yosemite Slough bridge, increased foot and vehicular traffic, installation of towers, and operation of stadium lights. …

And also (regarding impacts to reptiles and amphibians on page III.N-53):

> Local abundance of these species may decline in some areas due to a reduction in dispersal (resulting from trails, roads, and increased vehicular traffic and human presence) and possibly increased vehicular mortality, but all six of these species are regionally abundant, and the Project's impacts would have a negligible effect on regional populations. …

And also (regarding impacts to birds on page III.N-53):

> … Increased human use of the Project site may reduce abundance in aquatic habitats along the immediate shoreline, but ample aquatic habitat is present around the Project site, and, even without restoration, no substantial changes in common waterbird abundance (particularly relative to regional populations) are expected as a result of the Project.

As discussed previously, the restoration and management of 43 acres of grassland on HPS specifically for grassland associated wildlife species will adequately offset impacts to 48 acres of highly invaded, and in many areas heavily disturbed, grassland on CPSRA and HPS combined.

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Letter 65: Joshua, Nyese (1/12/10)

Response to Comment 65-1

This comment primarily contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required. However, with respect to hazardous conditions at the Project site, refer to Section III.K (Hazards and Hazardous Materials) of the Draft EIR, as well as to Master Response 7 (Liquefaction), Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving through Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures), which also discuss hazardous materials, pile driving through contamination, conditions at the Parcel E-2 landfill, cleanup to unrestricted use (Proposition P), naturally occurring asbestos, ubiquitous metals issues, HPS radiation cleanup and restrictions, status of HPS CERCLA process, process for decisions and responsibility for cleanup, and notification regarding restrictions, contaminations, and releases or violations of mitigation measures.

Response to Comment 65-2

Refer to Response to Comment 84-11 regarding the public review period and the opportunities for public input.

The public noticing process for this Project has been in full compliance with the CEQA Guidelines, and has gone beyond the requirements of CEQA Guidelines Section 15087(a), which requires at least one of the following methods: in a newspaper of general circulation; in the area where the project is to be located; or direct mailing to owners and occupants of property contiguous to the project site. In addition to notifying responsible or trustee agencies, the Bayview Hunters Point communities were notified (all occupants and owners of zip code 94124, including the commenter). The City also published notices in the *San Francisco Examiner*. Surveys of residents to determine whether they are informed about the Project are beyond the requirements of the CEQA Guidelines.

Below is a description of the noticing process for the NOP and scoping meetings, and the same process was used to notice the availability of the November 2009 Draft EIR, as well as the public hearings on the Draft EIR. Chapter I (Introduction), Draft EIR page I-8, states:

> The Agency and the City distributed the NOP on August 31, 2007, announcing its intent to prepare and distribute an EIR (refer to Appendix A [Notice of Preparation (NOP) and NOP Comments]). The NOP was distributed to responsible or trustee agencies in accordance with Section 15082 of the CEQA Guidelines. In addition, the NOP was also sent to organizations, companies, and/or individuals that the Agency and the City believed might have an interest in the Project. A copy of the NOP is included in Appendix A1 to this EIR. …

Response to Comment 65-3

The Project has been planned to provide a variety of mixed uses that will provide employment and housing opportunities in a transit-oriented development. The Project was designed based on short- and long-term foreseeable economic and industry trends. It is anticipated that R&D space will continue to be in demand, despite the current economic downturn, as new technologies are developed. The Project is an integrated development that will be attractive to prospective employers given its proximity to transit.

Response to Comment 65-4

With respect to contamination on Candlestick Point Section III.K.2 (Setting Results of Environmental Investigations at Candlestick Point), page III.K-8 of the Draft EIR, states:

> According to the California Department of Toxic Substances Control (DTSC) EnviroStor and State Water Resources Control Board (SWRCB) Geotracker online databases, there are currently no known, unremediated, or active hazardous materials release sites at Candlestick Point.[276,277]

As such, no remediation is anticipated to be required at the Candlestick Point area.

Refer also to Master Response 7 (Liquefaction), Master Response 8 (Sea Level Rise), Master Response 9 (Status of the CERCLA Process), Master Response 12 (Naturally Occurring Asbestos), and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of liquefaction, sea level rise, the CERCLA process, and proposed further cleanup.

Response to Comment 65-5

Refer to Response to Comment 43-4 for a discussion of potential property acquisitions associated with roadway improvements identified for the Project.

Response to Comment 65-6

The proposed transportation changes, the Project's impacts to transportation, and mitigation measures to eliminate or reduce severity of impacts, where feasible, were presented in Section III.D (Transportation and Circulation) of the Draft EIR. Additional detail regarding transportation-related changes associated with the Project was provided in the Project's Transportation Study, included as Appendix D of the Draft EIR. Refer to Master Response 18 (Transit Mitigation Measures) for details regarding proposed roadway configuration and mitigation measures designed to reduce transit delays. Refer to Response to Comment 43-2, which describes the timing of the BTIP Draft EIR, which is unpublished at this time, relative to this Draft EIR.

Transportation-related construction impacts were presented in Impact TR-1, beginning on page III.D-67.

Response to Comment 65-7

The commenter suggests that the "transportation EIR" has not been completed. Section III.D (Transportation and Circulation) of the Draft EIR describes the transportation-related impacts of the Project. It is possible the commenter was referring to the BTIP Draft EIR, which has not been published. Refer to Response to Comment 43-2, which describes the timing of the BTIP Draft EIR relative to this Draft EIR.

The TDM program would be funded by revenues generated by the Project, through homeowners association dues, rents, etc. The commenter is correct that the BAAQMD is currently working on guidelines for measures to reduce greenhouse gas emissions, the policies included in the TDM plan are generally considered among the best practices with respect to managing travel demand.

Response to Comment 65-8

Parking impacts were described in Impact TR-35. As noted in Table III.D-20 (Summary of Project Parking Demand and Maximum Permitted Supply) and Table III.D-21 (Summary of Project Parking Shortfalls for No Minimum and Maximum Permitted Supply) the Project would result in a shortfall of parking of at least 2,316 spaces. Providing fewer parking spaces than expected peak demands is consistent with the City's "Transit First" policy and would likely serve to reduce automobile travel to and from the Project. However, as described on page III.D-124, it is possible that some drivers would seek available parking in the Bayview residential areas, increasing the peak occupancies of adjacent streets.

However, as also noted in the Draft EIR, the City of San Francisco does not consider parking supply a permanent physical condition, and changes in parking supply would not be a significant environmental impact under CEQA, but rather a social effect. Therefore, Impact TR-35 was determined to be less than significant.

The commenter notes that the City has been reducing its workforce of parking meter attendants and requests additional information related to the collection of parking fees for non-residential uses. SFMTA will continue to enforce parking meters in the Project area, similar to the rest of the City. Parking meter revenues are collected by SFMTA and go directly into SFMTA's budget.

Response to Comment 65-9

Transit priority signals would be equipped with devices to anticipate arrivals of transit vehicles, so that signal timings could be dynamically adjusted to improve the likelihood that transit vehicles get a "green" light. Similar systems have been deployed on other transit preferential streets in San Francisco, including Third Street and Mission Street. The effects to drivers at a given intersection are generally very minor; however, along an entire transit corridor, where the benefits to transit are cumulative, the technology can provide substantial improvements to transit travel times and reliability.

Response to Comment 65-10

The EIR and the Transportation Plan do not anticipate major changes to the TDM elements proposed as part of the Project. However, as the Project builds out and local, Citywide, and regional transportation patterns change, the TDM coordinator would have the flexibility to adjust the TDM Plan to better respond to traveler's needs and to get the best use out of the funding available.

Response to Comment 65-11

The forecasts for vehicle travel, transit usage, and bicycling and walking in the Draft EIR are based on forecasting models developed using the best scientific data available and have been validated based on observed behavior in the Bayview neighborhood and other neighborhoods in San Francisco.

The Project's TDM Plan, which would be approved as part of the Disposition and Development Agreement, would include a provision for monitoring the effectiveness of congestion-reducing and traffic-calming measures. As part of the annual monitoring of the measures and programs, the on-site coordinator, would, in cooperation with SFMTA, review the effectiveness of the Project's transportation measures and other traffic calming measures implemented in the project vicinity. If warranted, the on-site coordinator and SFMTA would consider implementation of additional traffic-calming and congestion-alleviating measures. Refer to Master Response 18 (Transit Mitigation Measures) for additional details and clarity on proposed mitigation measures designed to reduce transit delays and what would occur in the event that implementation of those mitigation measures would not adequately reduce delays.

Response to Comment 65-12

As shown in Figure III.B-3 of the Draft EIR, the Yosemite Slough bridge would serve as an open space amenity in that it would encourage pedestrian and bicycle access, along with transit (e.g., bus) access, through the use of a combination of hardscape (i.e., paved) and softscape (i.e., grassy) features. Figure III.B-3 has been revised in Response to Comment 31-3 to indicate the proposed Bay Trail around the Yosemite Slough. Within the width of the bridge, the wheel tracks would be paved, while strips in the center of the lane would be planted with grass. The bicycle and pedestrian paths would also have a combination of paved and unpaved surfaces, which would be complementary to the portion of the bridge intended for transit. The planted areas would either be stabilized with soil reinforcing fibers similar to in the dual-use lawn areas, which would provide shear strength to the soil, thereby minimizing rutting and potholes, or, alternatively, these areas could use a concrete turf block system that would not experience rutting or potholes.

In terms of oil and grease expected to be deposited by buses or cars, the grassy areas would be effective in breaking down pollutants, akin to the use of bioswales and stormwater planters in retention or detention basins. However, in the event that there are oil and grease spills, which would be more extensive that that deposited by normal use, some maintenance or replacement of the plantings may be required. Further, in terms of maintenance, the Yosemite Slough bridge, and other roadways, bikeways, and pedestrian walkways throughout the City would be maintained, as deemed necessary, by the City's Department of Public Works.

Response to Comment 65-13

Figure III.D-13 on page III.D-128 of the Draft EIR presents the Stadium Game Day Traffic Control Plan. Figure III.D-13 has been revised in Response to Comment 7-17 to reflect a transit only lane along Harney Way to Bayshore Boulevard This figure illustrates 26 intersections throughout the Project area and the Bayview neighborhood that would be either manually controlled from within the Stadium's Transportation Management System or by an on-site Traffic Control Officer. The manual control would allow for efficient egress of game attendees from the stadium.

As noted in the Draft EIR, post-game traffic congestion would be severe immediately following games. However, the purpose of the proposed traffic signal control system is to improve the efficiency of traffic egress from the stadium, thereby minimizing the amount of time that the existing adjacent neighborhood is affected by game day traffic.

Response to Comment 65-14

The signals that would be operated from within the stadium Transportation Management Center would be connected to each other and to the center via underground fiber-optic wires. This is the same technology that SFMTA uses in other parts of the City to connect traffic signals to their main Transportation Management Center. The proposed Transportation Management Center within the stadium has been coordinated with SFMTA and SFPD, who have agreed that this is the preferred approach. The system would be similar to the Transportation Management Center currently operational at AT&T Park, which operates on baseball game days.

Funding for the capital improvements for the Transportation Management Center, the new traffic signals, and their connections to the Transportation Management Center would be provided by the Project Applicant. Operations of signals on game days would be controlled by SFMTA and SFPD officers. Funding for game day operation of the Transportation Management Center would be provided by the San Francisco 49ers.

Response to Comment 65-15

The comment is an introductory remark to Comments 65-16 through 65-21. No further response to this comment required. Refer to Responses to Comments 65-16 through 65-21.

Response to Comment 65-16

Refer to Response to Comment 50-28, which describes revenue sources for SFMTA to operate expanded transit services to the neighborhood. The budget projects that Project-generated revenues would exceed the costs of providing services (including transit service), resulting in a surplus of revenue to the City for at least 30 years. As part of the Project approval process, SFMTA will be asked to approve transit service changes as envisioned in the Project transit service plan.

Response to Comment 65-17

The transit infrastructure proposed by the Project was described in the Draft EIR on pages III.D-40 through III.D-50. Infrastructure includes new transit vehicles, the Hunters Point Transit Center, Bus Rapid Transit facilities, the Yosemite Slough bridge, Transit Priority Signals along Palou Avenue and the Bus Rapid Transit route.

The existing routes that would have increased frequency are described in the Draft EIR on pages III.D-48 to III.D-50. In summary, the Project would include frequency improvements to the following routes:

- 24-Divisadero
- 29-Sunset
- 48-Quintara-24th Street

In addition, although not part of the Project, frequencies on the T-Third would increase as part of the Central Subway project. The Project would also include three new transit routes:

- Candlestick Point Express (CPX)
- Hunters Point Express (HPX)
- New Bus Rapid Transit connecting to Balboa Park BART Station (28L-19th Avenue)

Refer also to Response to Comment 50-28 and Response to Comment 65-16, which describe revenue sources for operating expanded transit services to the neighborhood.

Response to Comment 65-18

As described on pages III.D-48 and III.D-50 in the Draft EIR, the Project would include new express service to Downtown San Francisco from Candlestick Point (via the new CPX) and Hunters Point (via the new HPX). These routes would make stops within the Project site, and just outside the Project site (the CPX would include stops at Executive Park along Harney Way and the HPX would include stops near Area C/India Basin), before continuing with express (non-stop) service to Downtown San Francisco.

Refer also to Response to Comment 50-28 and Response to Comment 65-16, which describe revenue sources for operating expanded transit services to the neighborhood.

Response to Comment 65-19

Refer to Response to Comment 52-6 regarding the definition of "transit priority technology," plans for extension of the 24-Divisadero and potential extension of overhead wires.

The commenter also requests information regarding the extent to which residents have been informed of proposals. Over the past three years (as of the date of publication of this document), City staff have conducted more than 236 public meetings and workshops on the Project. In spring 2008, City staff held a series of four land use workshops on transportation, urban design and open space, which included the referenced proposal for Palou Avenue. Additionally, the City has conducted numerous Transportation Plan workshops with committees of both the PAC and CAC. Feedback has generally expressed a desire for better transit service, improved pedestrian amenities, and concern regarding project traffic impacts.

The commenter asks how the extension of the 24-Divisadero along Palou Avenue would affect residents of Palou Avenue and other adjacent streets. SFMTA Service Planning staff recommend the extension of the 24-Divisadero line, including the overhead wires, since it has been part of that agency's long-term transportation plan, supported by voters in 2003's Proposition K. For this Project, the extension of the 24-Divisadero provides a quiet, zero-emission and direct link to Bernal Heights, the central Mission, the Fairmont/outer Noe Valley area, the Castro (and Muni Metro subway), NoPa, Western Addition, the hospital hub along the Geary Corridor, and the Pacific Heights neighborhood that no other Muni line extension would provide, and does so without requiring a transfer. The impacts associated with the Project, including the proposed extension of the 24-Divsadero were described in Section III.D of the Draft EIR, particularly on Draft EIR pages III.D-106 to III.D-109, and III.D-125 to III.D-126. The impacts specifically of extending the overhead wires for the 24-Divisadero were found to be less than significant. In summer 2009, several street-specific community workshops were held in the Bayview Hunters Point and India Basin areas with focus on design and engineering treatment options for Palou Avenue among other corridors, and input from which has led to the final design decision for this street and the transit service of the 24-Divisadero line.

Response to Comment 65-20

The reference to the 54-Felton operating on Palou Avenue was a typographical error. The reference should be to the 44-O'Shaughnessy. In response to the comment, the text in Section II.E (Project Characteristics), page II-41, Item E, has been revised as follows:

> E. **Palou Avenue Transit Preferential Street.** One Muni line (24-Divisadero) would be extended along Palou Avenue to serve Hunters Point Shipyard Transit Center. Transit priority technology would be installed on Palou Avenue including installation of new traffic signals. This would improve transit travel times and reliability on the 24-Divisadero and also the 23-Monterey and ~~54-Felton~~ 44-O'Shaughnessy, which would continue to operate on Palou Avenue ~~but would not be extended into the Project~~.

The revised text is consistent with the description in the Transportation Study. The error was purely typographical and does not affect the transportation analysis.

Response to Comment 65-21

Refer to Response to Comment 65-18 for discussion of the proposed CPX and HPX Downtown Express routes. The Downtown Express routes would be new routes, and would not affect existing transit routes. Pages III.D-48 and III.D-50 in the Draft EIR describe the proposed travel routes.

Response to Comment 65-22

In general, street lighting improves pedestrian visibility and personal security. It improves safety by allowing pedestrians and drivers to see each other. Streetscape improvements and street lighting could also lead to reductions in crime and fear of crime, and increased pedestrian street use after dark[115].

In terms of lighting, pages III.E-69 through III.E-76 of the Draft EIR discusses the various types of lighting that would be provided at the Project site, including street lighting, lighting for public areas, security lighting, lighting for parking areas, lighting to highlight architectural elements, landscaping lighting, and building tenant and Project signage. In terms of providing adequate lighting that is also sensitive to environmental concerns, mitigation measure MM AE-7a.1 requires that lighting direction, lighting fixtures, and screening walls minimize light spill, and mitigation measure MM AE-7a.2 requires the use of low-level lighting. Further, as stated on page III.B-32 of the Draft EIR, the Project shall use "energy-efficient street lighting."

Response to Comment 65-23

Refer to Response to Comment 35-5 for a discussion of the adequacy of the off-site water system to deliver water to the Project site. The proposed off-site water distribution system would consist of 30- and 24-inch mains that will tie in to an existing 16-inch distribution main at four locations: Thornton Avenue, Williams Avenue, Paul Avenue, and Salinas Avenue. The improvements would occur in rights-of-way. All business owners would be notified by the Project Applicant in advance of any street blockages or other physical barriers that could affect customers' ability to patronize these businesses.

[115] Landscape and Urban Planning magazine, Volume 35, Issues 2-3, pages 193-201.

Response to Comment 65-24

Page IV-182 of the Draft EIR, second paragraph, under Variant 4: Utilities Variant, states that

> The wastewater treatment plants would use membrane bioreactors (MBRs) to treat wastewater, via a series of screens, anoxic and aerobic bioreactors which remove solids and convert nitrogen and ammonia compounds), a membrane filter, and disinfection via exposure to ultraviolet light …

Page IV-182 of the Draft EIR goes on to say, also in the second paragraph:

> … With approximately 1.1 mgd of anticipated wastewater flows, and assuming a 5 percent loss (via sludge disposal), the eleven decentralized plants would generate approximately 1.05 mgd of reclaimed water.[1258]

The timing of the supply of recycled water is described on Draft EIR page III.Q-5, third paragraph, under the description of the Local Water Supply Improvements. Relative to recycled water, the Draft EIR states:

> … Currently, the SFPUC is conducting a recycled water demand assessment on the east side of San Francisco. The assessment examines the potential uses of recycled water for irrigation, toilet flushing, and commercial applications.

The ultimate timing of the build-out of a recycled water facility to serve the Project depends on several factors and the successful completion of a number of phases. In the near term, SFPUC staff anticipates engaging in preliminary technical analysis regarding the siting of recycled water facilities to serve the Project, as well as other customers on the eastside of the City. These preliminary studies would be followed by a formal analysis of alternatives and identification of the preferred option, conceptual design, environmental review, detailed design, contracting, and construction. The SFPUC is interested in providing reclaimed water to appropriate uses within the Project site at the earliest practicable date relative to the occupancy of the development by a critical mass of reclaimed water users[116].

As reinforced under the topic of Water Conservation, Draft EIR page III.Q-5, last paragraph, states:

> In addition, the SFPUC is increasing its water conservation programs in an effort to achieve new water savings by 2018, consistent with the Phased Water Supply Improvement Program. The supplying of reclaimed water could be a component of the water conservation programs. …

Refer also to Response to Comment 86-4.

Response to Comment 65-25

As stated in mitigation measure MM UT-2 on Draft EIR page III.Q-18, which is provided in its entirety below, the Auxiliary Water Supply System (AWSS) shall be installed prior to the issuance of occupancy permits:

> *MM UT-2* Auxiliary Water Supply System. *Prior to issuance of occupancy permits, as part of the Infrastructure Plan to be approved, the Project Applicant shall construct an Auxiliary Water Supply System (AWSS) loop within Candlestick Point to connect to the City's planned extension of the off-site system off-site on Gilman Street from Ingalls Street to Candlestick Point. The Project Applicant shall construct an additional AWSS loop on HPS Phase II to connect to the existing system at Earl Street and Innes Avenue and at Palou and Griffith Avenues, with looped service along Spear Avenue/Crisp Road.*

[116] Personal communication between Michael Martin of the SFPUC and Derek Adams of the City and County of San Francisco Department of Public Works on March 12, 2010.

In general, infrastructure will be installed as development occurs, as illustrated by Figure II-16 of the Draft EIR. (Figure II-16 has been revised in Section F [Draft EIR Revisions] to reflect that site preparation activities would occur 1 to 2 years later than originally planned.) Lennar Urban is responsible for installation of the necessary infrastructure to support the Project. The Infrastructure Plan is described in Section II.E.4 as part of the Project Description. Further, the MMRP designates Lennar Urban (the Project Applicant) as the entity responsible for the implementation of mitigation measure MM UT-2, which includes the planning and design, construction, and operation of the on-site AWSS as specifically defined in the Infrastructure Plan. As further described in the MMRP, the City will be responsible for enforcement and monitoring of the AWSS, as well as the construction of the off-site improvements necessary to complete the system. In terms of notification, the community has been notified of this component of the Project as part of the overall environmental review and entitlement process.

Response to Comment 65-26

Comment noted. The quote from the Draft EIR is responded to in Response to Comment 65-27.

Response to Comment 65-27

Regulatory agency approved work plans will be developed for directing this work and will include measures for monitoring and managing hazardous materials and transporting impacted material appropriately, if present. Refer to Impacts HZ-1b, HZ-2a.2, HZ-8, HZ-10, HZ-12, and HZ-15 and mitigation measures MM HZ-1b, MM HZ-2a.2, and MM HZ-10b for further details.

Response to Comment 65-28

Refer to Response to Comment 43-4 for a discussion of potential property acquisitions associated with construction and/or implementation of the Project. There are five blocks with privately owned parcels which, if not acquired by the developer, would be allowed to develop via an owner Participation Agreement in a manner consistent with the BVHP Redevelopment Plan or allowed to continue under their existing use as a non-conforming use. Of these blocks, one block zoned RH-2 is vacant and there are no residences on the four other blocks zoned M-1 (which are contiguous). There would be no displacement of residents or businesses unless they agree to sale of the property.

Response to Comment 65-29

As stated on Draft EIR page II-50, last paragraph:

> Demolition activities at Candlestick Point would include demolition of the existing Candlestick Park Stadium, associated parking lots, existing infrastructure, and structures on adjacent properties to be acquired, as well as demolition of the Alice Griffith public housing. Minor utilities would be abandoned in place or removed if they would interfere with installation of new infrastructure. Those include existing small-diameter combined sewer, the CPSRA sewer force main, storm drainage facilities, and low-pressure water main. Lennar Urban would be responsible for all demolition at Candlestick Point.

Demolition activities are described in Draft EIR Section II.F.1 (Abatement and Demolition), which is provided on pages II-50 through II-55 and includes associated tables and figures.

Response to Comment 65-30

The comment is acknowledged. No response is required.

Response to Comment 65-31

The City will not accept transfer of any property until the radiological cleanup, including radiologically impacted buildings, has been completed and approved by the regulatory agencies. Refer also to Master Response 9 (Status of the CERCLA Process) and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the radiological investigation and cleanup process.

Response to Comment 65-32

Refer to Response to Comment 66-17 regarding radiological contamination of the site. Refer also to Master Response 13 (Post-Transfer Shipyard Cleanup) for further detail on radiological cleanup and ICs.

Response to Comment 65-33

If soil exceeds the cleanup level developed as part of the CERCLA process (refer to Master Response 9 [Status of CERCLA Process]) it would be managed and transported offsite for disposal at an appropriately licensed disposal facility in accordance with state and federal laws as indicated on page III.K-40 of the Draft EIR. Refer to Impacts HZ-1, HZ-3, and HZ-6 and mitigation measures MM HZ-1b.

Response to Comment 65-34

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving though Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a comprehensive discussion of cleanup on the HPS Phase II site, who will be responsible for the cleanup, the Parcel E-2 landfill, notification procedures, and site restrictions.

Response to Comment 65-35

Refer to Master Response 8 (Sea Level Rise) about the methodology for evaluating sea level rise. As reported in Response to Comment 52-4, soil will be imported from approved sources and will meet the guidelines for construction fill as specified by local, regional, and state guidelines. The type and extent of testing specified by these permits and guidelines will be followed. Transportation will be by truck and/or barge. California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), has identified procedures to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. In addition, Amendments to San Francisco Health Code Article 31, to include all of Hunters Point Shipyard, will require the preparation of a Soil Importation Plan that describes the procedures to be used to ensure that imported soil does not exceed established thresholds.

Response to Comment 65-36

This comment contains introductory, closing, or general background information that does not contain a direct comment on environmental issues. No response is required. Further, while the commenter generally refers to incorrect maps and incorrect street references, there is no specific reference to where there is a potential inaccuracy; therefore, no response can be provided.

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Letter 66: Tello, Juana (1/12/10)

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Letter 66: Tello, Juana (1/12/10)

Response to Comment 66-1

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of health disparities in HPS/Bayview Area.

Response to Comment 66-2

The comment correctly cites the Draft EIR; therefore, the comment is acknowledged. No response is required.

Response to Comment 66-3

Refer to Master Response 9 (Status of the CERCLA Process) and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the radiological investigation and cleanup process.

Response to Comment 66-4

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the radiological investigation and cleanup process.

Response to Comment 66-5

Soil and groundwater contamination and cleanup are addressed as part of the CERCLA process (refer to Master Response 9 [Status of CERCLA Process] and Master Response 13 [Post-Transfer Shipyard Cleanup]). Barring a seismic or earth moving event (refer to Master Response 6 [Seismic Hazards] and Master Response 7 [Liquefaction]), soil typically remains in place though contaminants in soil may leach to groundwater or volatilize into soil gas and then migrate depending on the chemicals and conditions present. The CERCLA investigation and cleanup process takes these factors into account in developing protective remediation and monitoring programs which are approved by state and federal regulatory agencies.

Response to Comment 66-6

For diagrams on the current conditions at Parcels E and E-2 refer to Barajas and Associates, *Final Revised Remedial Investigation Report for Parcel E Hunters Point Shipyard*, May 2, 2008; and Engineering/Remediation Resources Group, *Draft Final Revised Remedial Investigation Feasibility Study Report for Parcel E-2*, February 1, 2009. These reports are on file for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103 as part of File No. 2007.0946E. The future Remedial Designs for Parcels E and E-2 will detail the methods, such as excavation, and specifications, such as depths, to be used in cleanup of these parcels.

Response to Comment 66-7

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) for discussions of an unrestricted use alternative and Proposition P, respectively.

Response to Comment 66-8

As the Draft EIR states in Impact HZ-8, the FFA Signatories overseeing the remediation program have required various interim measures to be put in place in areas of ongoing remediation to ensure persons outside ongoing remediation sites are not at risk. Securing areas still undergoing remediation with fencing is one standard security measure required. The purpose of the fence is to provide site security, preventing unauthorized access (refer to Table III.K-2, Methods to Reduce Effects of Conventional Excavation/Temporary Stockpiling). The fence is not intended to prevent airborne contaminants from spreading; other measures discussed in Impacts HZ-6b and HZ-15 serve that purpose. Figure II-16 presents the proposed site preparation schedule. Refer to this figure, and note that fencing will be one of many measures used whenever any of the depicted sites have ongoing physical remediation. (Figure II-16 has been revised in Section F [Draft EIR Revisions] to reflect that site preparation activities would occur 1 to 2 years later than originally planned.)

The remediation work will be conducted following Remedial Design work plans or Risk Management Plans that have been approved by regulatory agencies and will outline the methods that will be used to minimize dust emissions. The Remedial Designs will specify the details for the fencing to be used and will include plans and diagrams outlining where the fencing will be placed relative to occupied and public areas. A typical fence used for this purpose would be wire mesh fencing approximately 7.5 feet tall with the fence posts encased in concrete if the fence will remain in place for an extended length of time. The fence will be signed with notification that hazardous materials are present and who to contact for more information. Refer to Impacts HZ-1a, HZ-2a, HZ-10, HZ-12, HZ-15, and HZ-17 and mitigation measures MM HZ-1a, MM HZ-2a.1, MM HZ-10a, MM HZ-10b, MM HZ-12, MM HZ-15, and MM HZ-17 for further details. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of notice provisions for occupants.

Many factors are used to determine how development is phased, but in all instances, development will not occur in a location if doing so would be inconsistent with the restrictions on the parcel as required by the Navy cleanup documents approved by the regulatory agencies. As stated in the Draft EIR, those restrictions are designed to protect not only occupants and visitors on the parcel itself, but also those on nearby property (Section III.K.4, page III.K-73). As to the remediation of Parcels E and E-2, the Navy controls that remediation, and it is not a part of the Project. A timeline with the requested specificity is not available at this time, but refer to Impact HZ-8 for more detail on the handling of related impacts.

The criteria used in determining the development timeline include the amount of environmental investigation that has been conducted, the contamination present on each parcel and the cleanup that has been completed to date. Master Response 9 (Status of CERLCA Process) presents a summary of the CERCLA cleanup process and the status of each parcel in the various stages of the CERLCA cleanup process. Parcels B and G have decision documents or Records of Decision completed and approved by

the regulatory agencies, have already undergone cleanup actions, and are undergoing remedial design for final cleanup. These parcels will gain closure from the regulatory agencies once cleanup has been completed at which time property transfer and redevelopment can commence. Parcels which are still undergoing decision document preparation will not be ready for transfer until cleanup has been completed and approved at some date in the future.

Figure II-17 (Proposed Building and Parks Construction Schedule) of the Draft EIR illustrates the phasing of parks and open space relative to the other development proposed as part of the Project. The first two phases of development, expected to be completed by 2023, would develop HPS with residential uses, neighborhood retail, approximately half of research and development uses, artists' studios/art center, more than half of community services uses, and a stadium. By 2027, the same types of uses would be completed at Candlestick Point (but without a stadium). Therefore, neighborhood services would be developed as residential uses are developed. (Figure II-17 has been revised in Section F [Draft EIR Revisions] to reflect that building construction activities would occur 1 to 2 years later than originally planned.)

Response to Comment 66-9

The comment that building renovations are likely to expose Bret Hart Elementary School to hazardous building materials mischaracterizes the analysis in the Draft EIR. As the commenter notes, Section III.K.4, Draft EIR page III.K-105, states that:

> … Demolition or renovation of existing structures could result in potential exposure of students, teachers, staff, and visitors at the school to hazardous building materials during construction, without proper abatement procedures. …

That statement is offered to describe Impact HZ-18a, which is considered less than significant with mitigation. The Draft EIR continues:

> … To reduce the potential for the school site to be exposed to hazardous air emissions, the Project would comply with regulations and guidelines pertaining to abatement of and protection from exposure to asbestos and lead, as discussed under Section III.K.3 (Regulatory Framework) would be complied with, as appropriate. Implementation of applicable regulations and standards would ensure that hazardous air emissions from structures to be demolished would be minimized. Therefore, impacts would be less than significant, and no additional mitigation is required.

For a discussion of dust monitoring under the Dust Control Plan and Asbestos Dust Mitigation Plan as well as clarification of protocols for providing notification to property owners, schools, and residents under the plans, refer to Master Response 12 (Naturally Occurring Asbestos), and Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues).

Also refer to Impacts HZ-2a.2, HZ-10, and HZ-15 and mitigation measures MM HZ-2a.2 and MM HZ-10 for further details.

Response to Comment 66-10

As stated in Response to Comment 66-8, the purpose of the fence is to restrict access to the remediation area. The fence will not be used to prevent airborne contaminants from spreading. The remediation work will be conducted following remedial action work plans or Risk Management Plans that have been approved by regulatory agencies and will outline the methods that will be used to minimize dust emissions

and manage risks associated with the remediation activities. Required worker training and worker protective gear to be used to protect workers from radiological and other contaminants will be outlined in Project-specific Health and Safety Plans. Potential risks to residents on neighboring parcels will be managed through proper site control, monitoring and regulatory oversight. Monitoring results will be available to the community through Navy and City community participation programs and through regulatory agencies. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of additional notice requirements to be implemented in the community.

Monitoring will take place as determined necessary by the BAAQMD pursuant to mitigation measure MM HZ-15. It is likely that monitoring will be performed by private contractors under the supervision of government agencies. For a discussion of dust monitoring under the Dust Control Plan and Asbestos Dust Mitigation Plan, as well as clarification of protocols for providing notification to property owners, schools, and residents under the plans, refer to Master Response 12 (Naturally Occurring Asbestos), and Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues). Also refer to Impacts HZ-2a.2, HZ-10, and HZ-15 and mitigation measures MM HZ-2a.2 and MM HZ-10 for further details.

The Navy's remediation of Parcels E and E-2 and the Occupational Safety and Health Agency (OSHA) requirements pertaining to that work are not part of the Project. Remediation work on sites containing radiological contamination is ongoing as part of the Navy cleanup program. That remediation work and the OSHA requirements applicable to it are not part of the Project. Prior to property transfer and development, all radiological cleanup will be complete. The Navy will use control measures listed in Table III.K-2. Such measures include, for example, air monitoring and engineering controls, health and safety plans, covering soil stockpiles, etc. Refer to the table and specifically to methods designated to reduce environmental effects for Parcels E and E-2 for further detail. Also refer to Response to Comment 66-8 for a discussion of impacts associated with phased development. Refer to Master Response 13 (Post Transfer Shipyard Cleanup) for more detail on the Navy's radiological cleanup. With respect to protecting neighboring residents, refer to above regarding exposure to toxic dust.

The commenter references Figure III.K-25; however, since the figure numbering for Section III.K (Hazards and Hazardous Materials) ends with Figure III.K-5, it is likely the commenter intended to reference Figure III.K-5. The commenter requests a figure that shows the Navy Parcels overlain on the Project's land use plan. Figure III.K-5 (Hunters Point Shipyard Phase II Navy Parcel Overlay) and Figure III.K-6 (Status of CERCLA Process) provide such illustrations.

Response to Comment 66-11

Construction debris would be sorted and temporarily stockpiled in areas slated for development in later years. Any reusable materials would be retained for later reuse, any recyclable materials would be transported to an approved recycling facility, and non-reusable construction debris would be removed within approximately five years and disposed of at an approved landfill that has been permitted for disposal of such material. Miscellaneous debris, such as non-recyclable metal debris, building materials containing lead paint and asbestos, treated wood materials considered potentially hazardous, glass, plastic and electronics (needing specialized recycling), would be disposed of in accordance with all hazardous waste disposal laws. It is not anticipated that any construction debris would be moved between Candlestick Point and Hunters Point Shipyard.

All stockpiles would be established and maintained using standard best management practices as described in the Risk Management Plan (RMP) and Soil and Groundwater Management Plan (SGMP), respectively. The SGMP for the Candlestick Point site would be prepared by the Applicant, as required by City Ordinance (in Articles 22 and 31 of the Municipal Code) and approved by the City prior to any site construction as part of the demolition and grading permitting. The RMP would be prepared as part of the ROD, which is a public document that explains which cleanup alternatives will be used for a Superfund site. The ROD is created from information generated during the Remedial Investigation/Feasibility Study (RI/FS). A ROD contains site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, scope and role of response action and the remedy selected for cleanup. The RMPs for Hunters Point site will be completed by the Applicant and approved by the Regulatory Agencies prior to Navy parcel transfer as required by the site specific ROD documents for each Navy parcel.

Specific information regarding the constituents of the debris, the storage methodology, the storage locations, and disposal methods would be provided in the RMP and SGMP prior to site demolition or construction. In terms of haul routes, it is anticipated that trucks would primarily use Harney Way to enter or leave Candlestick Point and the Innes/Hunters Point Blvd/Evans corridor to enter or leave Hunters Point Shipyard.

Response to Comment 66-12

For a discussion of residual contamination following cleanup, refer to Master Response 13 (Post-Transfer Shipyard Cleanup).

The criteria used to determine safe levels of exposure are outlined in health risk assessments conducted as part of the RI step of the CERCLA process explained in Master Response 9 (Status of the CERCLA Process). The risk assessments and RI reports are approved by state and federal regulatory agencies. For a discussion of the contaminants in soil on each parcel and the criteria used to determine safe levels of exposure, refer to the reports referenced in Section III.K.2 of the Draft EIR which are available for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103, as part of File No. 2007.0946E. To see a diagram of the demarcation layer described on page III.K-18, refer to the *Final Remedial Design Package Installation Restoration Sites 7 and 18, Parcel B, Design Basis Report* by Chaduxt, January 8, 2010.

Response to Comment 66-13

Refer to Master Response 6 (Seismic Hazards) and Master Response 7 (Liquefaction) for a discussion of seismic hazards and liquefaction potential at the site. As discussed in those master responses, any approved covers or caps will be designed with site-specific geotechnical studies to minimize potential breach, and the covers are intended to limit exposure and be protective of human health even where temporary breaches may occur. Impact HZ-23 also discusses the potential for harmful exposure to hazards from reasonably foreseeable upset and accident conditions during operation of the project (see Impact HZ-23, Draft EIR pages III.K-114 to -115). The discussion of that impact, which is assessed to be less than significant, includes reference to San Francisco's Emergency Response Plan and Hazard Mitigation Plan.

Those plans describe the City's actions during an emergency response, including earthquake-induced emergencies, as well as risks from hazards and mitigation strategies to minimize the risks. Refer also to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) regarding the notice that will be given to property owners, residents, and neighbors regarding environmental restrictions and other cleanup issues.

With regard to an emergency evacuation plan for the Project, the General Plan states that the City ensures fire safety primarily through provisions of the Building Code and the Fire Code. The final building plans for any new residential project greater than two units are reviewed by the San Francisco Fire Department as well as the Department of Building Inspection in order to ensure conformance with these provisions. Depending on building type, conformance with these provisions may include development of an emergency procedure manual and an exit drill plan. In this way, potential fire and safety hazards would be mitigated during the permit review process.

For high-rise projects over 75 feet, Section 12.202(e)(1) of the *San Francisco Fire Code* requires that all owners of buildings over 75 feet tall establish procedures to be followed in case of fire or other emergencies. These procedures are to be reviewed and approved by the fire chief. Additionally, Project construction would have to conform to the provisions of the Building and Fire Codes, which require additional life-safety protections for high-rise buildings.

Response to Comment 66-14

Refer to Engineering/Remediation Resources Group, *Draft Final Revised Remedial Investigation Feasibility Study Report for Parcel E-2*, February 1, 2009 for a detailed description and illustration of the groundwater extraction system. This report is on file for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103, as part of File No. 2007.0946E.

Response to Comment 66-15

Refer to Engineering/Remediation Resources Group, *Draft Final Revised Remedial Investigation Feasibility Study Report for Parcel E-2*, February 1, 2009 for an explanation of the currently existing cap and landfill gas collection system. This report is on file for public review at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, as part of File No. ER06.05.07, or at the Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA 94103, as part of File No. 2007.0946E. If the landfill will be permanently capped as part of the future remedial actions (that are not part of the Project), the details of that cap configuration and specifications will be part of the Remedial Design which would be available to community members for review once it is completed by the Navy.

Response to Comment 66-16

For a discussion of the steps involved in the CERCLA process, refer to Master Response 9 (Status of the CERCLA Process). The Proposed Plan describes cleanup alternatives evaluated in the Feasibility Study and explains the preferred alternative. A public meeting will be held about the Proposed Plan to provide information to the public and allow the public to comment on the preferred cleanup alternative. The ROD then documents and publicizes the selected cleanup alternative and includes a summary and responses to

all comments on the Proposed Plan. Thus, it is not accurate to state that the ROD informs the Proposed Plan and could uncover more areas of severe toxicity. The Proposed Plan is not prepared until the RI (which is the stage in the process where areas of toxicity would be "uncovered") and FS are complete. Further, as stated in Section III.K.1 on page III.K-2 of the Draft EIR, the Navy's ongoing remedial activities are not part of the Project, and it is not the goal of the EIR to assess the adequacy or impacts of those remediation actions.

Response to Comment 66-17

As stated in the Setting portion of the Hazards Section of the Draft EIR, the primary purpose of the HRA was to investigate the radiological contamination of the area and designate sites as "impacted" or "non-impacted (Section III.K.2, page III.K-27). All sites designated as "impacted" have been further investigated, and the Navy will remediate these sites prior to transfer. Before any Project development may occur, the sites will receive clearance from federal and state agencies for unrestricted use, including soil disruption, except in specific cases where the use of ICs prohibiting soil disruption are authorized by the regulatory agencies overseeing the CERCLA remediation process. The overall conclusion of the HRA was that low levels of radioactive contamination existed at certain sites within HPS, but there was no imminent threat or substantial risk to tenants, the environment of HPS, or the local community (Section III.K.2, page III.K-27). In Impact HZ-6b, the Draft EIR acknowledges that movement of soil containing hazardous material could result in impacts from human exposure to dust. This impact is rendered less than significant with mitigation through the legally enforceable environmental restrictions required to be in place before any Project development occurs (Refer to Impact HZ-6b, page III.K-68). As the Draft EIR explains, such restrictions will incorporate dust control measures, and will be approved by the FFA Signatories as being sufficient under CERCLA and other applicable laws to ensure protection of human health and the environment both during and after the development activities (Section III.K.4, pages III.K-50 and III.K-68). Additionally, regulatory-agency-approved work plans developed for directing this work will include measures for controlling site access, monitoring workers, screening materials for radionuclides, and handling radiologically impacted material appropriately, if present. Refer to Impacts HZ-1b, HZ-2a.2, HZ-8, HZ-10, HZ-12, and HZ-15 and mitigation measures MM HZ-1b, MM HZ-2a.2, and MM HZ-10b for further details. Refer also to Master Response 13 (Post-Transfer Shipyard Cleanup) for further detail on radiological cleanup and ICs.

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Letter 67: Harvey, Carol (1/12/10)

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Letter 67: Harvey, Carol (1/12/10)

Response to Comment 67-1

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment 67-2

The comment refers to the interaction of sea level rise and earthquakes, with reference to aquifers below Parcel A and B and potential creation of a retention wall, earthquake amplification, liquefaction, and the release of toxic contaminants. Refer to Master Response 6 (Seismic Hazards); Master Response 7 (Liquefaction); Master Response 8 (Sea Level Rise); Master Response 9 (Status of the CERCLA Process); Master Response 11 (Parcel E-2 Landfill); Master Response 12 (Naturally Occurring Asbestos); Master Response 13 (Post-Transfer Shipyard Cleanup); and Master Response 14 (Unrestricted Use Alternative) for discussions on the interrelationships between potential liquefaction, amplification, and toxics. Refer to Impacts HZ-1a and HZ-2a and mitigation measures MM HZ-1b and MM HZ-2a.1 for further details.

Response to Comment 67-3

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), and Master Response 13 (Post Transfer Shipyard Cleanup) which discusses the status of HPS CERCLA process, hazardous materials, conditions at the Parcel E-2 landfill, naturally occurring asbestos, and process for decisions and responsibility for cleanup.

Response to Comment 67-4

The comment is acknowledged. No response is required. However, with respect to hazardous conditions at the Project site, refer to Section III.K (Hazards and Hazardous Materials) of the Draft EIR, as well as Master Response 7 (Liquefaction), Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving though Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures), which also discuss hazardous materials, pile driving through contamination, conditions at the Parcel E-2 landfill, cleanup to unrestricted use (Proposition P), naturally occurring asbestos, ubiquitous metals issues, HPS radiation cleanup and restrictions, status of the HPS CERCLA process, process for decisions and responsibility for cleanup, and notification regarding restrictions, contaminations, and releases or violations of mitigation measures. In terms of potential impacts to biological resources, refer to Section III.N of the Draft EIR, which identifies numerous mitigation measures to avoid or reduce impacts to biological resources, including those that would actually maintain or increase certain habitat types.

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Letter 68: Technical Assistance Services for Communities (1/12/10)

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Letter 68: Technical Assistance Services for Communities (1/12/10)

Response to Comment 68-1

The comment expresses concern about exposure of construction workers, occupants, and schools to hazardous materials, as well as concern about oversight of contractors performing remedial activities in the case of Early Transfer. Please refer to Section III.K.4 of the Draft EIR for a discussion of these potential impacts and the associated mitigation measures. In particular, refer to mitigation measures MM HZ-1a, MM HZ-1b, MM HZ-2a.1, and MM HZ-2a.2 for information on mitigating potential impacts to construction workers and the public; refer to MM HZ-18 for information on mitigating potential impacts related to the proximity of schools; and refer to MM HZ-18 for an analysis of potential impacts and mitigation associated with Early Transfer. Implementation of the above mitigation measures would ensure that potential impacts from construction activities would not expose construction workers or the public (including school aged children) to hazardous materials in the result that early transfer of the HPS II properties were to occur. Refer also to Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a detail on the mechanisms of enforcing the mitigation measures. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of related notice requirements.

Response to Comment 68-2

Refer to Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a discussion of the mechanisms of oversight and enforcement of environmental restrictions and mitigation measures. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of notification of property owners and residents regarding environmental restrictions, and also of notification requirements and mechanisms to inform nearby property owners, residents, and schools of asbestos dust levels when they exceed standards, and of the discovery of previously unidentified contaminants. Refer to Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup, which discuss hazardous materials, conditions at the Parcel E-2 landfill, ubiquitous metals issues, and HPS radiation cleanup and restrictions. Impact HZ-2 addresses the potential to encounter previously unidentified hazardous material during excavation, and implementation of mitigation measures MM HZ-2a.1 and MM HZ-2a.2, which provide for community notification, renders this potential less than significant. Refer to Response to Comment 66-8 for a discussion of the protection of occupants in connection with phased development. With respect to cumulative impacts, the Draft EIR evaluated the potential for cumulative impacts of hazardous materials in various contexts. Refer to Section III.K.4, pages III.K-118 through -124 for a discussion of cumulative impacts of hazardous materials, and also to Section III.H.4, pages III.H-37 through -39 for a discussion of cumulative impacts related to air quality.

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Letter 69: People Organized to Win Employment Rights (1/12/10)

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Letter 69: People Organized to Win Employment Rights (1/12/10)

Response to Comment 69-1

Refer to Master Response 6 (Seismic Hazards) and Master Response 7 (Liquefaction) for a discussion of hazards associated with earthquakes and liquefaction, and measures to be taken to ensure public safety. Refer to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), Master Response 13 (Post-Transfer Shipyard Cleanup), and Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) regarding concerns with toxins, cleanup, the Parcel E-2 landfill, and notification issues. For the requested images, refer to Figure III.K-6 (Status of CERCLA Process) in connection with the information on toxins provided in Master Response 9 and Master Response 13. Refer to Response to Comment 55-3 for a discussion of sources of soil to be used for backfilling. Refer to Master Response 5 (Public Health) for a discussion of Bayview health patterns related to environmental justice concerns.

Response to Comment 69-2

Refer to Response to Comment 52-7 regarding neighborhood-serving retail.

Response to Comment 69-3

In terms of potential impacts of the Project on existing businesses, Draft EIR pages V-14 through -28, including the supporting appendix material contained in Draft EIR Appendix U, provide a detailed evaluation of secondary land use effects. As stated on page V-14:

> Secondary land use effects can also include economic and social changes. Economic and social changes are not in themselves significant impacts on the environment; however, a physical change in the environment caused by economic and social factors attributable to a development could sometimes result in a reasonably foreseeable indirect environmental impact, such as urban decay or deterioration. …

Impacts of construction activity on the transportation network are described on Draft EIR pages III.D-67 through -69. Buildout of the Project would occur over a 20-year period, and therefore details related to construction activities are not currently known. In terms of street closures, page III.D-68 of the Draft EIR states that:

> In general, construction related transportation impacts would include impacts in the immediate vicinity of the development project under construction, on roadways within the Project site, and cumulative construction traffic impacts along the roadways in the Bayview Hunters Point neighborhood. Since the Project includes building construction as well as construction of a new street system and transit route extensions into the Project site, all Project construction operations would include plans for the closure of traffic/parking lanes and sidewalks adjacent to construction sites. The closure of sidewalks and parking lanes could last throughout the entire construction phase for each building or group of buildings. It is possible that more than one location within the Project site could be under construction at any one time and that multiple travel lane closures may be required.

However, mitigation measure MM TR-1 requires the implementation of a Construction Traffic Management Program to minimize the possibility of conflicting impacts on the roadway system, while safely accommodating the traveling public in the area. Importantly, one component of this Program is to

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.

At this stage in the Project entitlement process, there is no specific map listing all street closures or lane closures, nor is information available as to the length of time of each closure; typically, this information becomes available when the construction schedule is more fully refined. However, as part of the Construction Traffic Management Program, this information could be provided. This comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

Lastly, in terms of the business closures associated with the Fillmore/Western Addition, the information is not relevant to the analysis of the impacts of this Project at this Project site. As previously mentioned, an Urban Decay Analysis was conducted for this Project, and the findings are presented on pages V-14 through V-28 of the Draft EIR, including the supporting appendix material.

Response to Comment 69-4

The developer selection process, a competitive process completed over ten years ago, is not the subject of the Draft EIR. The commenter references news articles about Lennar Urban and asks what measures are in place to ensure the correct mitigation procedures are followed. Refer to Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a discussion relating to enforcement of mitigation measures and other restrictions. Refer also the Mitigation, Monitoring and Reporting Plan (MMRP) for a detailed table which identifies the responsible implementing, enforcing and monitoring parties for each mitigation measure identified in the EIR.

Response to Comment 69-5

Refer to Response to Comment 50-14 regarding the proposed stadium.

Letter 70: Tello, Jesse (1/12/10)

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Letter 70: Tello, Jesse (1/12/10)

Response to Comment 70-1

As part of the Community Benefits Agreement, a component of the DDA that will be approved by the Agency at the time of Project approval, the Project Applicant will contribute to a workforce development fund that will be used for workforce development programs designed to create a gateway to career development for residents of the Bayview community. The Project would be developed in four major phases: Phase 1 would be completed in 2019, Phase 2 would be completed in 2023, Phase 3 would be completed in 2027, and Phase 4 would be completed in 2031. The stadium and the majority of the commercial and R&D development, which will provide jobs, would be completed by the end of the second phase.

Response to Comment 70-2

Refer to Master Response 19 (Proposed BAAQMD Guidelines) for an updated analysis of cumulative impacts associated with TAC and $PM_{2.5}$ based on the most recent guidance from the BAAQMD, and refer to Master Response 5 (Health of the Bayview Hunters Point Community) for a discussion of health outcomes in the Bayview community.

Response to Comment 70-3

This comment primarily contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. However, with respect to the request to address air quality questions, the commenter raises specific comments earlier in her letter, and responses to those comments are provided in Responses to Comments 70-1 and 70-2. Also, with respect to the local hiring and/or the creation of local jobs, one of the EIR's objectives, as stated in Proposition G, is to create substantial affordable housing, jobs, and commercial opportunities for existing Bayview residents and businesses. Section III.C (Population, Employment, and Housing) of the Draft EIR discloses the employment opportunities that would be provided by the Project. Whether local residents choose to or are encouraged to apply for those jobs is an issue that is entirely outside of the scope of this EIR; however, this comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

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Letter 71: California Department of Transportation—Transportation Planning (1/12/10)

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Letter 71: California Department of Transportation—Transportation Planning (1/12/10)

Response to Comment 71-1

The detailed trip generation calculations requested by the Department are described in Appendix J of the Transportation Study, which is provided in Appendix D to the Draft EIR and was provided to the Department. The Appendix includes tables showing the forecasted vehicle trip generation for each land use, as requested in the comment. Appendix K of the Transportation Study Technical Appendix includes a detailed description of the trip generation methodology.

The commenter recommends using the trip internalization methodology contained in the *Trip Generation Handbook*, published by Institute of Transportation Engineers (ITE). The commenter is correct that this methodology is common for use in smaller development projects, when more accurate local data is not available. However, for an analysis on the scale of the Project, the ITE data on internal trip capture for multi-use developments is not particularly useful. First, the *Trip Generation Handbook* contains the following caution:

> The data presented … quantify the influence of several key factors on internal capture rates. Numerous other factors have a direct influence on travel at multi-use sites, factors for which the current data do not account. Additional data and analysis are desirable to better quantify the relationships between these factors and multi-use development trip generation and internal trip capture rates.

This caution acknowledges that although there are a number of factors that influence trip generation, the ITE *Trip Generation Handbook* methodology is limited in accounting for development scale and the mix of uses. The *Trip Generation Handbook* also acknowledges that the trip internalization factors presented are based on a very limited sample size (three smaller suburban sites), collected in the East Coast and that, if available, use of local data is preferable:

> The estimated internal capture rates presented … rely directly on data collected at a limited number of multi-use sites in Florida. While ITE recognizes the limitations of these data, they represent the only known credible data on multi-use internal capture rates and are provided as illustrative of typical rates. If local data on internal capture rates by land use pair can be obtained, the local data should be used.

As described below, the analysis conducted for the Project uses local data, a more robust sample size, and is more sensitive to the multiple factors that influence trip generation than the ITE methodology. In addition, the commenter provides no evidence to support their recommended internalization value of 14 percent.

Summary of Analysis

The methods commonly used for forecasting trip generation of projects in San Francisco are based on person-trip generation rates, trip distribution information, and mode split data described in the SF Guidelines. These data are based on a number of detailed travel behavior surveys conducted within San Francisco. The data in the SF Guidelines are generally accepted as more appropriate for use in the complex environs of San Francisco than more conventional methods because of the relatively unique mix of uses, density, availability of transit, and cost of parking commonly found in San Francisco. However, the methods described in the SF Guidelines cannot be directly applied to the Project because of its large scale, unique location, and distinctive character.

Similarly, standard vehicle-traffic generation rates, such as those provided by Trip Generation, 8th Edition, 2008, ITE, represent national data that may not accurately represent the unique characteristics of San Francisco and therefore, would not be suitable for the Project, unless appropriate adjustments were made to account for the Project size, mix, and availability of transit.

Therefore, estimates of the Project's travel demand were developed using state-of-the-practice methods for adjusting standard traffic generation rates. This method was originally developed for the USEPA and has been recommended for planning analyses by the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) as documented in *Assessment of Local Models and Tools for Analyzing Smart Growth Strategies* (Caltrans and DKS Associates, July 2007). This method is commonly referred to as the "4D" method, and generally accounts for the following factors that may influence traffic generation:

- **Development scale**—this "D" is the only one of the 4D's that is used in virtually all transportation impact analyses and accounts for the fact that as development scale increases, trip generation increases.
- **Density of the Project**—although trip generation increases with development scale, the higher the Project's density, the less vehicular traffic generated per unit of development
- **Diversity of uses**—an appropriate mix of uses can lead to internalization of trips within a Project
- **Design of Project**—a walkable, pedestrian- and bicycle-oriented circulation system can help to reduce automobile dependence within a Project site

The method can also take into consideration other site location factors such as "Destination accessibility" and "Distance from transit" under certain circumstances. The general concept behind the 4D method is that projects that deviate from the base case (in this case, ITE methods) with respect to the four bulleted variables above exhibit different traffic generation patterns. Elasticities have been derived from travel behavior surveys to help estimate how traffic generation changes as a function of changes in the 4D's.

Methodology

The first step in the 4D method is to define the base case. In this case, the ITE Trip Generation (8th Edition, 2008) methodology was selected as the base case, as it represents typical suburban, automobile-oriented development. Generally, the derivation of person-trip generation for the Project was taken by converting vehicle trip generation forecasts from ITE Trip Generation, 8th Edition (a more recent version of the source suggested by the commenter) to person-trips. This conversion was made by multiplying the total number of vehicle trips forecasted by 1.6 persons per auto, which is the national average vehicle occupancy for all trip types according to the results of the National Household Travel Survey conducted and published by the United States Bureau of Transportation Statistics[117].

Once the base case is defined, the next step in the 4D process is to define the application area (i.e., the catchment area for trip internalization). For purposes of this analysis the Candlestick Point and Hunters Point Shipyard were treated as separate catchment areas.

[117] US Department of Transportation and Federal Highway Administration, Summary of Travel Trends, 2001 National Household Travel Survey, December 2004.

The third step in the 4D process is to determine the characteristics of the Project, as they relate to the 4D variables described earlier. This process was done by comparing the Project with typical suburban development patterns. The Project's percentage differences from typical suburban developments were applied against elasticities developed from travel behavior surveys conducted by the Sacramento Area Council of Governments (SACOG) (SACOG 2009) and regional averages obtained from the Contra Costa Transportation Authority (CCTA) travel demand forecasting model.[118] The regional averages from the CCTA model are reasonable for application to this Project as they represent typical, suburban development, similar to the ITE trip generation rates, but are also located in the Bay Area and account for regional differences between the Bay Area and the national average. The analysis found that approximately 34 percent of all AM peak hour trips and 28 percent of all PM peak hour trips would be internal to the development.

Validation

The conclusion that between 34 and 28 percent of all peak hour person-trips generated by the Project would be internal to the development is higher than trip internalizations for smaller development projects that don't constitute full service communities. Further, the scale of the Project is on the order of other entire neighborhoods in San Francisco. Recent travel behavior surveys conducted by the Metropolitan Transportation Commission (MTC) have shown, for example, that 33 percent of all trips made in San Francisco's Marina District (Census Tracts 126, 127, and 128) and 34 percent of trips made in the Inner Sunset neighborhood (Census Tracts 302.01, 302.02, and 303.01, excluding UCSF Parnassus campus) are internal to those neighborhoods (Bay Area Travel Survey, 2000). Therefore the analysis forecasts that the Candlestick Point and Hunters Point Shipyard neighborhood, both of which include a strong mix of residential, retail, recreational, and commercial uses, would function similar to other neighborhoods in San Francisco.

The 4D approach has been validated for land use plans generally of up to ½-mile radius, as uses within that proximity of each other have been demonstrated to interact according to the elasticities used in the 4D analysis. Both the Candlestick Point and Hunters Point Shipyard areas have a roughly ½-mile radius (1-mile diameter). All residential, retail, office, and other uses are within 1 mile of each other or less, and it is reasonable that they will interact. More detail on the appropriate catchment area for trip interaction is provided in Appendix K of the Transportation Study.

As noted above, the average vehicle occupancy rate of 1.6 persons per vehicle is the national average vehicle occupancy for all trip types reported by the Bureau of Transportation Statistics. The comment does not include any evidence suggesting why 1.6 persons per vehicle would not be appropriate. The comment also suggests that 1.6 persons per vehicle would be more appropriate for use in the game day scenario; however, data provided by the San Francisco 49ers suggests that existing vehicle occupancy for game days is closer to 3.0 persons per auto.

Response to Comment 71-2

The requested figures are included in the Project's Transportation Study (Figures 30A-D, 31A-D, and 32A-D). The Transportation Study was included as Appendix D to the Draft EIR.

[118] The CCTA travel demand model was refined to correct for accurate sidewalk cover and residential density in the region.

Response to Comment 71-3

The traffic impact analysis includes four intersections along Palou Avenue (i.e., at Third Street, at Keith Street, at Ingalls Street, and at Crisp Avenue). The comment requests three additional study intersections on Palou Avenue. The additional intersections requested would be most similar in operations and traffic demand to two of the study intersections analyzed in the Draft EIR, Ingalls/Palou and Keith/Palou, because they would be signalized as part of the Project and would be generally located in the midst of the Bayview neighborhood street grid system. These two intersections were projected to operate at acceptable LOS C or better in each peak hour under year 2030 conditions with the Project. Because of similar configuration, context, travel demand, and traffic control, the intersections of Palou Avenue with Hawes Street, Jennings Street, and Lane Street would likely experience similar LOS and the Project's impacts at these intersections would be less than significant.

The comment also requests the intersection of Arelious Walker/Ingerson be added as a study intersection. This intersection would likely operate similar to the intersection of Arelious Walker/Gilman, which was projected to operate at acceptable LOS D or better in each study peak hour under year 2030 conditions with the Project. Traffic volumes at the intersection of Arelious Walker/Ingerson are projected to be less than at the intersection of Arelious Walker/Gilman. Because of similar configuration, context, and traffic control, and lower intersection volumes, the intersection of Arelious Walker/Ingerson would likely experience similar or better LOS, and the Project's impacts at this intersection would be less than significant.

Response to Comment 71-4

The Draft EIR analyzes traffic impacts for Sunday conditions without a game and with a game. Because during post-game conditions, many traffic control devices would be manually operated and intersection levels of service would be impossible to calculate, no intersection LOS was calculated for the Sunday game day scenario.

Response to Comment 71-5

As noted in the Draft EIR, the Project would contribute to significant impacts in year 2030 at the intersections of Geneva Avenue/US-101 Southbound Ramps and Harney Way / US-101 Northbound Ramps. These two intersections would be constructed as part of the Geneva Avenue Extension, US-101 Candlestick Interchange Reconstruction, and Harney Way Widening projects and would replace the existing Beatty Avenue/Alana Way and Alana Way/Thomas Mellon Circle intersections. These impacts were identified in Impact TR-6 in the Draft EIR. The Draft EIR also identified mitigation for these impacts. However, because implementation of the mitigation measure is under Caltrans jurisdiction and outside of the control of the City/Agency jurisdiction, its implementation is uncertain, and therefore the impacts were considered significant and unavoidable.

Response to Comment 71-6

The analysis in the Draft EIR assumes that traffic signal timings at ramp terminal intersections (and adjacent intersections) would be optimized to minimize queuing impacts on freeway mainlines. Therefore, no additional mitigations related to signal coordination is required.

The comment also notes that the Project should add additional queue storage space to mitigate queuing impacts to less than significant levels. Typical mitigation measures to resolve poor LOS operating conditions for ramp merge or diverge operations would be to add a lane to the ramp, or an auxiliary lane on the freeway. However, the City and County of San Francisco has a general policy not to increase the capacities of bridges, highways, and freeways for single-occupant vehicles.[119] As a result, providing additional roadway capacity or ramp capacity was determined not to be feasible, and the ramp impacts would remain significant and unavoidable.

Response to Comment 71-7

As discussed throughout the Draft EIR section, the SFCTA is conducting a study, known as the Bi-County Study, through which funding and fair-share allocations for transportation improvements in the southeast section of San Francisco would be allocated to specific development proposals. This study will function similar to a regional impact fee program in that it will fully fund transportation improvements through contributions paid by private developers.

Response to Comment 71-8

Per Caltrans requirements for construction or modifications of on-ramps, the northbound on-ramp from Harney Way and the southbound on-ramp from Harney Way/Geneva Avenue Extension would have ramp meters installed as part of the new US-101/Harney Way/Geneva Avenue Extension Interchange project. The Project would not modify the northbound on-ramps at Alemany Boulevard or Bayshore Boulevard/Cesar Chavez and ramp meters are not proposed. Installation of isolated ramp meters would not mitigate the ramp junction LOS conditions at the identified locations. The metering of a number of on-ramps—for example, US-101 between San Jose and San Francisco, could help maintain stable flows on the mainline and improve ramp junction operations. However, additional studies would be necessary to evaluate the freeway and ramp system prior to determining the optimal configuration for US-101.

Response to Comment 71-9

The statement includes a typographical error. Impact TR-16, Draft EIR page III.D-97, has been revised as follows:

Impact TR-16 **Implementation of the Project would increase traffic volumes ~~and~~, but would not ~~contribute~~ make a considerable contribution to cumulative traffic volumes on Harney Way. (Less than Significant with Mitigation)** ***[Criterion D.a]***

With construction of Harney Way improvements, intersection levels of service on Harney Way, east of the US-101 interchange, would be acceptable.

Response to Comment 71-10

Post-game queuing conditions under 2030 No Project conditions were determined to be similar, not the same, as existing conditions, as referenced by the commenter. Transportation Study (Appendix D of the

[119] City and County of San Francisco, General Plan Transportation Element, Objective 3, Policies 3.1 and 3.2; Objective 18, Policy 18.3.

Draft EIR) pages 124 to 129 presents the future baseline transportation improvements that were assumed for the 2030 No Project conditions. Only planned regional roadway improvement projects of the Geneva Avenue Extension and the new US-101 Interchange at Geneva Avenue Extension/Harney Way would affect post-game conditions. Otherwise, pre-game and post-game circulation would remain similar to existing conditions. As indicated on Transportation Study page 324, due to projected increases in background traffic on the study area freeways and traffic associated with buildout of land uses already approved for HPS, congestion following a football game would worsen somewhat over existing conditions on area roadways and freeways. As part of the interchange project, additional capacity onto US-101 would be provided. As a result, although queuing and congestion due to background traffic may worsen compared to existing conditions, actual stadium clearance times may improve somewhat over existing conditions due to the increased capacity associated with the new interchange. However, the improved capacity may be limited in terms of game day operations, depending on the operation of ramp meters. Therefore, as indicated in the Transportation Study, with the existing stadium, the No Project post-game conditions would be similar to the existing congested and queued conditions.

Response to Comment 71-11

Refer to Master Response 9 (Status of the CERCLA Process) and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of status of the CERCLA process and the conditions surrounding the deed transfer from the United States Navy to the City, including any deed restrictions.

Response to Comment 71-12

Refer to the discussion of Alternative 2, presented in Chapter VI of the Draft EIR, for discussion of transportation and circulation conditions if the Project were constructed without the Yosemite Slough bridge.

Response to Comment 71-13

The analysis of impacts and mitigation measures presented in the Draft EIR is based on travel demand forecasts, including transit ridership, vehicle trips, etc., that include a series of assumptions that represent the best available information to the analyst. CEQA does not require that these assumptions or the resulting forecasts be confirmed following completion of a project. Although SFMTA routinely monitors its transit and roadway system and makes adjustments and improvements as travel patterns warrant, this is not required as part of the Draft EIR to mitigate significant impacts.

Letter 72: Muhammad, Colleen (1/12/10)

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Letter 72: Muhammad, Colleen (1/12/10)

Response to Comment 72-1

The comment is acknowledged. Refer to Response to Comment 72-2.

Response to Comment 72-2

Refer to Master Response 13 (Post-Transfer Shipyard Cleanup), and particularly the section on Residual Contamination Following Cleanup, for a discussion of contamination expected to remain in place after the cleanup. With regard to clean soil, Article 31 regulations establish minimum criteria for soil importation plans. While Article 31 is currently applicable only to Parcel A, the City presently anticipates that it will amend Article 31 to add contents to sections currently reserved for Parcels B, C, D, E, and F, as discussed throughout the Impacts section of Section III.K (refer to Section III.K.3, Draft EIR page III.K-38). As amended, Article 31 would similarly provide minimum criteria for soil importation plans in Phase II. Refer to Master Response 8 (Liquefaction) and Master Response 6 (Seismic Hazards) for discussions of liquefaction, seismic hazards, and public safety on those issues.

Refer to Master Response 14 (Unrestricted Use Alternative) and Master Response 15 (Proposition P and the Precautionary Principle) for discussions of an unrestricted use alternative and Proposition P, respectively.

With respect to construction debris, as the comment notes, 80 percent of the debris will consist of concrete, wood, and steel. Those materials will be recycled on site, or immediately transferred offsite where it will be recycled and/or disposed of. Where building demolition involves disruption of materials containing asbestos, lead-based paints, and other common hazards, the Project will comply with strict handling regulations and guidelines, as described in Section III.K.3 and Section III.K.4 of the Draft EIR (refer to Impact HZ-16). Also, through implementation of Article 22A, mitigation measures MM HZ-1a, MM HZ-1b, MM HY-1a.1, and MM HY-1a.2, potential impacts to the public related to handling, stockpiling, and transport of contaminated soil would be reduced to less-than-significant levels (refer to Impact HZ-6a and Impact HZ-6b). Refer also to Table III.K-2 for specific examples of methods employed to reduce environmental effects associated with certain remedial actions. For example, impacts associated with temporary soil stockpiling will be reduced by actions including covering the stockpiles, securing the site, monitoring the air, and implementing engineering controls.

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Letter 73: Lee, Mishwa (1/12/10)

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Letter 73: Lee, Mishwa (1/12/10)

Response to Comment 73-1

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

If sea level rise were to occur beyond that which the project will initially provide for, the perimeter will be raised to provide continued protection. As future improvements to the perimeter will not occur for decades and would be subject to regulatory approval at the time of need, fill quantities for the potential improvements are unknown. However, several concepts for perimeter improvement have been provided in Master Response 8 (Sea Level Rise).

With respect to the amount of fill necessary to accommodate sea level rise projections of 36 inches and National Aeronautics and Space Administration (NASA) projections of up to 5 meters, Table II-12 (Summary of Project Site Grading Requirements) of Section II.F.2 (Site Preparation and Earthwork/Grading) on page II-54 of the Draft EIR summarizes the Project's grading requirements that will provide for a minimum sea level rise allowance of 36 inches in the development areas and 16 inches at the shoreline. As described in Section II.F.2, pages II-69 to II-70, and MM HY-12a.1 and MM HY-12a.2, pages III.M-100 to III.M-102 of the Draft EIR, and further outlined in Master Response 8, if sea level rise exceeds 16 inches an adaptive management strategy is in place to continue providing protection to the Project site for higher levels.

Response to Comment 73-2

Refer to Response to Comment 47-42 for a discussion of the manner in which fugitive dust was analyzed in the Draft EIR, as well as a description of the mitigation measure that would reduce fugitive dust impacts to a less-than-significant level.

Response to Comment 73-3

Fill material brought to HPS Phase II would be delivered via SFMTA-approved surface truck routes (SFMTA San Francisco Truck Route Figure, January 29, 2010, or future updates) and via barges from the San Francisco Bay. The Construction Traffic Management Program specified by mitigation measure MM TR-1 would establish approved haul routes. In general, truck traffic routes to HPS Phase II would utilize US-101, exit onto Cesar Chavez Street, use Cesar Chavez Street to 3rd Street, then utilize the Evans Avenue/Hunters Point Blvd/Innes Avenue corridor to HPS Phase II. Trucks bringing fill to Candlestick Point would utilize US-101, exit onto Harney Way as it is a designated Commercial Throughway and leads directly to Candlestick Point. Alternate routes as approved by SFMTA would be used if needed.

Response to Comment 73-4

With Respect to the commenter's questions related to costing and construction schedule the comment is noted and the responsibility of costing of operation and maintenance for the existing state parks will be clearly identified prior to the undertaking of any construction activities.

With respect to the protection of trails the project characteristics, which are discussed in Section II.E (Project Characteristics), the Draft EIR, page II-7, second to last paragraph, states that:

> … Shoreline improvements would also be provided to stabilize the shoreline. …

An analysis of the wave environment was completed and used to select improvements which would protect the shoreline from erosion.

With respect to protection of the people who use the trails along the shoreline edge, the selected shoreline improvements have been designed to provide protection from a 100-year event. The crest elevation of shoreline improvements were developed based on the criteria set forth by the Federal Emergency Management Agency to prevent flooding and the Technical Advisory Committee on Flood Defense to ensure that shoreline edges would be safe for pedestrians during storm events.

Examples of shoreline improvements that have been used in a similar type area to prevent trail collapse include Rock Revetments, Articulated Concrete Block (ACB) Mats, Beaches, and Marsh habitats (improvements are listed in order of use in relation to highest wave environment to lowest wave environment). The ACB Mats are provided as an alternative to Rock Revetments where the wave environment is relatively calm. These methods of shoreline stabilization have been used successfully at Treasure Island, Robert W. Crown Memorial State Beach, and Redwood Shores Levee Trails.

Refer to Master Response 8 (Sea Level Rise) for a discussion of strategies to continue providing protection along the shoreline edge as sea levels increase in the future.

Response to Comment 73-5

The commenter incorrectly states that a "strong odor of methane" emanates from the embankment along the Bay near the group picnic area and restrooms. Methane is an odorless, nontoxic gas, but it can create a potential explosion hazard if it collects inside of a structure. Methane is typically associated with subsurface petroleum hydrocarbon degradation, landfills, and livestock operations. As stated in Section III.K.2 (Setting) on Draft EIR pages III.K-5 through -8, there are currently no known, unremediated, or active hazardous materials release sites at Candlestick Point. Due to the organic nature of material at the Bay margin, the odors the commenter has experienced, while not related to methane, may be due to the degradation of plant and marine debris commonly found at the Bay margin. These Bay margin odors are not a health threat to residents or workers. There are no studies planned in regards to the fill and seawater interaction, as the odor is not related to pollution and is not a source of air pollution. As stated in Draft EIR Section III.B (Land Use and Plans), the Project includes improvements to CPSRA, but these odors are not expected to impact the Project development process or the park improvements. The commenter does correctly point out an area of localized embankment sloughing along the park shoreline. Such localized slope failures are consistent with the dynamic natural environment along the shoreline and will require ongoing maintenance by State Parks staff.

Response to Comment 73-6

The commenter correctly states that the development plan will require substantial disturbance of the surrounding bodies of water, particularly within Yosemite Slough. Section III.M (Hydrology and Water Quality) of the Draft EIR includes mitigation measures that would reduce the impacts to water quality and beneficial uses of receiving waters to a less-than-significant level. Mitigation measure MM HY-1a.1 starting on page III.M-58 of the Draft EIR, and mitigation measure MM HY-1a.2 starting on page III.M-61 of the Draft EIR, require a preparation of a Stormwater Pollution Prevention Plan to protect receiving waters from sediment discharge caused by erosion, and other pollutants from construction activities occurring on land. Therefore, it is incorrect to state, as the comment does, that water quality and beneficial uses would be compromised, lowered, or diminished.

Impacts to biological resources associated with disturbance of surrounding water bodies are primarily addressed in Section III.N (Biological Resources). Mitigation measure MM BI-4.a.1, starting on page III.N-59 of the Draft EIR addresses temporary and/or permanent impacts to wetland habitat, and requires the Project to comply with the various regulatory permits for in-water construction (such as a Clean Water Action Section 401 Water Quality Certification), to protect water quality and biological resources. Mitigation measure MM BI-4a.2 starting on page III.N-62 of the Draft EIR requires implementation of specific best management practices during in-water construction, such as installing sediment curtains around the worksite to minimize sediment transport. Implementation of these mitigation measures would reduce the impacts of in-water construction of the Yosemite Slough bridge to a less-than-significant level. Mitigation measure MM BI-4c on page III.N-68 of the Draft EIR mitigates the impacts on aquatic habitat from permanent shading caused by the Yosemite Slough bridge. Consequently, implementation of in-water construction would not lower water quality or diminish beneficial uses of Project receiving waters. Refer also to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]).

All five Project Variants, which are described in Chapter IV (Project Variants) of the Draft EIR, must be equally protective of water quality. Protection of water quality will be achieved by requiring the Project Applicant to implement mitigation measures (as described above) that would reduce water quality impacts to a less-than-significant level, such that the Project would not cause or contribute to a violation of water quality objectives, or contribute additional impairment to the Lower Bay, which is on the CWA Section 303(d) list of impaired water bodies.

The Project Variants include changes in land use (such as research and development or residential land use in lieu of the 49ers Stadium) and a utility variant that allows for on-site wastewater treatment in lieu of conveying Project wastewater flows off site to the Southeast Water Pollution Control Plant. It is anticipated that wastewater discharged from the on-site treatment plants into receiving waters would be subject to similar regulatory effluent discharge limits as the Southeast Water Pollution Control Plant, which is described starting on page III.M-40 of the Draft EIR. One exception is that on-site wastewater treatment facilities would not be subject to the Federal Combined Sewer Overflow Policy, as this policy only applies to discharges to a combined sewer system (i.e., wastewater and stormwater), and on-site facilities would only treat wastewater and not stormwater flows.

Response to Comment 73-7

The commenter requests a comparison of economic viability of various healthy wetland resources. This is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Further, the comment is unclear; therefore, an appropriate response cannot be made. No further response is required.

Response to Comment 73-8

Refer to Response to Comment SFPC-30 for a discussion of potential impacts to fisheries.

Response to Comment 73-9

Figure III.N-5 in Section III.N (Biological Resources) provides a figure depicting the Project's impacts to wetlands and other waters, including impacts of the bridge in the Yosemite Slough area, which is detailed in Area 2. With respect to non-bridge alternatives, no impacts to this area would occur. Figure III.N-5, including the accompanying calculations and explanatory text, has been revised in Section F (Draft EIR Revisions).

Response to Comment 73-10

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 SB 18.

Response to Comment 73-11

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18. The comment notes that Draft EIR page III.J-2 states geoarcheology and Geographic Information Systems (GIS) are recent tools that have provided more complete information on archaeological sites in San Francisco. As discussed in that response, the City is undertaking outreach, separate from the EIR process, intended to elicit a full understanding of concerns that Native American tribes and organizations have about the Project, how the concerns may be addressed, and any other suggestions or recommendations the Native American tribes or organizations may have. Those suggestions or recommendations may include the use of specific research methods at Native American archaeological sites.

Response to Comment 73-12

Mitigation measure MM CP-2a, Section III.J, pages III.J-36 through -39, provides for a series of steps, including pre-construction testing under the direction of a qualified archeologist, to identify potential cultural resources. Implementation of the Project's Archaeological Research Design and Treatment Plan (ARDTP), cited in the mitigation measure, would also include research guidance to determine factors such as dating of pre-historic sites.[120]

[120] Archeo-Tec, *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*, November 2009. The prior name of the Project was the Bayview Waterfront Project. Some of the technical studies completed for the Project use the former name if they were prepared prior to August 2009; however, regardless of name, the reports address conditions at the Project site.

Response to Comment 73-13

The Draft EIR, as noted in the comment, acknowledges the potential for prehistoric resources to be present in shoreline areas of the Project site. Those areas would include Yosemite Slough. Construction activities at Yosemite Slough with the Project would be subject to implementation of mitigation measure MM CP-2a, which requires pre-construction testing and other evaluation prior to development. As discussed on Draft EIR page III.J-36 this would reduce impacts to archaeological resources to a less-than-significant level.

Response to Comment 73-14

Refer to Response to Comment 73-13 regarding mitigation proposed to reduce impacts to archeological resources present in the shoreline.

Response to Comment 73-15

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18).

Response to Comment 73-16

Draft EIR Chapter I (Introduction), Section I.B.2 (Redevelopment Plans – Hunters Point Shipyard Redevelopment), pages I-2 to I-4, discusses the approval of what is now referred to as Hunters Point Shipyard Phase I. Phase I is under construction and is not part of the proposed Project. Phase I development is subject to the mitigation measures identified in the Hunters Point Shipyard Reuse Final EIR, certified February 8, 2000, and subsequent Final EIR Addenda issued in November 2003 and July 2006. The Final EIR included a background report addressing potential prehistoric sites at the Shipyard and the November 2003 Addendum discussed the presence of Native American sites. The Mitigation Monitoring and Reporting Plan (MMRP) for Hunters Point Shipyard Phase I required that, for any project disturbance below the layer of historic fill within four identified archaeological sensitivity zones, that archaeological consultants prepare an archaeological treatment plan and monitoring plan. Zone 1 in Phase 1 specifically related to Native American sites. No Phase I activity has occurred in the four identified archaeological sensitivity zones that would trigger the preparation of an archaeological treatment and monitoring plan as required in the MMRP. No other disturbance of archaeological resources has been identified during Phase I development.

The MMRP also required instruction of project construction contractors about the archaeological sensitivity of the area and the Final EIR adds the additional requirement of the distribution of the Planning Department "Alert Sheet" to all project contractors and that signed verification of this distribution be submitted to the Planning Department Environmental Review Officer (ERO). However, the ERO does not have a record of that verification.

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Letter 74: Matlock, Perry (1/11/10)

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Letter 74: Matlock, Perry (1/11/10)

Response to Comment 74-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 74-2

The comment opposing development of the Yosemite Slough bridge is not a direct comment on the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

Alternative 2: CP-HPS Phase II Development Plan; No Yosemite Slough Bridge, Draft EIR pages VI-30 through VI-59, is a Project alternative with no Yosemite Slough bridge.

Response to Comment 74-3

Please refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the cleanup process and the current status of each parcel undergoing the CERCLA process; Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of cleanup activities for clarification regarding who will be responsible for any cleanups necessary after transfer and what types of residual contaminants will remain at the site after transfer; Master Response 14 (Unrestricted Use Alternative) for a discussion of the relationship between the remediation program and the project; Master Response 15 (Proposition P and the Precautionary Principal) for a discussion of how Proposition P and the Precautionary Principal relate to the remediation program and the project; and Master Response 16 (Notifications Regarding Environmental Restrictions and Other Issues) for a discussion of how future property owners and residents, adjacent property owners and residents, and neighboring schools and residents will be notified of the type of restrictions that will be imposed on the property, the type of contaminants remaining in the property, any releases or potential releases of contaminants, and violations of environmental regulations or mitigation measures by the Project Applicant.

Response to Comment 74-4

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 74-5

This comment contains information on the history of the Muwekma Ohlone tribe and its legal status as a Native American tribe and is not a direct comment on the content or adequacy of the Draft EIR. No response is required.

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Letter 75: Sierra Club (1/12/10)

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Letter 75: Sierra Club (1/12/10)

Response to Comment 75-1

This comment contains introductory, closing, or general background information and also reflects the commenter's opinions. No response is required. However, each of the commenter's general issues regarding biological and aesthetic impacts to the CPSRA, a transportation alternative to construction of the Yosemite Slough bridge, and the provision of long-term job opportunities for the Bayview community are specifically responded to in Response to Comment 64-1.

Response to Comment 75-2

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 75-3

Refer to Response to Comment 64-1 regarding employment opportunities associated with the Project.

Response to Comment 75-4

Arc Ecology has not asserted that its suggested alternatives avoid the unmitigated (significant unavoidable) impacts of the Project. It is not clear how these alternatives would do so. Refer to Response to Comment 84-23 regarding the Arc Ecology's proposed alternatives. Refer to Response to Comment 84-5 regarding maritime port use as an alternative.

Refer to Response to Comment 48-3 regarding the selection and analysis of alternatives.

Response to Comment 75-5

Refer to Responses to Comments 31-14, 47-34, 47-36, 47-46, 47-58, 47-73, and 47-75 regarding aesthetic impacts relative to the slough, bridge, and CPSRA.

It would be difficult to have an "undisturbed nature experience" in an urban area, as development to the north, south, and west of the Project site are currently being developed and are visible from the Yosemite Slough and CPSRA. The bridge would not be responsible for "forever destroying the ability of people to have that undisturbed nature experience," as commenter asserts. The bridge is but one component of the Project. Page III.P-32 of the Draft EIR describes how the portions of the CPSRA identified for conversion (i.e. near the bridge) are degraded, unimproved, or not maintained, and do not currently provide recreational opportunities. Refer to Response to Comment 47-4 regarding the interrelationship between the Yosemite Slough Restoration Project and the bridge.

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a comprehensive discussion of the less-than-significant impacts on the birds, waterfowl, and other wildlife that frequent the slough. The commenter states that the bridge would prevent people walking and viewing along the slough from seeing the seals that are hauled out on sandbars off the Hunters Point shoreline, leopard sharks, and the waterbirds swimming in the Bay waters beyond the bridge. This could be true for those

walking in the immediate vicinity of the bridge; however, views of the Bay would remain from numerous other vantage points in the slough, and the bridge itself would provide pedestrian paths that would provide an excellent additional viewpoint from which to watch seals and other wildlife in the slough and the Bay.

Noise from the BRT vehicles would be intermittent, and would diminish rapidly with distance from the bridge. Cars would only access the bridge at specific times on game days only, which would limit the impacts of noise from these vehicles on recreational users of the slough and CPSRA.

Refer to Response to Comment 17-1 regarding the bridge; the Project would prohibit automobile use of the bridge except on game days.

Response to Comment 75-6

The comment is identical to Response to Comment 64-3. Refer to Response to Comment 64-3 for discussion of the Yosemite Slough bridge.

Response to Comment 75-7

A number of the components of this comment refer to potential impacts of the Yosemite Slough bridge on biological resources, including sensitive species and habitats. For responses to these comments, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) which provides a discussion of the Project's potential effects on the biological resources of Yosemite Slough and on the proposed Yosemite Slough Restoration Project. For example, that master response discusses reasons why the western snowy plover, suggested by this commenter as potentially nesting on islands to be created as part of the restoration project, would not nest on those islands.

The commenter suggests that the USACE, USEPA, and BCDC should deny any permit for the bridge. Permitting issues are outside the scope of this CEQA analysis, and the project applicant has already engaged all three agencies in discussions regarding permitting this project. The applicant will continue to work with these agencies to address regulatory issues.

The commenter suggests that birds moving between South Basin and Yosemite Slough may strike the bridge on very foggy days. While the possibility of some such collisions cannot be ruled out, shorebirds in the Bay Area regularly navigate numerous hazards under foggy conditions, and there is no evidence that substantial impacts of this kind will occur.

Refer to Response to Comment 47-89 for a discussion of potential impacts to bird use of Double Rock.

Many of the comments in this letter overlap (generally verbatim) those in the comment letter from San Francisco Tomorrow. Such comments include those regarding consideration of mud flats as Special Aquatic Sites, potential impacts of the project on wildlife movement, wildlife using the CPSRA, the "region" used as the context for determining whether project impacts affect regional populations, the importance of grasslands and the Draft EIR's assessment of impacts to grassland species, the Draft EIR's assessment of cumulative impacts to habitats and species in San Francisco, the potential value and feasibility of proposed grassland restoration, the potential for control of burrowing mammals to be required on HPS, alternative locations for mitigating impacts to grassland off-site, impacts to CPSRA, and impacts to wildlife from an increase in human visitors to the site. Refer to Response to Comment 64-4 for a response to such comments.

The commenter suggests that sea level rise of 3-6 feet would reduce room for wildlife movement under the bridge at the bridge abutments, and that predation of such wildlife may be high in these areas even with existing water levels. The commenter is correct that sea level rise may reduce the area for wildlife movement under the bridge, and predation may be somewhat higher near the bridge if wildlife movement is confined to narrow areas near the abutments. However, it is not expected that wildlife movement past the bridge will be completely eliminated by sea level rise, and there is no evidence to suggest that predation rates on either side of the bridge would increase so sharply as to have substantial effects on the occasional movement by wildlife that is expected to occur in this area. Furthermore, movement of wildlife around the upper end of Yosemite Slough will be constrained by existing industrial land uses that will not change as a result of either the CP/HPS project or the Yosemite Slough Restoration Project. In particular, sea level rise would constrict or eliminate already very narrow avenues for wildlife movement in areas where the proposed restoration site abuts industrial development at the upper end of the slough. As a result, the Project's contribution to constraints on wildlife movement around Yosemite Slough will not be substantial.

The commenter has observed harbor seals hauled out and loafing in South Basin near the HPS shoreline "several times" and suggests that the EIR should identify bridge construction impacts to "an occasional harbor seal haul out area." Harbor seals are capable of hauling out virtually anywhere surrounding the Bay (and in coastal areas) providing mud flats, sand flats, marshes, rocks, or other hard substrates close to the water, and individuals will use such locations opportunistically as they forage throughout the Bay. However, such opportunistic haul-out locations are obviously not limiting Bay-area seal populations due to the abundance of such locations. Rather, haul-out locations that are used repeatedly by numbers of seals are particularly worthy of protection given the importance that the seals place on those traditionally used areas. The Yosemite Slough Watershed Wildlife Survey did not detect any haul-outs in South Basin during its year-long study, nor have any regular haul-outs been reported from anywhere in the project area by other sources. Therefore, the project will not disturb a traditional haul-out used by large numbers of seals. Although seals that occasionally use South Basin or other areas along the shoreline may be disturbed by project-related construction to the point that they avoid areas close to construction, these individuals will be able to find ample haul-out locations elsewhere in the Bay, and such disturbance will have no long-term or population-level effects on harbor seals. Also refer to Impact BI-9b in the Draft EIR, which states on page III.N-81:

> It is possible that any of the sensitive fish species listed in the Setting section could be found within aquatic habitats of HPS Phase II during certain times of year. Those include green sturgeon, Chinook salmon, steelhead, and longfin smelt. Marine mammals such as the harbor seal and California sea lion could also be present. Pacific herring and a number of other non-special-status fish could also occur in these waters. The high noise levels generated by pile driving have the potential to disturb, injure, or kill these species.

Also, mitigation MM BI-9b on page III.N-82 in the Draft EIR would reduce impacts from such noise levels. The text in MM BI-9b has been revised as indicated in Response to Comment 37-1.

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Letter 76: Whittle, Lola (1/12/10)

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Letter 76: Whittle, Lola (1/12/10)

Response to Comment 76-1

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 76-2

The commenter's support for the Yosemite Slough bridge and preference that the bridge be made available for vehicular use year round is noted. Refer to Response to Comment 33-4, which describes that the Board of Supervisors will legislatively require that the bridge be closed to autos except on football game days by designating the bridge as a public right-of-way for transit only, except as specified. The Infrastructure Plan, which the Board will approve, will require a bridge design that controls access. Only the Board, after completion of any required additional environmental review could change the designation, but no such other designation is contemplated by the Project.

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Letter 77: City and County of San Francisco, Historic Preservation Commission (1/12/10)

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Letter 77: City and County of San Francisco, Historic Preservation Commission (1/12/10)

All of the comments provided in this letter are substantially similar to the comments provided in Letter 39; however, where this letter was submitted as a "draft" letter by the Historic Preservation Commission, Letter 39 represents their "final" letter. Full responses are provided in Letter 39.

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Letter 78: City and County of San Francisco, Human Rights Commission (1/12/10)

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Letter 78: City and County of San Francisco, Human Rights Commission (1/12/10)

Response to Comment 78-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18, and to Master Response 2 (Potential Native American Burial Sites) regarding the presence and treatment of burial remains and funerary objects discovered at the Project site.

Response to Comment 78-2

The *Issues of Concern for Native Americans in San Francisco*, a report of the San Francisco Human Rights Commission, submitted with the comment, provides general information and is not a direct comment on the content or adequacy of the Draft EIR.

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Letter 79: San Francisco Bicycle Coalition (1/12/10)

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Letter 79: San Francisco Bicycle Coalition (1/12/10)

Response to Comment 79-1

The analysis in the Draft EIR does examine the impact associated with full buildout of Harney Way. Under this scenario, Harney Way would have a Class I shared bicycle/pedestrian path on its southern side, adjacent to the San Francisco Bay. This facility would accommodate bicycle travel in both the eastbound and westbound directions. However, to provide connections to potential bicycle facilities to the west and reduce the need for bicycles to cross Harney Way, Harney Way would also include a Class II bicycle lane in the westbound direction. As described in Impact TR-31, the Draft EIR determined that there would be no significant adverse impacts to bicycles associated with the planned bicycle configurations.

The ultimate configuration of Harney Way has been developed based on a series of public meetings and workshops, and it is anticipated that Harney Way would be built out as currently proposed in the Draft EIR. However, as indicated in mitigation measure MM TR-16, prior to 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. The study shall be conducted in collaboration with the SFMTA, which would be responsible for making final determinations regarding the ultimate configuration. Along with other concurrent factors, SFMTA may incorporate public comment into the ultimate configuration, thereby allowing community preferences to help shape viable options that may differ from those currently planned.

Response to Comment 79-2

Comment noted. The purpose of the feasibility study referenced in mitigation measure MM TR-32 would be to examine the connectivity issues, topography, and auto traffic volumes cited by the commenter.

Response to Comment 79-3

The comment refers to Figure 14 in the Project's Draft Transportation Plan. The same figure is included in Figure III.D-10 of the Draft EIR. In response to the comment, Figure III.D-10 in the Draft EIR has been revised to include a Class III bicycle facility on Harney Way from Arelious Walker Drive to the northeastern end of Harney Way within the Candlestick Point site. Refer to Response to Comment 31-9 for the revised figure.

Response to Comment 79-4

The Project would include a number of bicycle-related improvements designed to encourage bicycle use to the new stadium. Refer to Response to Comment 31-4. However, regardless of the amount of bicycle-related infrastructure that could be reasonably provided, due to the very high traffic volume and large volumes of pedestrians in the vicinity of the stadium on game days, bicycling (as with other modes) would become more congested and difficult. However, Impact TR-40 concluded that the impacts to bicycles would be less than significant, because congestion and crowding are generally expected at large sporting events.

Response to Comment 79-5

For purposes of the Draft EIR, the level of significance of Project impacts were measured according to the significance criteria described on pages III.D-31 to III.D-33. Specifically for bicycles, Criteria D.k specifies that impacts to bicycles would be significant if the Project would "create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining uses."

Letter 80: People Organized to Win Employment Rights (12/11/09)

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Letter 80: People Organized to Win Employment Rights (12/11/09)

Response to Comment 80-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 regarding extension of the comment period and opportunities for public comment.

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Letter 81: Golden Gate Audubon Society (1/12/10)

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Letter 81: Golden Gate Audubon Society (1/12/10)

Response to Comment 81-1

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on wildlife.

Response to Comment 81-2

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on biological resources of Yosemite Slough. The proposed bridge would run parallel to Third Street—about 0.7 mile to the east of Third Street—so there is no way that it cannot bypass the existing community and businesses on Third Street. However, it is at the eastern-most edge of San Francisco in an undeveloped area, and, therefore, could not possibly divide an "established community." Physical division of an established community means that one part of a community is completely cut off from another part, in that the residents/patrons of each portion could not physically travel from one part to the other. This would not occur under the Project.

Response to Comment 81-3

This comment contains introductory or general background information on existing wildlife use of Yosemite Slough and the benefits of the Yosemite Slough Restoration Project, and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 81-4

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on biological resources of Yosemite Slough and to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the traffic-related justification for the bridge.

Response to Comment 81-5

The transportation-related benefits of the proposed Yosemite Slough bridge extend beyond transit and auto access to the stadium. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of benefits of bridge to transit overall (including non-game days) and to bicycle and pedestrian connectivity between the Hunters Point Shipyard and the Candlestick Point development areas.

Response to Comment 81-6

Refer to Responses to Comments 31-9 and 31-11 for a discussion of the Bay Trail alignment.

Response to Comment 81-7

The commenter disagrees with the Draft EIR's findings that the Yosemite Slough bridge will not have significant impacts on nearby aquatic resources and that the Draft EIR should be revised to address bridge

construction impacts, including increases in turbidity, pollution, mobilization of contaminants in water, and other disturbances to the natural environment related to the Project.

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of potential effects of the bridge on Yosemite Slough, the Yosemite Slough Restoration Project, and wildlife use of the area.

As discussed in the Impact BI-4c starting on page III.N-67 of the Draft EIR, construction of the bridge is expected to affect wetlands and aquatic habitats, and therefore, mitigation measures are prescribed to mitigate potentially significant impacts to less than significant levels (MM BI-4a.1, MM BI-4a.2, and MM BI-4c). Mitigation measure MM BI-4a.1 requires the Project Applicant to obtain a CWA Section 404 permit, a CWA Section 401 Water Quality Certification, and a CWA Section 402 National Pollutant Discharge Elimination System permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. By obtaining CWA permits and certifications and complying with their conditions, construction of the bridge would be in compliance with the CWA and its implementing regulations. In addition, complying with the conditions of the CWA permits would reduce impacts from increased turbidity, pollution, mobilization of contaminants in water, and other disturbances to the natural environment to a less than significant level.

The commenter also expresses concern regarding four impact statements included in the Draft EIR, but does not state what these concerns are. The commenter's concern regarding these impacts statements is noted.

Response to Comment 81-8

The Draft EIR addresses increased stormwater pollution resulting from bridge operation, including pollution originating from automobiles, transit vehicles, cyclists and pedestrians. The Draft EIR states on page III.M-92 that:

> Stormwater runoff from the Yosemite Slough bridge and discharges of materials from bridge maintenance activities would not cause or contribute to an exceedance of water quality standards. Primary pollutants of concern in stormwater runoff from transportation-related land uses include fuels, PAHs, sediment, metals, and litter and debris. …

The primary pollutant associated with pedestrians and cyclists is trash and the primary pollutants associated with automobiles and transit vehicles include fuels (and associated constituents such as PAHs), sediment, and metals.

Automobiles would only be a source of stormwater pollutants on game days, which would occur twelve days out of the year, because the bridge would only allow automobile traffic on game days. Game days are currently scheduled from September through early December, with the post-season extending through January, and therefore would only occur during a portion of the rainy season (the rainy season is typically defined as October 1 through May 31).

The Draft EIR states, on page III.M-92, that:

> … Impacts from bridge operation would be reduced via compliance with the existing stormwater runoff programs. …

Existing stormwater runoff programs are the Phase II Municipal Stormwater General Permit, and local requirements for incorporating site design, source control, and treatment control BMPs into the project (which are subject to approval by the SFPUC). The existing stormwater runoff programs would address potential new pollutants introduced into Yosemite Slough from operation of the bridge. Increased pollution from transit vehicles, pedestrians, and cyclists would be addressed under the Post-Construction Storm Water Management in New Development and Redevelopment element of the Municipal Stormwater General Permit, and implemented through compliance with SFPUC's San Francisco Stormwater Design Guidelines. As described on pages III.M-47 to III.M-48 of the Draft EIR, the San Francisco Stormwater Design Guidelines require capture and treatment of a precipitation depth of 0.75 inch in volume-based BMPs (such as a detention basin), or a rainfall intensity of 0.2 inch per hour for flow-based BMPs (such as a vegetated swale). The City's requirements for stormwater treatment comply with the Maximum Extent Practicable performance standard in the Municipal Stormwater General Permit, which requires that the City ensure that controls are in place that would prevent or minimize water quality impacts from development projects.

As described in Chapter II (Project Description) on page II-38 of the Draft EIR, the Yosemite Slough bridge would be constructed with a 40-foot-wide greenway, which would be converted to automobile travel lanes on 49ers game days only. The greenway would also be designed to provide treatment for stormwater pollutants associated with automobiles, and reduce the impacts of vehicle-related stormwater runoff to a less-than-significant level. Runoff from the transit vehicle lanes would be routed to the greenway, and/or to land-based stormwater treatment controls such as swales. The stormwater treatment components for the bridge would be described in the Project Stormwater Control Plan, which is subject to approval by the SFPUC.

In addition, the Pollution Prevention/Good Housekeeping for Municipal Operations element of the Municipal Stormwater General Permit would address increased pollutants from transit vehicles, pedestrians, and cyclists, because the Permit requires the City to implement a program to reduce the amount and type of pollution that collects on streets and roads. The City would likely implement a street sweeping program to comply with this element of the Permit, and street sweeping would reduce the sediment, litter, debris and oil and grease on the bridge that could potentially be discharged in stormwater runoff. Compliance with existing stormwater runoff programs would reduce the impacts from bridge operation to a less-than-significant level, and therefore no mitigation is required.

In response to the comment and to clarify the elements of the Project related to the bridge and stormwater runoff, the Draft EIR text on page III.M-92 (Impact HY-6c) has been revised as follows:

> Stormwater runoff from the Yosemite Slough bridge and discharges of materials from bridge maintenance activities would not cause or contribute to an exceedance of water quality standards. Primary pollutants of concern in stormwater runoff from transportation-related land uses include fuels, PAHs, sediment, metals, and litter and debris. The pollutants could originate from automobiles, transit vehicles, cyclists, and pedestrians. Automobiles would only be a source of stormwater pollutants on game days, which occur twelve days out of the year, because the bridge would only allow automobile traffic on game days. As described in Chapter II (Project Description) on page II-38, the Yosemite Slough bridge would be constructed with a 40-foot-wide greenway, which would be converted to automobile travel lanes on 49ers game days only. The greenway would also provide vegetative treatment for stormwater pollutants associated with automobiles, and would reduce the impacts of automobile-related stormwater runoff to a less than significant level. Runoff from the transit vehicle lanes would also be routed to the greenway and/or to land-based stormwater

treatment controls such as swales. The stormwater treatment measures for the bridge would be described in the Project's Stormwater Control Plan, which is subject to SFPUC's approval.

Bridge maintenance activities such as welding and grinding, sandblasting, and painting can also adversely affect water quality if materials generated from maintenance are allowed to discharge into the Bay. It is anticipated that bridge operation would be under the jurisdiction of the City, and thus stormwater runoff mitigation would be performed under the Municipal Stormwater General Permit, which requires development of a pollution prevention program for municipal operations. The municipal operations program would also include street sweeping to remove litter and sediment-associated pollutants generated by transportation land uses.

Pollutants generated from transit vehicles, cyclists and pedestrians would also be addressed under the pollution prevention program for municipal operations implemented by the City. The pollutants would also be reduced through compliance with local stormwater treatment requirements (i.e., San Francisco Stormwater Design Guidelines), which were put into effect to comply with the new development requirements in the Municipal Stormwater General Permit.

Impacts from bridge operation would be reduced via compliance with the existing stormwater runoff programs, specifically, elements of the Municipal Stormwater General Permit, and local requirements for stormwater treatment measures that would be subject to approval by the SFPUC. Operation of the Yosemite Slough bridge would not cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements and a less than significant impact would result. No mitigation is required.

In response to the comment and to clarify the elements of the Project related to the bridge and stormwater runoff, the Draft EIR text on page II-38 (Project Description) has been revised as follows:

5. **Yosemite Slough Bridge.** A new Yosemite Slough bridge would extend Arelious Walker Drive from Candlestick Point to Hunters Point Shipyard. The 81-foot-wide, seven-lane bridge would cross the slough at its narrowest point and would primarily function for transit, bicycle, and pedestrian use. Figure II-12 illustrates the bridge location. The bridge and its approach streets would have two dedicated 11-foot-wide BRT lanes and a separate 12-foot-wide Class I bicycle and pedestrian facility, which would be open at all times. The bridge would also have a 40-foot-wide greenway, which would be converted to four peak direction auto travel lanes on 49ers game days only. Those four lanes would be open on game days to vehicle traffic in the peak direction of travel. The roadway would be planted with grass and would serve as an open space amenity on all non-game days. Two-foot-tall barriers would separate the BRT lanes from the bicycle/pedestrian plaza and the vehicle lanes. The greenway would be designed to function as a stormwater treatment control facility for the auto travel lanes. Runoff from the BRT lanes would also be routed to the greenway and/or to land-based stormwater treatment facilities, in accordance with the City's requirements for stormwater treatment.

Response to Comment 81-9

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the project's potential effects on biological resources of Yosemite Slough. Due to the low volume of traffic that will be using the bridge, as described in Master Response 3, significant impacts to Yosemite Slough from traffic-related pollution are not expected to occur.

Response to Comment 81-10

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the Project's potential effects on biological resources of Yosemite Slough.

Response to Comment 81-11

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the potential effects of shading on biological resources of Yosemite Slough.

Response to Comment 81-12

The commenter suggests that plant life, including coastal scrub, may be affected by the bridge and asks whether the project will prevent invasion by weeds, erosion, and sediment deposition due to traffic on the bridge. The commenter also asks how revegetation will be accomplished.

A small amount of coastal scrub dominated by coyote brush will be impacted at the southern approach to the Yosemite Slough bridge. However, this regionally abundant plant species and habitat type will continue to be present in other shoreline areas, and some restoration/creation of such habitat is planned. Revegetation efforts are described in the Draft Parks, Open Space, and Habitat Concept Plan provided in Appendix N3 of the Draft EIR. That Plan also describes the process by which invasive plants will be removed, monitored, and controlled on the site. Traffic use of the bridge is not expected to result in increased erosion or sediment deposition.

Response to Comment 81-13

As stated on pages II-38 to II-39 of Chapter II (Project Description) of the Draft EIR, the Yosemite Slough bridge will be approximately 81 feet wide and approximately 900 feet long based on preliminary designs. As the Project proceeds through the final design phase, the bridge design will be refined. Final Project design, including the bridge, will undergo review by City and Agency staff to ensure that any design modifications would not change the environmental analysis in the EIR. For a discussion of effects of the bridge on biological resources from lighting, traffic, and shadow, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]). Page III.M-58 of Section III.M (Hydrology and Water Quality) describes mitigation measure MM HY-1a.1, which sets forth the requirements for a Storm Water Pollution Prevention Plan that must be prepared by the Project Applicant. As noted on page III.M-72 of Section III.M:

> With respect to water quality impacts caused by construction of the Yosemite Slough bridge, including pollutants transported through erosion and sedimentation or the incidental release of construction materials or the accidental spill of substances commonly used in construction directly to the Lower Bay, implementation of mitigation measures MM HY-1a.1 (SWPPP—Combined Sewer System), MM HY-1a.2 (SWPPP—Separate Storm Sewer System), MM HZ-1a (Article 22 Site Mitigation Plan), MM HZ-2a.1 (Unknown Contaminant Contingency Plan), and MM HZ-9 (Navy-Approved Workplans for Construction and Remediation Activities on Navy-Owned Property) would reduce the potential for contaminants, sediments, or pollutants in stormwater runoff to enter the Lower Bay. While mitigation measures MM HY-1a.1 and MM HY-1a.2, each of which require the preparation of a SWPPP, are intended to address runoff that enters either the combined or separate sewer systems, the BMPs could also address bridge construction activities. In addition, because the bridge would be constructed using piles driven in dry conditions (behind coffer dams), water quality impacts would be minimized.

Response to Comment 81-14

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the project's potential effects on biological resources of Yosemite Slough, including wildlife. While some wildlife species will be able to adapt or habituate to shading or other effects of the bridge, others will not, resulting in the loss of a small area of habitat under and immediately adjacent to the bridge.

The commenter suggests that the EIR provide a diagram depicting the bridge dimensions relative to vegetation conditions, a diagram depicting shadow at various times during the day and its impacts on wetlands, and a diagram depicting night lighting from the bridge. Master Response 3 discusses the potential effects of the bridge, including shading and increased night lighting, on wetlands and other sensitive habitats; diagrams are not needed to convey these effects. While some night lighting will be required on the bridge, such lighting will be limited to the minimum necessary for human safety. Given the urban context in which Yosemite Slough occurs, species using the area will have to be habituated to some lighting, and the Lead Agencies do not expect lighting impacts on wildlife to be substantial; refer to Master Response 3 for further discussion of the effects of increased night lighting on biological resources of Yosemite Slough.

The commenter also recommends that the bridge be constructed and designed using guidelines from a reference from the Arizona Game and Fish Department. The design and construction of the bridge generally follow the principles outlined in that publication, although due to the very different conditions in Yosemite Slough as compared to streams in Arizona, site-specific design and construction measures that take into account the types and sensitivity of biological resources at Yosemite Slough have been (and will be) employed.

Response to Comment 81-15

This comment contains introductory or general background information and also reflects the commenter's opinions. No response is required. However, the commenter's general issues regarding impacts are specifically responded to in Responses to Comments 81-2 through 81-14.

Response to Comment 81-16

Chapter III.N (Biological Resources) describes the project's potential impacts to the habitats and species referred to in this comment. The Project applicant has already engaged the BCDC regarding potential Project effects on all resources regulated by that agency, and has met with BCDC staff on several occasions. The applicant will continue to pursue the necessary permits from the BCDC, thus addressing any issues of project consistency with the San Francisco Bay Plan.

The commenter suggests that the Draft EIR underestimates potential impacts to the Bay. Actually, a very conservative approach to estimating Bay fill was taken in the Draft EIR, in that impacts resulting from removal of Bay fill on HPS, as described in Impact BI-4b on pages III.N-64 to III.N-67, were considered "fill" activities because of the movement of existing fill and potential temporary impacts to water quality that might result. In actuality, removal of fill along the shoreline may occur under dewatered conditions, using coffer dams, so that no impacts to water quality will occur. Thus, such activities would actually be beneficial by removing Bay fill even though they are considered impacts to aquatic habitats in the Draft EIR.

Response to Comment 81-17

Refer to Response to Comment 47-88 regarding potential project impacts to eelgrass. Specifically, MM BI-5b.1 and BI-5b.2 have been modified somewhat to require more extensive surveys for eelgrass, both in and within 750 feet of in-water construction activities at HPS Phase II and the Yosemite Slough bridge, prior to such in-water activities. Otherwise, potential project impacts to eelgrass were adequately described in the Draft EIR in Impacts BI-5a and BI-5b on pages III.N-69 and III.N-70, and the associated mitigation measures reduce impacts to eelgrass beds in and adjacent to construction areas to less than significant levels by requiring impact avoidance if practicable, best management practices to avoid water-quality impacts, and compensatory mitigation for unavoidable impacts to eelgrass. Regarding compliance with BCDC's eelgrass recommendations, the Project applicant has already engaged the BCDC regarding potential Project effects on all resources regulated by that agency, and has met with BCDC staff on several occasions. The applicant will continue to pursue the necessary permits from the BCDC, thus addressing any issues of project consistency with the San Francisco Bay Plan.

Response to Comment 81-18

The commenter suggests that the biological conditions of CPSRA were not adequately described and comments that biological surveys were conducted on only two days. The existing conditions section of Chapter III.N (Biological Resources) contains descriptions of the habitat types and wildlife communities of the entire project area, including CPSRA, and Figure III.N-2 maps the habitats in this portion of the project site. Although PBS&J biologists were on-site on only three days, as noted in Section III.N.2 on page III.N-3, the description of biological resources in Chapter III.N was also informed by multiple field visits conducted by H. T. Harvey & Associates biologists during general reconnaissance surveys, wetland delineation surveys, and tree surveys, as well as by a number of background references as described on pages III.N-3 and III.N-4 of the Draft EIR.

The commenter also suggested that the Draft EIR did not adequately describe the bird species that could potentially nest on the site and listed a number of bird species that nest on CPSRA. The intent of Chapter III.N of the Draft EIR was not to provide an exhaustive list of animals that occur on the site, but rather to describe the general wildlife community, noting representative common species that occur on the site, and to provide more detail on potentially occurring special-status species. Some of the species listed by the commenter as breeding on CPSRA, such as double-crested cormorant, black-crowned night-heron, snowy egret, great egret, Caspian tern, white-throated swift, and several others, are not indicated by the 2003 *San Francisco Breeding Bird Atlas* as having been confirmed breeding on CPSRA, and suitable breeding habitat for some of these species is absent from the site.

Regarding the comments pertaining to potential effects on wildlife resulting from increased human use of the site, refer to Response to Comment 64-5 for a discussion of such effects.

Response to Comment 81-19

The commenter suggests that the project will result in an increase in the human population of the area and a concomitant increase in pets, particularly cats and dogs, and makes recommendations for limiting the potential for such animals to impact wildlife. The Impact BI-16a discussion, Draft EIR page III.N-101,

mentions the potential for impacts to wildlife resulting from increased human activity and increased presence of domestic animals, as follows:

> Human activity at Candlestick Point following completion of construction would affect wildlife, including invertebrates, reptiles, amphibians, birds, and mammals. Potential adverse effects include disturbance of individuals (including nesting birds) in terrestrial, shoreline, and aquatic habitats due to movement by humans, domestic animals, and vehicles; depredation of native species by domestic animals; injury or mortality of individuals due to vehicular traffic; and other impacts. However, as discussed in Impact BI 2, adverse effects of human disturbance and other operational factors would occur primarily to small numbers of regionally abundant species, and operational impacts would not substantially affect populations of these species. Impacts would be less than significant, and no mitigation is required.

Response to Comment 81-20

The commenter suggests that the project will result in an increase in trash and food waste, which degrade the aesthetics of the park and subsidize populations of nuisance birds and mammals, which could in turn adversely affect more sensitive native wildlife species. The commenter suggests that the Draft EIR did not adequately analyze the impact.

In response to the comment, the Impact BI-2 discussion, Draft EIR page III.N-50, has been revised to add the following sentence after the fourth sentence of the first paragraph under this impact:

> … areas/ornamental plants. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species such as common ravens (*Corvus corax*), American crows (*Corvus brachyrhynchos*), raccoons, rats, and feral cats, which in turn could increase predation on more sensitive wildlife species. …

In addition, Impact BI-16a, page III.N-101 of the Draft EIR has been revised to add the following sentence to the second paragraph under this impact, after the second sentence:

> … and other impacts. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species, which in turn could increase predation on more sensitive wildlife species. …

Response to Comment 81-21

The commenter suggests that the Draft EIR did not adequately characterize the value of the project area to wildlife. The Draft EIR considered not only the results of the Yosemite Slough Watershed Wildlife Study but also other species that could potentially occur in the project area when describing existing conditions and assessing impacts to habitat.

The commenter disagrees with statements that certain birds were considered California Species of Special Concern only when breeding and states that the reference cited in the Draft EIR does not support this statement. However, the reference cited in the document (a list of bird Species of Special Concern on the CDFG's website [http://www.dfg.ca.gov/wildlife/nongame/ssc/ birds.html] and the compendium on which this list is based (Shuford and Gardali 2008) both indicate a "Season of Concern" for these species. The Draft EIR did not "dismiss conservation concerns" regarding species that occur on the project site during the non-breeding season; rather, the importance of the site to all species was considered regardless of the season, even for species that are not considered Species of Special Concern when they occur as nonbreeders on the site. It was determined that those particular species that were considered Species of

Special Concern only during the breeding season, and that occur on the site only as nonbreeders, would not be significantly impacted by the Project, but this was based on the Project-specific impacts to these species' populations rather than on the basis of whether or not they were considered Specifies of Special Concern.

The commenter notes that a number of birds that have been recorded on the site are on the Audubon Watch List. Impacts to all species, whether or not on a list of species of concern, were considered during impact assessment. The commenter also notes that a number of bird species rely on the project area and questioned why only the peregrine falcon was considered in Impact BI-6b. This impact was not intended to focus only on the peregrine falcon; rather, Impact BI-6b on page III.N-75 in the Draft EIR contained the following text:

> Similar to development at Candlestick Point, construction-related activities including, but not limited to, grading, materials laydown, facilities construction, vegetation removal, and construction vehicle traffic may result in loss of a special-status and/or legally protected avian species' active nest and/or mortality of the nest's occupants; this would be considered a significant impact. Implementation of mitigation measures MM BI 6a.1 and MM BI 6a.2 (as detailed in Impact BI 6a) would reduce the effects of Project construction and implementation on nesting special-status and legally protected avian species to less-than-significant levels.

Thus, the Impact BI-6b discussion on page III.N-75 referred to the discussion under Impact BI-6a, Draft EIR page III.N-72, which stated:

> In addition to recognized special-status species, as discussed above in Regulatory Framework, all native bird species that may use the site are protected under the MBTA and California Fish and Game Code. These laws protect many common species in addition to those considered special-status species.

Therefore, impacts to all native bird species were addressed in Impacts BI-6a and BI-6b, and mitigation measures MM BI-6a.1 and MM BI-6a.2, Draft EIR pages III.N-73 and -74, were applied to both Candlestick Point and HPS. Peregrine falcons were discussed specifically because they are presently a State-listed endangered species and because a resident pair breeds on the site.

The commenter suggests that impacts to raptors were not adequately analyzed, and claims that Impact BI-7b "appears to ignore the fact that the Project would result in a loss or alteration of 43 acres of grassland." The comments acknowledge that some raptors will benefit from new grasslands and that the nest box program, which is a component of the Draft Parks, Open Space, and Habitat Concept Plan provided in Appendix N3 of the Draft EIR, would benefit additional species. Refer to Response to Comment 64-4 for more discussion of the project's impacts to raptors (e.g., for clarification that the 43 acres of grassland impacted at HPS will be impacted due to grassland restoration efforts).

The commenter suggests that the Draft EIR did not adequately assess the impacts of tall buildings to birds. Refer to Impacts BI-20a and BI-20b on Draft EIR pages III.N-108 to -111; these impacts discuss the potential effects of tall buildings and associated reflections and lighting on birds. These impact discussions also cite some of the same references that are cited by the commenter.

Response to Comment 81-22

The commenter recommends that the 10,000 trees to be planted on the site be natives. The Draft Parks, Open Space, and Habitat Concept Plan, provided in Draft EIR Appendix N3, describes the trees that will be planted as follows:

> 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 may also be considered.

It is expected that the vast majority of trees to be planted will be natives.

The commenter also suggested that the project did not appear to consider the Hunters Point Constructed Storm Water Wetland Feasibility Study prepared for the Golden Gate Audubon Society. The majority of the commenter's recommendations pertain to creation of wetlands and remediation issues that are subject to remediation decisions to be made by the Navy, and that are not in the control of the Project applicant.

Response to Comment 81-23

The commenter lists native plants that are present on the site and that provide habitat value for wildlife. This comment is noted; native plants such as these will be planted on the site as described in the Draft Parks, Open Space, and Habitat Concept Plan provided in Appendix N3 of the Draft EIR.

The commenter states that the Draft EIR did not adequately discuss salt marsh plants, yet the description of the salt marsh community on page III.N-9 of the Draft EIR contains all of the plants listed in this comment.

Response to Comment 81-24

The comment regarding open space is noted. The Project's ratio of 13.8 acres per 1,000 residents provides substantial amounts of open space.

The comments regarding native grasses, natural playing fields, and dog play areas are noted. The specific elements of the CPSRA improvements, including landscaping and plantings will be determined through the CPSRA General Plan Amendment process. No synthetic turf is proposed for the Project's playing fields. Dog recreation areas will accommodated within community parks outside of CPSRA.

Figure III.P-2 shows the location of proposed parks and the reconfiguration of CPSRA. Refer to Responses to Comments 47-3, 47-28, and 47-29 for further discussion of the reconfiguration. As shown on Figure III.P-2, the Candlestick Park stadium area will not be developed as a park, and is not included in any park area calculations.

Response to Comment 81-25

Refer to Master Response 8 (Sea Level Rise) for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment 81-26

Refer to Response to Comment 47-29 for discussion of this standard of significance. While the Project site's parkland ratio will be reduced from its current level (which is particularly high because the area has a very small population), the ultimate ratio of 13.8 acres per 1,000 residents is well above the standard of 5.5 acres provided in the 1986 San Francisco General Plan and used in the Draft EIR. This impact is, therefore, less than significant.

Response to Comment 81-27

The comments regarding park programming are noted. In contrast with typical nursery-grown trees, a "specimen tree" is often older or larger and has particularly exceptional aesthetic qualities. In landscape design, a specimen tree may be used at focal points, in small courtyards, or in other places where the tree's exceptional qualities will be noticed and have a strong impact on the sense of place.

Impacts related to stormwater runoff on Candlestick Point are discussed in Impact HY-6, beginning on Draft EIR page III.M-78.

Response to Comment 81-28

The commenter states there is no basis for the assertion that the Project is consistent with BCDC and Bay Trail plans. Refer to Response to Comment 47-58 for a discussion of the Project's consistency with BCDC policies and the Bay Plan policies with respect to biological resources. Refer also to pages III.B-13 through III.B-15 for a discussion of consistency with BCDC policies related to fill. Project consistency with the Bay Trail Plan is analyzed on pages III.B-16 through III.B-19 of Section III.B (Land Use and Plans) of the Draft EIR.

Response to Comment 81-29

Refer to Response to Comment 81-18 for a discussion of the number of days on which biological resources surveys were conducted and of the information on which the biological resources assessment was based. The bird species listed by the commenter as having been considered as potentially occurring by the Navy in 2000 were all considered during the preparation of the special-status species table and the impact assessment in the Draft EIR.

Response to Comment 81-30

The Draft EIR, page III.E-75 discloses that the Project site will change from an "area of low to moderate-level illumination to moderate to high illumination." Thus, the Project would result in day and night lighting that is typical for other urbanized locations in San Francisco. Page III.E-76 identifies that "views of the night sky are diminished as they are in all urban areas" The Draft EIR identifies mitigation measures that reduce spill light and require shielding of light fixtures to reduce light pollution (refer to mitigation measures MM AE-7a.1 through AE-7a.3, page III.E-72). Mitigation measure MM AE-7a.1 restricts light fixture direction, prescribes state-of-the-art light fixtures, and shielding. Mitigation measure MM AE-7a.2 requires the use of low-level and unobtrusive light fixtures for landscape illumination and exterior sign lighting; and mitigation measure MM AE-7a.3 requires the Applicant to prepare a Lighting Plan for each

phase of the Project to be approved by the Agency prior to issuance of building permits to minimize glare and prevent spill light.

Page III.E-73 of the Draft EIR describes that the requirements for lighting for the stadium are subject to "NFL Sports Lighting Design Criteria." As these requirements are already in force at Candlestick, the new light and glare attributed to the new 49ers stadium is a relocation of impacts from Candlestick Point to HPS Phase II, that would be reduced to less than significant with mitigation measures MM AE-7b.1 and MM AE-7b.2. No more detail is necessary to identify or address the impact of stadium lighting associated with the Project.

Response to Comment 81-31

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required. However, the commenter is requesting that the lead agencies consider their comments and those of other community members and organizations. All comment letters and responses will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

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Letter 82: Arc Ecology (1/12/10)

Response to Comment 82-1

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 82-2

As a result of the size of the Project, the mass emissions will be above the BAAQMD mass emission thresholds of significance (Impact AQ-4), resulting in a "significant and unavoidable" determination. However, despite its size, the Project has been designed to minimize these exceedances to the extent possible. The Project's design incorporates a dense, compact development plan that includes a diverse mix of land uses that are well connected with regional mass transit systems, all of which serve to reduce the mass emissions of this Project compared to a similar sized project without these design features, as stated on page III.H-31:

> Table III.H-5 (Operational Criteria Pollutant Emissions [Year 2030]) presents the emission modeling with comparisons to BAAQMD thresholds and the transportation scenario without trip reduction features (referred to as the Business as Usual [BAU] scenario). The estimated daily criteria pollutant emissions associated with the proposed Project and the BAU scenario are shown in Table III.H-5 in comparison with each other and with the BAAQMD CEQA significance criteria. Although the Project would generate substantially fewer emissions than the BAU scenario (i.e., from 14 to 50 percent less than BAU depending on the pollutant), Project emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ would exceed the BAAQMD thresholds. No additional feasible mitigation measures have been identified that would further reduce the Project's operational criteria emissions below the BAAQMD thresholds. This would be a significant and unavoidable impact.
>
> However, the Project design is a dense, infill mixed-use project, with a transit-oriented design, which is consistent with Senate Bill 375 as well as the San Francisco's sustainable city initiatives to reduce emissions, on a per-capita basis by its very nature. However, the BAAQMD CEQA guidelines list a total mass of criteria pollutants as its CEQA threshold. Accordingly, a large project, such as this one, regardless of its design and location will always exceed these mass-based thresholds.

While the emissions from the Project may exceed the mass thresholds, as discussed in Impact AQ-9, the Project would conform to the current regional air quality plan, and therefore would not impair the ability of the BAAQMD to maintain air quality within its jurisdiction. Therefore, the Project would neither worsen existing air quality nor contribute substantially to projected air quality violations.

Response to Comment 82-3

The comment incorrectly states that requiring a site mitigation plan, contingency plan, or health and safety plan does not constitute a mitigation measure, but only "a promise of the intent to have a mitigation measure." In fact, the Draft EIR provides legally binding mitigation through formulation of, and compliance with, approved plans meeting certain performance standards and utilizing detailed methods.

As the Draft EIR explains, the Project is legally committed to utilizing the mitigation measures corresponding to Impacts HZ-1 through HZ-14. Prior to obtaining a site permit, building permit or other authorization from the City for development activities in various areas, the Project Applicant must comply with the mitigation measures, which require, for example, preparation of a site mitigation plan under Article

22A of the *San Francisco Health Code* (MM HZ-1a), or approval by the San Francisco Department of Public Heath of an unknown contaminants contingency plan (MM HZ-2a.1). Without such approval and compliance with the mitigation measures, no permit may be issued, and no development may take place.

The mitigation measures do not, and cannot, contain the full specifics of the site mitigation plans, contingency plans, and health and safety plans since those plans must take into account circumstances that exist at the time they are prepared. However, the Draft EIR does provide significant detail about the purposes and required content of the plans and the standards they must be designed to achieve. For example, mitigation measure MM HZ-1a, Draft EIR page III.K-54, requires that, where the site investigation reveals a hazardous materials release:

> 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.

The Draft EIR further states that any remedial activities, safety protocols, and control measures required would be similar to the specific measures described in Draft EIR Table III.K-2 (Remedial Actions, Potential Environmental Effects, and Methods to Reduce Effects), pages III.K-74 -76. Similarly, mitigation measure MM HZ-2a.1, in describing contingency plans, states the plans will accomplish appropriate notification and site control utilizing methods including further investigation and remediation in various forms where necessary. Please refer to the mitigation measures corresponding to Impacts HZ-1 through HZ-14 for further detail.

Response to Comment 82-4

Mitigation measure MM HZ-10b provides for the creation of legally binding design documents, approved by all required regulatory agencies (including USEPA, DTSC, RWQCB, and the Navy and CDPH if necessary) for the installation of any pilings through a landfill cap. The Draft EIR outlines specific standards those documents must adhere to; in particular, they must describe how the cap will be evaluated to determine the potential adverse effect of shoreline improvements, and they must describe the method of construction to mitigate environmental risk and restore the cap. Mitigation measure MM HZ-10b ensures that, before any construction activities take place that could potentially affect contaminated sediments, the Agency, its contractors, or the 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 on Consent. In addition to Impact HZ-10 and mitigation measure MM HZ-10b, refer to Master Response 10 (Pile Driving through Contaminated Soil) for a detailed discussion on these topics.

Response to Comment 82-5

As stated in mitigation measure MM HZ-15, Draft EIR page III.K-99, the Project Applicant must attain approval of an Asbestos Dust Mitigation Plan (ADMP) prior to obtaining any permit from the City that includes soil disturbing activities for areas over one acre, and additionally the Project Applicant must attain approval of a Dust Control Plan (DCP) prior to obtaining any such permit for areas over 0.5 acre. The ADMP and DCP must be approved by BAAQMD and SFDPH, respectively, and must meet certain standards through numerous dust control measures. The DCP addresses all forms of dust and is not

specifically targeted at naturally occurring asbestos, although most of the mitigation measures required by the plan have the effect of controlling emissions of naturally occurring asbestos disturbed during excavation activities. The City and County of San Francisco's "no visible dust" objective is likewise not specifically targeted at naturally occurring asbestos emissions. The ADMP approved by the BAAQMD is specifically targeted at controlling naturally occurring asbestos emissions (whether visible or not), as required by the state regulation promulgated by the California Air Resources Board called the Airborne Toxic Control Measures (ATCM). The state ATCM regulations do not require ambient air monitoring to be included as a part of ADMPs; however, the regulations provide that air districts may require an ADMP to include such monitoring. Consistent with the state ATCM regulations, MM HZ-15 requires the ADMP for the Project to include ambient monitoring to the extent the BAAQMD requires such monitoring. In approving the ADMP for HPS Phase I, the BAAQMD did require ambient air monitoring, and continues to require it. There is no reason to believe the BAAQMD would vary from its position of requiring ambient air monitoring when approving the ADMP for the Project. Refer to mitigation measure MM HZ-15 and Master Response 12 (Naturally Occurring Asbestos) for detail regarding the DCP and ADMP.

Response to Comment 82-6

Comment noted. The shutdown criteria in the BAAQMD-approved ADMP for HPS Phase I was established using the methodology employed by the California Office of Environmental Health Hazard Assessment (OEHHA), and corresponds to a risk level of one increased cancer per 10,000 (at the level suggested by the commenter). As indicated in the Response to Comment 82-5, there is no reason to believe the BAAQMD will require a different monitoring program in the ADMP for the Project than it did for the ADMP for HPS Phase I.

Response to Comment 82-7

The ambient air monitoring conducted by the Project Applicant at HPS Phase I includes four "community" monitoring stations operated by an independent contractor under the supervision of the San Francisco Department of Public Health. Samples from these monitoring stations are analyzed by a different laboratory than the one that analyzes the samples from the monitors operated under the direct supervision of the Project Applicant. Under the ADMP, the results of the community air monitors have the same legal effect as those of the monitors operated under the direct supervision of the Project Applicant; in both cases the Project Applicant is required to shut down project operations if monitoring results are above certain thresholds. If the BAAQMD requires ambient air monitoring to be included in the ADMP for the Project (as described in the Response to Comment 82-5 above), it is likely that similar community monitoring stations will be utilized. With respect to the public provision of monitoring data, monitoring results will be available to the community through Navy and City community participation programs and through regulatory agencies. Further, additional notice requirements will be implemented under mitigation measure MM HZ-15, Draft EIR page III.K-99, as described in Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues).

The shutdown criteria in the BAAQMD-approved ADMP for HPS Phase I is if the results from one of the air monitors exceeds 16,000 structures per cubic meter. This level was established using the methodology employed by the California Office of Environmental Health Hazard Assessment (OEHHA), and corresponds to a risk level of one increased cancer per 10,000 (at the level suggested by the commenter). As

indicated in Response to Comment 82-5, there is no reason to believe the BAQMD will require a different monitoring program in the ADMP for the Project than it did for the ADMP for HPS Phase I.

Response to Comment 82-8

The commenter states that removal of riprap at Candlestick Point would have a significant impact on oysters and recommends replacement of hard substrate that is to be removed with new hard substrate. As stated in Impact BI-10a, page III.N-83 in the Draft EIR, the scenario recommended by the commenter is what is anticipated to occur as a result of the Project—hard substrate that is removed will be replaced by similar hard substrate suitable for colonization by oysters. Thus, the Draft EIR correctly concludes that impacts to oysters on Candlestick Point will be less than significant.

Response to Comment 82-9

The commenter states that the mitigation measures for potential Project impacts to green sturgeon are incomplete, as Section 7 consultation with the NMFS will be necessary regarding impacts to this species. The commenter suggests that the NMFS may not approve impacts from the bridge.

The regulatory process, which may include a Section 7 consultation, is a parallel but separate process from the CEQA process, and resolution of permitting issues is not required for assessment of impacts, specification of measures necessary to mitigate impacts to less than significant levels, and project approval under CEQA.

Response to Comment 82-10

In reference to the comment that re-suspension of sediment at Candlestick Point may result in impacts to biological resources, Impact BI-19a referenced in this comment pertains to the operational aspects of the development at Candlestick Point. No activities resulting in the re-suspension of sediments at Candlestick Point will occur after construction is completed.

Response to Comment 82-11

In reference to the comment that consultation with the NMFS and CDFG will be necessary regarding potential maintenance dredging impacts to fish and eelgrass, refer to Response to Comment 82-9 above regarding the distinction between the regulatory permitting process and the CEQA process. The applicant will be required to consult with both agencies regarding regulatory issues, separate from the CEQA process.

Response to Comment 82-12

One comment suggested that flashing lights, rather than continuously burning lights, on tops of buildings may not be permissible by the US Coast Guard. According to David Sulouff, Chief of the Bridge Section for the Eleventh Coast Guard District, the Coast Guard is not expected to have any concerns over lighting on tops of the towers on Candlestick Point and HPS Phase II, as such lights would not pose an impediment to navigation of vessels on San Francisco Bay.[121]

[121] David H. Sulouff, pers. comm. to Steve Rottenborn of H. T. Harvey & Associates, March 10, 2010.

Response to Comment 82-13

The suggestion that measures to protect native oysters from maintenance dredging, including a turbidity plume study, are not necessary, are noted. The commenter may be correct in suggesting that a survey for oysters on substrates within the marina may not detect the species. Nevertheless, in light of concerns regarding the status of this native species inside San Francisco Bay, these measures are being required to ensure against impacts to a substantial and important occurrence of the species (e.g., a large oyster bed), in the unlikely event that such an occurrence be present.

Response to Comment 82-14

In reference to the comment regarding the Pacific herring spawning season and seasonal restrictions pertaining to the spawning season, refer to Response to Comment 37-1.

Response to Comment 82-15

In response to the comment, the text in mitigation measure MM HZ-1a, Draft EIR page III.K-55 (and Table ES-2, page ES-51), has been revised as follows:

MM HZ-1a …

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 ~~comparable~~ equivalent to those set forth in Article 22A for construction and development activities conducted at Candlestick Point State Recreation Area.

Response to Comment 82-16

Documents prepared for the Project approval hearing process will include a Mitigation Monitoring and Reporting Program, which will describe who is responsible for implementing and monitoring the mitigation measures that are adopted.

Response to Comment 82-17

In response to the comment, mitigation measure MM HY-1a.1, Draft EIR page III.M-59 (and Table ES-2, page ES-77), has been edited to add the following text to the second item under the first bullet:

MM HY-1a.1 […]

> *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.*

In response to the comment, the text for mitigation measure MM HY-1a.2, Draft EIR page III.M-62 (and Table ES-2, pages ES-79 and -81), the following sentence has been added to the second item under the first bullet as well as to the first item under the tenth bullet:

MM HY-1a.2 …

- *Erosion and Sedimentation:*

…

> *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 and seeding shall use native, non-invasive species.*

…

- *Post-construction BMPs:*

> *Re-vegetate all temporarily disturbed areas as required after construction activities are completed. Re-vegetation shall use native, non-invasive species.*

…

In addition, Appendix N3 of the Draft EIR includes a Draft Parks, Open Space, and Habitat Concept Plan that describes proposed removal of, monitoring for, and ongoing control of invasive plants and describes proposed revegetation efforts.

Response to Comment 82-18

Natural, living shorelines will be incorporated wherever possible and feasible with input from local agencies and stakeholders. Mitigation measures proposed will also require approvals from a myriad of environmental and other regulatory agencies prior to construction, which will provide independent review of their design and performance.

The design of the Project shoreline improvements must consider structural integrity, functionality, and regulatory requirements. Living shorelines emphasize the use of natural materials including marsh plantings, shrubs and trees, low profile breakwaters, strategically placed organic material, and other techniques that recreate the natural functions of a shoreline ecosystem. Table II-13 (Summary of Shoreline Improvements at the Project Site) of the Draft EIR, starting on page II-57, and Table II-14 (Description of Existing Shoreline Conditions and Proposed Improvement Concepts), starting on page II-59, shows the areas where beaches and tidal wetlands would be constructed. Table II-14 also identifies areas where bulkheads could be replaced with a natural shoreline edge. Figure II-20 (Natural Shoreline Recommended Work Map), on page II-68 of the Draft EIR, illustrates the areas where living shoreline elements are proposed.

In response to the comment, mitigation measure MM HY-12a.2, Draft EIR page III.M-102 (and Table ES-2, page ES-89), has been revised as follows:

> *MM HY-12a.2* Shoreline Improvements for Future Sea-Level Rise. *Shoreline and public access 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 ~~along the shoreline~~ 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 legislative 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.*

In response to the comment, the text for mitigation measure MM HY-14 on page III.M-106 (and Table ES-2, pages ES-90 to -91) of the Draft EIR has been revised as follows:

> *MM HY-14* Shoreline Improvements to Reduce Flood Risk. *To reduce the flood impacts of failure of existing shoreline ~~protection~~ 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.*

Response to Comment 82-19

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur. The Adaptation Strategy includes measures to provide continued flood protection beyond the 16 inches of sea level rise that it is initially built to, thereby ensuring that open-space and public uses continue.

Response to Comment 82-20

Refer to Response to Comment 82-16, which is identical to this comment.

Response to Comment 82-21

Refer to Response to Comment 82-18 for a discussion of the incorporation of natural, living shoreline elements into the project, wherever possible and feasible, with input from local agencies and stakeholders, and to the extent that such measures are compatible with proposed shoreline treatments.

Response to Comment 82-22

The suggestion that the natural shoreline incorporate a variety of habitats, including deep intertidal, eelgrass, and native oyster beds and reefs, is noted. The Project will incorporate habitat diversity into this shoreline to the extent that such measures are compatible with proposed shoreline treatments.

Refer also to Response to Comment 57-3 for a discussion of shoreline protection and improvements.

Response to Comment 82-23

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 82-24

Figure C&R-17 (Cross-section of the Yosemite Slough Bridge, With Stadium and Without Stadium) presents the proposed cross-section of the Yosemite Slough bridge under conditions with and without a new NFL stadium. As shown, with the stadium, the bridge would be 81 feet wide, including a 40-foot-wide bicycle/pedestrian promenade (which would be converted to four 10-foot-wide travel lanes on game days only), a 2-foot-wide median on either side of the promenade, two 11-foot-wide BRT lanes, a 2-foot-wide median barrier, a 12-foot-wide Class I bicycle/pedestrian facility, and a 1-foot-wide shoulder. Under

conditions without the new stadium, the bridge would be 41 feet wide and would include a 12-foot-wide Class I bicycle/pedestrian facility and two 11-foot-wide BRT lanes.

Response to Comment 82-25

This comment repeats information presented in the Draft EIR regarding traffic impacts of Alternative 2. No additional response is required.

Response to Comment 82-26

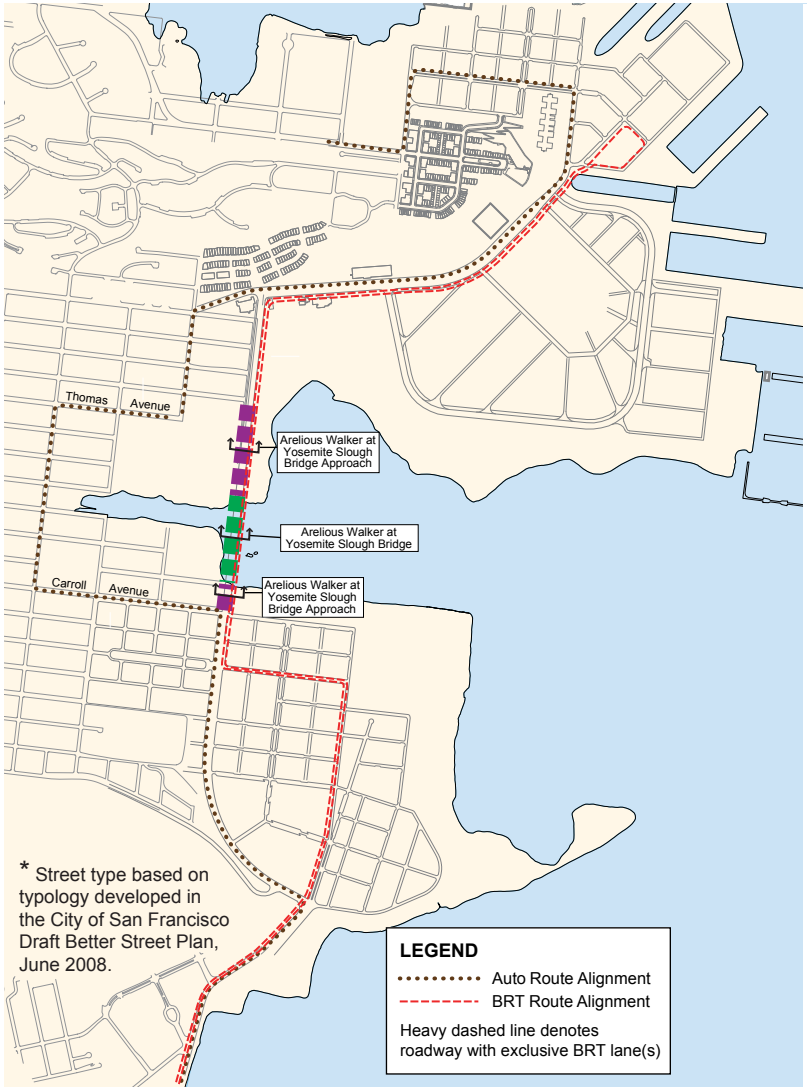
The intent of the statement was to note that game-day traffic impacts would be exacerbated under Alternative 2 without the bridge compared to the Project. In response to the comment, the text in Section VI.D (Environmentally Superior Alternative), second paragraph, second and third sentences, page VI-160, has been revised as follows:

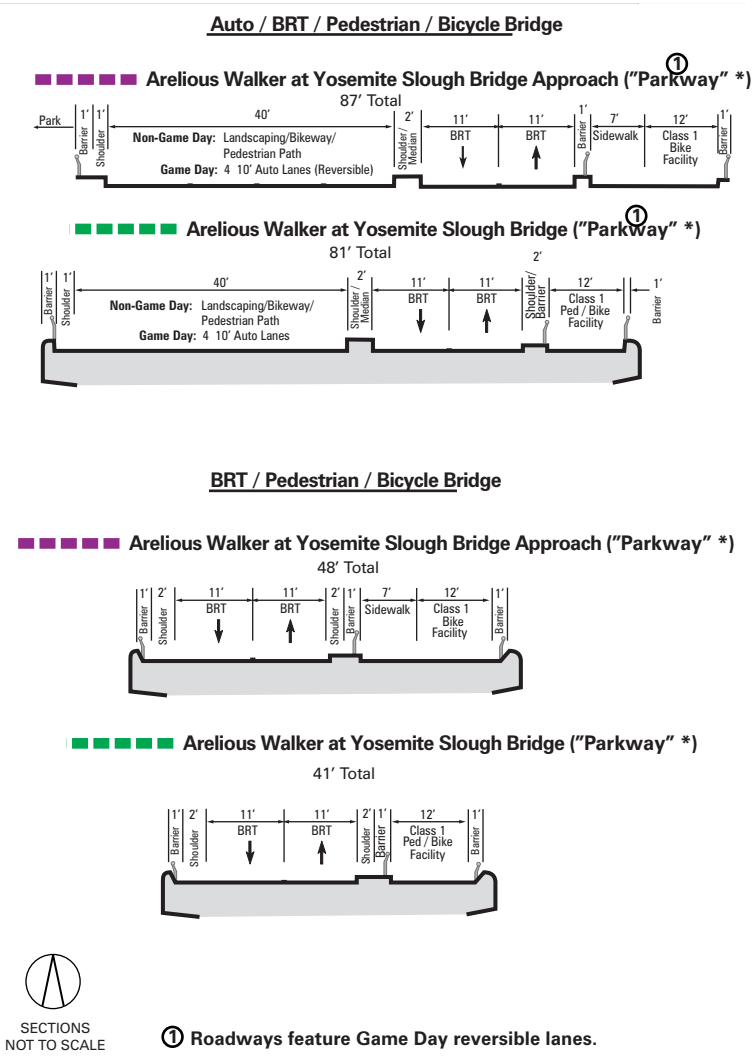
> … Alternative 2 (CP-HPS Phase II Development Project, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge) would avoid Project impacts related to biological resources, water quality, and hazardous materials because the Yosemite Slough bridge would not be constructed. However, because the Yosemite Slough bridge would not be constructed, Alternative 2 would result in increased traffic-related impacts~~, particularly~~ on game days. …

Response to Comment 82-27

In response to the comment, Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) shows the correct alignment of the proposed BRT route for Alternative 2.

The commenter notes that the BRT route proposed under conditions without the Yosemite Slough bridge would travel in exclusive right-of-way and that the explanatory text does not include this information. In response to the comment, the text in Section VI.C (Analysis of Project Alternatives), under the Transit Impacts heading, page VI-34, the second paragraph under this heading, has been revised as follows:





SOURCE: Fehr & Peers; AECOM, 2010.

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FIGURE C&R-17

Candlestick Point — Hunters Point Shipyard Phase II EIR

CROSS-SECTION OF THE YOSEMITE SLOUGH BRIDGE WITH STADIUM AND WITHOUT STADIUM

Existing RR ROW

BRT Path: Using RR ROW for portion of route around Slough

Auto Route Alignment

0 500 Feet

SOURCE: SFMTA, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE VI-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

ALTERNATIVE 2 CIRCULATION PLAN RAILROAD RIGHT-OF-WAY FOR BUS RAPID TRANSIT

> Although the alternative BRT route around Yosemite Slough would be technically feasible, it would not be an optimal configuration for a BRT system. BRT service would provide direct, fast, and reliable travel in a dedicated right-of-way, typically with signal priority for ~~V~~BRT vehicles. When these elements are combined, the BRT service takes on a higher quality character than typical local bus service. The Yosemite ~~s~~Slough bridge would provide a dedicated right-of-way and the most direct route between Hunters Point Shipyard and points to the west, including Candlestick ~~p~~Point, the Bayshore Caltrain Station, and Balboa Park BART. Although the route around Yosemite Slough proposed under Alternative 2 would provide exclusive right-of-way, the route would involve a number of right-angle turns and additional signalized intersections and would not ~~accommodate the BRT route~~ provide a comparably direct route as that provided on the bridge proposed ~~with~~ by the Project.

Response to Comment 82-28

Although the portion of the route around Yosemite Slough that travels within the Navy rail right-of-way would be "rail-ready," the primary area of concern with respect to rail-readiness of that route is the multiple right-angle turns and additional signalized intersections that the BRT would have to travel through between Arelious Walker Drive and the Navy rail right-of-way (i.e., along Carroll Avenue, Hawes Street, Armstrong Avenue and Shafter Avenue). Also refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge).

Response to Comment 82-29

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge), which describes how the route around the Yosemite Slough would be much less direct than the proposed bridge due to multiple right-angle turns and additional signalized intersections.

Response to Comment 82-30

The estimate of travel time around Yosemite Slough was developed based on data regarding average vehicle travel speeds provided by SFMTA's cost estimation model, which was developed as part of the Transit Effectiveness Project. That data notes that local bus service travels an average speed of 7 miles per hour (mph), while BRT service typically travels at 10 mph. Although the route around the slough would provide exclusive right-of-way, due to the large number of right-angle turns through signalized intersections, the analysis assumes that the BRT would operate at speeds more similar to local bus service through this portion (i.e., 7 mph). The route across the bridge would operate more similar to typical BRT speeds (i.e., 10 mph) because it would have no intersections, no turns, and no conflicting bicycle, pedestrian, or traffic streams. Because it would not have to stop on the route across Yosemite Slough bridge, the average travel speed may, in fact, be higher than 10 mph.

The distance across the Yosemite Slough bridge (from Carroll Avenue to Shafter Avenue) is approximately 0.4 mile. The distance on the route around the slough is approximately 1 mile, a difference of 0.6 mile, and includes crossing through 12 to 14 intersections and four additional right turns that the route over the Yosemite Slough bridge would not require. The travel time for the BRT route across this distance (assuming an average 10 to 20 mph travel speed) would be approximately 1.25 to 2.5 minutes. The travel time for the BRT route around the slough (assuming an average 7 mph travel speed) would be 8.7 minutes, an increase of over 6 to 7.5 minutes. Therefore, the assumption of a 5-minute difference in travel time as disclosed in the Draft EIR is a reasonable estimate given the uncertainties in estimating actual transit travel time. As described above, the travel times used in the Draft EIR are from the same start and end points for both routes, so the comparison

is valid. Although the route around the slough would provide exclusive right-of-way, its benefits would be limited because of the large number of right-angle turns through signalized intersections.

As noted above, an average travel speed of 7.3 mph is consistent with SFMTA's data regarding typical local bus speeds. Although the average speeds from SFMTA include dwell times at stops, they also are collected on routes traveling along typically straight corridors. The BRT route around Yosemite Slough would not have stops for passenger loading, but it would have more sharp turns through signalized intersections, which are more likely to require stops. Therefore, an average speed of 7 miles per hour is reasonable.

The commenter does not provide evidence supporting the claim that average BRT speeds are between 20 and 25 miles per hour. It is possible that BRT routes achieve maximum speeds of between 20 and 25 miles per hour, but unlikely that they achieve this speed over the length of their route, particularly if they are traveling through industrial areas and making a series of right-angle turns through signalized intersections as would be required by the proposed route around the slough. If anything, the 20-25 mph speed would be more likely to apply to the route across the bridge, since it would be straight and unobstructed and would have adequate distance to achieve its maximum speed.

As described above, the travel time estimates were calculated based on typical average speeds provided by SFMTA and are correct (Fehr & Peers, Memo to Planning Department documenting SFMTA's Transit Operating Speed Assumptions).

The Transportation Study (provided as Appendix D of the Draft EIR) and the text of the Draft EIR itself are consistent. Neither the Transportation Study nor the Draft EIR identified a new significant impact to Route 28L associated with Alternative 2. However, both the Transportation Study and the Draft EIR note that Alternative 2 would not provide the same quality in terms of travel times, reliability, and ridership on the 28L as would be provided by the Project.

Response to Comment 82-31

The 28L-19th Avenue/Geneva Limited would be extended from the Balboa Park BART station east along Geneva Avenue into the Project site. East of Bayshore Boulevard, the 28L-19th Avenue/Geneva Limited would provide the Bus Rapid Transit service extending across Yosemite Slough bridge into the Hunters Point Shipyard. The Project's impacts to this line are due to Project-generated traffic congestion at and just west of the Bayshore Boulevard/Geneva Avenue intersection, when the 28L would operate in mixed-flow travel lanes.

It is not clear to what data the commenter is referring. It is possible that the commenter is referring to Tables 77 and 83 in the Transportation Study in Appendix D of the Draft EIR. Table 77 presents the additional transit vehicles that would be necessary on each route serving the Project study area to maintain headways due to the Project and Variants 1 and 2. Table 83 presents the same information for Project Alternatives. If this is the data to which the commenter is referring, the comment contains a misrepresentation of the data.

Table 83 illustrates that based on long-term growth in traffic congestion in the study area, which would increase transit travel times, if Alternative 1 (No Project) occurred, a total of 16 additional buses would be necessary to maintain proposed transit headways in the study area in both the AM and PM peak hours. This includes only one additional vehicle for the 28L in both peak hours.

Table 77 illustrates that with implementation of the Project (and associated increases in traffic congestion, which would increase transit travel times) using SFMTA's Service Planning model in consultation with SFMTA, a total of 7 additional vehicles would be needed in the AM peak hour and 12 vehicles in the PM peak hour to maintain headways on all transit lines serving the study area. This includes one additional vehicle on the 28L-19th Avenue/Geneva Limited in each peak hour compared to Alternative 1 (No Project).

Table 83 shows that with implementation of Alternative 2, the 28L-19th Avenue/Geneva Limited would require the same number of additional vehicles (one) as required by the Project to maintain proposed headways, associated with traffic congestion-related delays only. However, the additional travel time around Yosemite Slough under Alternative 2 without the bridge would require an additional 2 vehicles on the 28L BRT, compared to the Project. These additional vehicles are not reflected in Table 83, which is summarizing the effects of traffic congestion related transit delays only.

Response to Comment 82-32

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of stadium traffic egress for Alternative 2. The existing stadium is situated adjacent to a single freeway interchange. A very large portion of post-game traffic is routed to this single interchange, which is typically overwhelmed following games, limiting the capacity of autos to exit the stadium. The new stadium would be situated such that it has two primary routes to regional freeways—the route over Yosemite Slough toward Harney Way and the reconstructed US-101/Harney Way interchange and the route along Innes Avenue/Evans Avenue/Cargo Way which opens up direct connections from the stadium to other regional freeway entrances at Cesar Chavez Street, Indiana Street, and Bayshore Boulevard/Alemany Boulevard (refer to Figure III.D-15 [Stadium Game Day Egress Routes] on Draft EIR page III.D-130).

Response to Comment 82-33

It is possible that providing extremely difficult stadium egress would promote a shift from private auto to transit. However, the shift would not be so great as to reduce stadium clearance times to within standards set by the NFL (i.e., 1 hour for average game). For example, the proposed bridge would accommodate approximately 4,000 vehicles per hour following games. The average auto occupancy for game day attendees is 2.6 persons per auto, according to data provided by the 49ers. In order to maintain the stadium clearance times provided by the Project, which includes the Yosemite Slough bridge, the 10,400 people per hour who would otherwise use the bridge (4,000 vehicles per hour x 2.6 persons per vehicle) would have to switch to transit. When added to the 17,040 persons per hour already forecasted to use transit to access the stadium, the stadium's transit mode share would more than double, increasing from 19 to 40 percent, with 27,440 transit riders.

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of importance of bridge related to new stadium.

Response to Comment 82-34

The comment summarizes Comments 82-23 to 82-33. Refer to Responses to Comments 82-23 to 82-33 as well as Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge). No further response required.

Response to Comment 82-35

In response to the comment, Section VI.C (Analysis of Project Alternatives), Draft EIR page VI-30, fourth paragraph, has been revised as follows:

> Under Alternative 2, ~~motorized traffic~~ transit and non-motorized traffic would be required to circumnavigate Yosemite Slough because no bridge would be constructed. On game days, motorized and non-motorized traffic, which would travel across Yosemite Slough Bridge under the Project, would also be required to circumnavigate Yosemite Slough because no bridge would be constructed under Alternative 2. Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) illustrates the proposed route. The rest of the street network at Candlestick Point and HPS Phase II would be the same as the Project.

Response to Comment 82-36

In response to the comment, the text in Section VI.C (Analysis of Project Alternatives), Draft EIR page VI-30, fifth paragraph, has been revised as follows:

> Similar to the Project, under Alternative 2, ~~T~~the primary roadway connection for automobiles and other vehicular traffic between Candlestick Point and HPS Phase II would be west on Carroll Avenue to Ingalls Street, north along Ingalls Street to Thomas Avenue, and east on Thomas Avenue to Griffith Street. Ingalls Street would remain an industrial mixed-use street with two auto lanes and parking and loading zones on its northern and southern sides. The width of sidewalks on that portion of Ingalls Street from Carroll Avenue to Yosemite Avenue would be decreased from 16 feet to 11 feet to create a uniform street width to accommodate the auto lanes, parking, and loading.

Response to Comment 82-37

Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) shows an incorrect alignment of the proposed BRT route for Alternative 2. The figure has been revised to illustrate the correct alignment. Refer to Response to Comment 82-27 for the revised figure.

Response to Comment 82-38

The line along Innes Avenue was also in error. Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) has been revised to illustrate the correct alignment. Refer to Response to Comment 82-27 for the revised figure.

Response to Comment 82-39

Refer to Response to Comment 82-28 for a discussion of "rail-readiness" of the BRT route around Yosemite Slough.

Response to Comment 82-40

In response to the comment, the text in Section VI.C (Analysis of Project Alternatives), the first paragraph, under the Transportation and Circulation heading, page VI-33, has been revised as follows:

> Alternative 2 would be the same as the Project, except it would not include the Yosemite Slough bridge. Because vehicular traffic could not use the bridge on non-game days, ~~T~~the main roadway connection between Candlestick Point and HPS Phase II would be the same as with the Project, via Ingalls Street. The bus rapid transit (BRT) route would be along Carroll Avenue, Hawes Street,

> Armstrong Avenue, and the abandoned railroad right-of-way to provide access between Candlestick Point and HPS Phase II. Alternative 2 would otherwise have the same transportation improvements as proposed with the Project.

Response to Comment 82-41

The referenced paragraph states that "Alternative 2 would have similar Project and cumulative effects at study intersections." The text is clear and no changes are required.

Response to Comment 82-42

In the case of the Yosemite Slough bridge, the bridge would carry four lanes of traffic inbound before games and four lanes outbound after games. Emergency vehicles would be permitted to use the BRT lanes.

The referenced text is in a paragraph discussing game-day traffic impacts. As described in the Draft EIR, game-day traffic entrance and exiting capacity would be reduced by 40 percent in Alternative 2, compared to the Project. Game-day traffic impacts may, in fact, be more severe under Alternative 2. The commenter is correct in noting that the number of lanes accessing the regional facilities and on the local street system would remain the same. No change to the text is required.

Response to Comment 82-43

In response to the comment, the text in Section VI.C (Analysis of Project Alternatives), under the "Intersection Conditions" heading, page VI-34, has been clarified, as follows:

> During game days at the football stadium, with no Yosemite Slough Bridge, the entrance and exiting capacity for vehicles would be reduced about 40 percent compared to the Project; four out of a total of 11 exit lanes would be available without the bridge. A<u>s with the Project, a</u> mitigation measure to implement a Travel Demand Management Plan for stadium events would reduce but not avoid traffic impacts, which would be significant and unavoidable.

Response to Comment 82-44

The text in Section VI.C (Analysis of Project Alternatives), under Transit Impacts heading, page IV-34, has been revised as indicated in Response to Comment 82-27. Refer to Response to Comment 82-27 for revisions to Figure VI-1 and the description of the BRT route.

Response to Comment 82-45

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of travel time around Yosemite Slough.

Response to Comment 82-46

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of travel time around Yosemite Slough.

Response to Comment 82-47

The text in Section VI.C (Analysis of Project Alternatives), under the "Transit Impacts" heading, page VI-34, the typographical error has been corrected, as follows:

> Although the alternative BRT route around Yosemite Slough would be technically feasible, it would not be an optimal configuration for the BRT system. BRT service would provide direct, fast, and reliable travel in a dedicated right-of-way, typically with signal priority for B~~V~~RT vehicles, …

Response to Comment 82-48

While the transportation impacts of the Project and Alternative 2 would be the same or similar, the Project Objectives would not be met at the same level. Table VI-4, page VI-59, provides a summary of the Project Objectives and indicates whether the Alternative meets those objectives. Two of the objectives of the Project are met to a lesser extent than the Project. Because game day access would be reduced by 40 percent with Alternative 2, and because the BRT would not be an optimal configuration, Alternative 2 does not meet the Project objective 1 and 2 to the same extent as the Project. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) regarding the need for the bridge.

Response to Comment 82-49

With regard to meeting the Project Objectives, refer to Response to Comment 82-48. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) regarding the need for the bridge.

Refer to Master Response 4 and Responses to Comments 47-4 and 82-30 about the difference between the Alternative 2 BRT and the Project transit travel time. With regard to impacts related to hazards and hazardous materials, geology and soils, and biological resources, Alternative 2 reduces the number of less-than-significant impacts (impacts which can be addressed by mitigation) that would occur with the Project. Alternative 2 has the same or similar significant unavoidable impacts as the Project.

Response to Comment 82-50

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge). Despite providing dedicated right-of-way, the route around Yosemite Slough would be substantially more circuitous with 12 to 14 additional signalized intersections and four additional right turns is therefore considered a much less direct connection across Yosemite Slough.

Response to Comment 82-51

The commenter is referencing text that is meant to identify the utility and ease of access that a bridge at the mouth of the slough would provide for multiple modes of transit (pedestrians, bicyclists, and transit riders). The visual and physical connection at the mouth of the slough would encourage travel that would not otherwise occur.

Response to Comment 82-52

Refer to Response to Comment 82-48 with regard to meeting the Project Objectives, and 82-50 regarding a much less direct connection across Yosemite Slough for Alternative 2, compared to the bridge alternative.

The commenter is mistaking the text in the Draft EIR which describes how a crossing of Yosemite Slough would provide benefits that would not accrue without a direct bridge connection. The analysis does not refer to grade separation as the distinguishing factor of the bridge. What is referenced is the utility and ease of access that a bridge at the mouth of the slough would provide for multiple modes of transit (pedestrians, bicyclists, and transit riders). The visual and physical connection at the mouth of the slough would encourage travel that would not otherwise occur. Bicyclists and pedestrians are more likely to travel across the slough as the bridge would provide longer views and quicker access to the shoreline.

Response to Comment 82-53

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Response to Comment 82-50 regarding a less direct connection across Yosemite Slough for Alternative 2 as compared to the bridge alternative.

Response to Comment 82-54

Comment noted.

Response to Comment 82-55

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) regarding the need for the bridge. Refer to Responses to Comments 47-4 and 82-30 about the difference between the Alternative 2 BRT and the Project transit travel time.

Response to Comment 82-56

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of post-game traffic flow under conditions without the Yosemite Slough bridge. Also refer to Response to Comment 82-32 for discussion of capacity constraints at regional transportation facilities.

Response to Comment 82-57

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of post-game traffic flow under conditions without the Yosemite Slough bridge and discussion of comments by the National Football League stating that a bridge across Yosemite Slough would be crucial to facilitating a new stadium at the Hunters Point Shipyard site.

Response to Comment 82-58

The text in Section VI.D (Environmentally Superior Alternative), page VI-160 has been revised as indicated in Response to Comment 82-26.

Response to Comment 82-59

The text in Section VI.D (Environmentally Superior Alternative), page VI-160 has been revised as indicated in Response to Comment 82-26.

Response to Comment 82-60

The routes toward Ingalls Street and across Yosemite Slough would generally deliver traffic from the new stadium to the same streets that are currently used to provide stadium egress (Harney Way, Carroll Avenue, and Gilman Avenue). The analysis assumes only a modest increase in capacity of the reconstructed Harney Way interchange compared to existing conditions. Alone, these routes across Ingalls Street and over Yosemite Slough are expected to offer similar capacity to their current capacity following games at Candlestick Park. The improvement in stadium clearance time is due in large part to the location of the stadium, which allows a second main exit route, along Innes Avenue, which provides connections to other regional freeway entrances. No further analysis is required to demonstrate capacity on Carroll Avenue, Gilman Avenue, or Harney Way because the analysis assumes they would have similar exiting capacity to existing conditions.

Response to Comment 82-61

This comment is similar to Comment 82-44. Refer to Response to Comment 82-27 for revisions to Figure VI-1 and description of the BRT route.

Response to Comment 82-62

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-63

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-64

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-65

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-66

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-67

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 82-68

The comment refers to the statement that the 28L-19th Avenue/Geneva Limited would experience increases in travel time due to Project-generated traffic. The comment notes that this route currently operates between Daly City and the Presidio, several miles west of the Bayview neighborhood, making it unlikely that Project-generated traffic would affect this route. However, the 28L-19th Avenue/Geneva Limited would be extended from the Balboa Park BART station east along Geneva Avenue into the Project site. East of Bayshore Boulevard, the 28L-19th Avenue/Geneva Limited would provide the Bus Rapid Transit service extending across Yosemite Slough bridge into the Hunters Point Shipyard.

The Project's impacts to this line are due to Project-generated traffic congestion at and just west of the Bayshore Boulevard/Geneva Avenue intersection, when the 28L would operate in mixed-flow travel lanes. As noted in the Draft EIR, Geneva Avenue would be extended from its current terminus at Bayshore Boulevard east to connect with Harney Way at US-101.

Response to Comment 82-69

The commenter has submitted a preliminary design report for a proposed stormwater treatment wetland. The comment is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

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Letter 83: Arc Ecology (1/12/10)

Response to Comment 83-1

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 83-2

The comment cites a number of statistics regarding crime rates on Muni, and comments that the safety of youth on transportation should be addressed. Although crime on Muni is an existing serious concern, the commenter provides no evidence suggesting that the Project would have any impact on crime rates on Muni.

Draft EIR page III.D-119 presents a discussion of potential pedestrian safety impacts resulting from increased travel demand. With the Project, the number of pedestrians on streets outside of the Project site would increase as a result of the expanded recreational uses, extension of transit lines, and overall increase in commercial activity in the area. Similar to the anticipated "safety in numbers" benefit from increased pedestrian activity in the Project area, the increase in Muni ridership and the general overall increase in pedestrians, bicyclists, and transit riders for a variety of purposes throughout the day could increase safety conditions on Muni and on the streets and sidewalks. No further analysis is required.

Response to Comment 83-3

Impact AQ-6, which is provided on Draft EIR pages III.H-33 through -34, assessed the environmental health concerns associated with Project operation. Because new R&D facilities would be located on HPS Phase II, the potential for cancer and non-cancer health risks was evaluated. With certain locational requirements identified in MM AQ-6.1 and MM AQ-6.2, potential exposure would be below the BAAQMD thresholds. Consequently, future residents of HPS Phase II would be protected from significant health effects.

The BAAQMD is recommending community-scale impact analyses for TAC and $PM_{2.5}$. Refer to Master Response 19 (Proposed BAAQMD Guidelines), which provides updated community-scale analyses based on the most recent guidance. Refer also to Master Response 5 (Health of the Bayview Hunters Point Community) for a discussion of health outcomes in the Bayview community.

Response to Comment 83-4

This comment does not provide a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 83-5

Provisions for adequate law enforcement services are discussed on pages III.O-1 through -12 of Draft EIR Section III.O (Public Services). The Draft EIR identified no need for new or improved services as a result of the Project. Also, the Project aims to provide high-quality parks that will encourage use and help anchor a vibrant, safe community. This comment is not a comment on the technical adequacy of the environmental analysis of the Project.

Response to Comments 83-6

Comments 83-6 through 83-26 are identical to Comments 82-2 through 82-22. Therefore, the following responses to these comments 83-6 through 83-25 reference the corresponding responses in Letter 82 without the need to summarize the issues.

Refer to Response to Comment 82-2.

Response to Comment 83-7

Refer to Response to Comment 82-3.

Response to Comment 83-8

Refer to Response to Comment 82-4.

Response to Comment 83-9

Refer to Response to Comment 82-5.

Response to Comment 83-10

Refer to Response to Comment 82-6.

Response to Comment 83-11

Refer to Response to Comment 82-7.

Response to Comment 83-12

Refer to Response to Comment 82-8.

Response to Comment 83-13

Refer to Response to Comment 82-9.

Response to Comment 83-14

Refer to Response to Comment 82-10.

Response to Comment 83-15

Refer to Response to Comment 82-11.

Response to Comment 83-16

Refer to Response to Comment 82-12.

Response to Comment 83-17

Refer to Response to Comment 82-13.

Response to Comment 83-18

Refer to Response to Comment 82-14.

Response to Comment 83-19

Refer to Response to Comment 82-15.

Response to Comment 83-20

Refer to Response to Comment 82-16.

Response to Comment 83-21

Refer to Response to Comment 82-17.

Response to Comment 83-22

Refer to Response to Comment 82-18.

Response to Comment 83-23

Refer to Response to Comment 82-19.

Response to Comment 83-24

Refer to Response to Comment 82-20.

Response to Comment 83-25

Refer to Response to Comment 82-21.

Response to Comment 83-26

Refer to Response to Comment 82-22.

Response to Comment 83-27

Comments 83-27 through 83-60 are identical to Comments 82-35 through 82-68. Therefore, Responses to Comments 83-27 through 83-60 refer to the corresponding responses in Letter 82 without the need to summarize the issues.

Refer to Response to Comment 82-35 for text changes to the description of Alternative 2.

Response to Comment 83-28

Refer to Response to Comment 82-36.

Response to Comment 83-29

Refer to Response to Comment 82-37.

Response to Comment 83-30

Refer to Response to Comment 82-38.

Response to Comment 83-31

Refer to Response to Comment 82-39.

Response to Comment 83-32

Refer to Response to Comment 82-40.

Response to Comment 83-33

Refer to Response to Comment 82-41.

Response to Comment 83-34

Refer to Response to Comment 82-42.

Response to Comment 83-35

Refer to Response to Comment 82-43.

Response to Comment 83-36

Refer to Response to Comment 82-44. Refer also to Response to Comment 82-27 for revisions to Figure VI-1 and a description of BRT routing.

Response to Comment 83-37

Refer to Response to Comment 82-45. Refer also to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for discussion of BRT travel time estimates.

Response to Comment 83-38

Refer to Response to Comment 82-46. Refer also to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for discussion of BRT travel time estimates.

Response to Comment 83-39

Refer to Response to Comment 82-47.

Response to Comment 83-40

Refer to Response to Comment 82-48.

Response to Comment 83-41

Refer to Response to Comment 82-49.

Response to Comment 83-42

Refer to Response to Comment 82-50. Refer also to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for BRT routing under Alternative 2.

Response to Comment 83-43

Refer to Response to Comment 82-51.

Response to Comment 83-44

Refer to Response to Comment 82-52.

Response to Comment 83-45

Refer to Response to Comment 82-53. Refer also to Response to Comment 82-50 for discussion of BRT routing for Alternative 2 and Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for BRT routing under Alternative 2.

Response to Comment 83-46

Refer to Response to Comment 82-54.

Response to Comment 83-47

Refer to Response to Comment 82-55.

Response to Comment 83-48

Refer to Response to Comment 82-56. Refer also to Response to Comment 82-32 for discussion of capacity constraints at regional transit facilities and Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for BRT routing under Alternative 2.

Response to Comment 83-49

Refer to Response to Comment 82-57.

Response to Comment 83-50

Refer to Response to Comment 82-58.

Response to Comment 83-51

Refer to Response to Comment 82-59. Refer also to Response to Comment 82-26 for revisions to Alternative 2 impact discussion.

Response to Comment 83-52

Refer to Response to Comment 82-60.

Response to Comment 83-53

Refer to Response to Comment 82-61. Refer also to Response to Comment 82-27 for revisions to Figure VI-1 and description of BRT route.

Response to Comment 83-54

Refer to Response to Comment 82-62. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 83-55

Refer to Response to Comment 82-63. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 83-56

Refer to Response to Comment 82-64. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 83-57

Refer to Response to Comment 82-65. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 83-58

Refer to Response to Comment 82-66. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30 for an estimate of BRT travel time around Yosemite Slough.

Response to Comment 83-59

Refer to Response to Comment 82-67. Refer also to Response to Comment 82-30 for discussion of BRT travel time estimates.

Response to Comment 83-60

Refer to Response to Comment 82-68.

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Letter 84: Arc Ecology (1/12/10)

Response to Comment 84-1

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required. However, page VI-160 of the Draft EIR affirms the receipt of the alternatives study mentioned in this comment, stating:

> A number of alternatives were proposed during the planning and public scoping process for the Project. Several of these alternatives were identified by Arc Ecology, a local community organization. In January 2009, Arc Ecology published a report titled *Alternatives for Study, Draft Outline of Issues, Positions, and Alternatives for Public Comment and Further Study* (Arc Ecology Report).[1350]

As stated on page VI-165 of the Draft EIR:

> Five alternative land use plans were proposed by Arc Ecology and studied in concept for this document. They include proposals to locate the stadium on Parcels B, C, and G of HPS Phase II; one proposal with no stadium at HPS Phase II; and one alternative land use plan for Candlestick Point. …

Each of these alternatives has been analyzed on pages VI-165 through VI-172 of the Draft EIR.

Response to Comment 84-2

A Sustainability Plan has been developed for the Project. The Sustainability Plan sets forth the vision, goals, and strategies for achieving this standard and for transforming the Project site into a local, regional, and international model for sustainable living. The Sustainability Plan integrates overarching goals for seven focus areas spanning the economic, social, and environmental aspects of sustainability, which include, but are not limited to economic vitality and affordability, community identity and cohesion, public well-being, safety and quality of life, accessibility and transportation, resource efficiency, ecology, information and communications technology. Numerous elements of the Sustainability Plan have been incorporated into other Project documents and plans including the Infrastructure Plan, Transportation Plan, and MMRP. The Project has set an energy efficiency performance target of 15 percent below the energy efficiency standards set forth in California law and Vertical Developers will be required to implement measures such 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, the use of drought tolerant plant species, and the use of efficient irrigation systems such as drip irrigation, moisture sensors, and weather data-based controllers; and progressive stormwater management to retain and treat stormwater on site and/or in adjacent areas. The Sustainability Plan will be a part of the DDA to be submitted for approval by the Board of Supervisors.

Response to Comment 84-3

Area C (which is referred to in the Draft EIR as India Basin Shoreline) was evaluated in the Draft EIR as part of the cumulative impact analysis, along with numerous other adjacent projects. As stated on page III.A-6 and -7 of the Draft EIR:

For the purposes of this EIR, the analysis of the potential for the Project's incremental effects to be cumulatively considerable is based upon a list of related projects identified by the City and neighboring jurisdictions and/or on full implementation of the City's General Plan and/or other planning documents, depending upon the specific impact being analyzed. For example, the cumulative analysis for the Traffic Study (which is the basis for many of the cumulative analyses in this document) uses the San Francisco County Transportation Authority (SFCTA) travel demand forecasting model, which projects general background growth based on Association of Bay Area Governments (ABAG) projections and is consistent with build-out of the City's General Plan. The Traffic Study specifically updated the background growth assumptions based on information regarding a number of major related projects, including (Figure III.A-1 [Cumulative Development in the Project Vicinity]):

- Yosemite Slough Restoration Project
- India Baseline Shoreline
- Hunters Point Shipyard Phase I
- Hunters View
- Jamestown
- Executive Park
- Brisbane Baylands
- Cow Palace
- Visitacion Valley/Schlage Lock

The purpose of the cumulative impact analysis is to determine whether or to what extent impacts from individual projects, when considered together, could result in a significant environmental impact, which eliminates the potential for "piecemealing."

Response to Comment 84-4

The Draft EIR presents 111 mitigation measures that have been designed for the express purpose of avoiding or reducing environmental impacts, including those associated with stadium, and the document, in total, provides nearly 4,400 pages of data and analysis, all of which collectively provides substantial evidence for the conclusions made in the document. While the commenter expresses an opinion that the Draft EIR "fails to present reasonable justification and/or mitigations for the impacts of locating the proposed stadium on the Shipyard," no specific comment is provided.

Response to Comment 84-5

Refer to Response to Comment 48-3 regarding the selection and evaluation of alternatives.

The alternative the commenter suggests (port-related heavy industrial uses) is not compatible with the City's vision or the redevelopment plans adopted for the area. Further, this alternative would not achieve the Project's objectives and would not provide any benefit not achieved by the Project. In addition, industrial activities would be expected to result in far greater environmental impacts than those of the Project's proposed land uses. Table VI-11, page VI-170, of the Draft EIR states with regard to maritime industrial uses: "Maritime industrial uses are not proposed under the Project. Construction and operation of such uses at HPS Phase II could result in new impacts including, but not necessarily limited to, impacts on air quality, noise, hydrology and water quality, and biological resources."

Response to Comment 84-6

The Draft EIR does analyze an alternative with no bridge and in which the proposed BRT route would travel in the route around Yosemite Slough proposed by the commenter. Refer to Section VI.C (Analysis of Project Alternatives) in the Draft EIR, and refer to Subsection VI.C.2 (Alternative 2 [CP-HPS Phase II Development Plan; No Yosemite Slough Bridge]).

Response to Comment 84-7

Chapter II (Project Description) of the Draft EIR identifies the total amount of area (in gross square feet) associated with each land use type (and for the residential areas, the density per acre), the height limits associated with specific areas of the Project site, and within Section III.E (Aesthetics) provides visual simulations of the Project site. This information provides the reader with an understanding of the massing, scale, and density of the Project.

Table II-2, page II-8, provides the net change in development as a result of the Project. Table II-3, page II-9, provides the total development area (in gross square feet) by land use type and by location on either Candlestick Point or HPS. Residential development is identified by density range. Figure II-5, page II-12, identifies the maximum building heights. Pages II-13 through II-23 provide a description of each land use type followed by a description of each district and the uses within each district.

Section III.E (Aesthetics), pages III.E-49 to III.E.50, of the Draft EIR states that:

> To demonstrate the changes in visual character that would result with implementation of the Project, visual simulations of the Project from each of the viewpoints identified in Section III.E.2 (Setting) in Figure III.E-10 through Figure III.E-30 as well as other photographs contained in this section were used to evaluate changes in both views and visual character based on height, bulk, massing, and type of development when compared to existing conditions. Where appropriate, the simulations also include views of the approved HPS Phase I development, currently under construction, and the approved Visitacion Valley Redevelopment Plan. For the purpose of analyzing cumulative impacts, the simulations also include potential development under the proposed India Basin Shoreline Plan and the Executive Park Sub Area Plan.
>
> The visual simulations are distinguished as long-range views (Figure III.E-11 through Figure III.E-18), and short- and mid-range (Figure III.E-19 through Figure III.E-30) depictions. The visual simulations include development with the Project and with other development noted, above. The analysis determines whether the Project would result in substantial blockage of or other substantial negative changes to existing views from the public viewpoints identified in Figure III.E-11 through Figure III.E-18, particularly to views of scenic open space and water, as well as whether the Project would result in degradation of the visual character or quality of the setting (refer to Figure III.E-19 through Figure III.E-30). The simulations are taken from fixed viewpoints and do not show all possible views of the Project site. For example, they do not provide the dynamic views that would be experienced while driving, walking, or cycling in the Project vicinity. In addition, the simulations depict the overall location, height, and dimension of development, with general exterior features or materials, window patterns, landscaping, or other details. The new buildings shown in views of Candlestick Point and HPS Phase II represent building types, heights, and dimensions that would reflect the Project land use plan and urban design guidelines. The simulations do not represent final architectural design that would occur with the Project. However, the simulations are sufficient for an adequate analysis of changes in scenic vistas, scenic resources, and visual character."

Refer to Section B (Project Refinements) of this EIR for discussion regarding the description of Variant 2A and Variant 3: Tower Variant D, as well as Alternative 2 and Subalternative 4A.

Response to Comment 84-8

Because the Project would not have any significant, unavoidable impacts related to recreation, CEQA does not require the analysis of alternatives focused on reducing or avoiding such impacts.

Response to Comment 84-9

Refer to Response to Comment 84-27 acknowledging that early transfer brings the portion of the hazardous materials cleanup to be performed by the Agency or Project Applicant under the umbrella of CEQA.

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principal relate to the remediation program and the project.

Response to Comment 84-10

The comment states that the assessment of impacts to wildlife is inadequate. While the commenter expresses an opinion, no specific comment is made that can be responded to. The EIR contains an extensive analysis of setting, impacts, and mitigation measures related to biological resources on pages III.N-1 through III.N-141. Specifically, an analysis of wildlife impacts is provided in Impacts BI-2 through BI-13b, BI-15a through BI-20b, and BI-22 through BI-25 of Section III.N (Biological Resources) of the Draft EIR. The Lead Agencies believe the EIR more than adequately addresses these issues for the public and for decision-makers to make informed decisions with respect to these issues.

Response to Comment 84-11

Refer to Response to Comment 1-1 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

In terms of accessing the documents referenced in the Draft EIR, as stated on page I-10 of the Draft EIR:

> The documents referenced in this Draft EIR are available for public review by appointment at the San Francisco Redevelopment Agency, One South Van Ness Avenue, Fifth Floor, San Francisco, CA, 94103, or at the City Planning Department, 1650 Mission Street, Fourth Floor, San Francisco, CA, 94103. The EIR will be posted for public review at http://www.sfplanning.org and www.sfgov.org/sfra.

Therefore, the reference documents were available. With respect to the assertion that the reference documents were difficult to obtain because City and Agency offices were closed during the public review period, they were only closed on four business days during the entire 60-day public review period: November 26 and 27 (Thanksgiving), December 25 (Christmas), and January 1 (New Year's Day). Further, in the event of staff vacations, another staff member was available to provide the requested materials.

Response to Comment 84-12

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18).

Refer to Response to Comment 73-16, with regard to archaeological information for Parcel A at Hunters Point Shipyard Phase I. The comments states "required archeological core samples may not have been taken" at Parcel A in Phase I. Response 73-16 notes that the Mitigation Monitoring and Reporting Plan (MMRP) for Hunters Point Shipyard Phase I required that, for any project disturbance below the layer of historic fill within four identified archaeological sensitivity zones, that archaeological consultants prepare an archaeological treatment plan and monitoring plan. Zone 1 in Phase 1 specifically related to Native American sites. No Phase I activity has occurred in the four identified archaeological sensitivity zones that would trigger the preparation of an archaeological treatment and monitoring plan as required in the MMRP. The MMRP did not require archaeological core sampling or other investigation in the absence of activities in the sensitivity zones. No other disturbance of archaeological resources has been identified during Phase I development.

Response to Comment 84-13

Refer to Response to Comment 48-3 regarding the selection of alternatives. The AFS Alternatives are specifically addressed in Response to Comment 84-23.

Response to Comment 84-14

The Brisbane Baylands alternative sites for Candlestick Stadium were analyzed on Draft EIR pages VI-161 through -163, concluding that:

> The Brisbane Baylands locations are not considered feasible sites for the 49ers stadium for the following reasons:
>
> - The Baylands Specific Plan, although not yet formally adopted, does not include a stadium as an allowed use in either the northern or southern portions of the site. Both sites are designated for commercial, office institutional, and industrial uses. While planning considerations in a particular jurisdiction can evolve over time, it is expected that the range of uses identified in the Phase I Specific Plan reflect Brisbane's long-term planning goals for the Brisbane Baylands, which plans do not include developing a professional football stadium.
> - The Brisbane sites are outside of the City and County of San Francisco. Planning review, and approval of a stadium in Brisbane Baylands would be subject to City of Brisbane jurisdiction. Neither the San Francisco Redevelopment Agency (Agency), the City and County of San Francisco, nor Lennar Urban would reasonably be able to acquire, control, or otherwise have access to a Brisbane site for the purpose of pursuing such alternative locations. Thus, the Brisbane Baylands sites were determined to be infeasible for development of the stadium, and were rejected from further consideration in the EIR.

While the ability to acquire, control, or otherwise have access to a Brisbane site for the purpose of pursuing an alternative stadium location was one factor that contributed to rejecting the site as infeasible, perhaps the more important factor is that the City of Brisbane does not envision a stadium at that location. Therefore, even if Lennar Urban were able to acquire the site from Universal Paragon Corporation, the Baylands Specific Plan, which would guide land use development at the site, would not allow a stadium.

Response to Comment 84-15

Refer to Response to Comment 84-5 regarding the inability of the suggested alternative (port-related heavy industrial uses) to achieve the Project's objectives or to offer any benefit beyond that provided by the Project, and its incompatibility with the City's vision or the redevelopment plans adopted for the area. This

comment expresses an opinion as to what the goals of the Project should be. Refer to Pages II-5 to II-7 of the Draft EIR outline the Project objectives.

Response to Comment 84-16

Refer to Response to Comment 84-5 and 85-15 for a discussion of why such uses would not achieve the Project's objectives nor offer any benefit beyond that provided by the Project, and the incompatibility of such uses with the City's vision or the redevelopment plans adopted for the area.

Response to Comment 84-17

The Project offers a substantial mixed-use development, much of which is oriented to the waterfront. The alternatives analyzed explore different combinations of land uses that could also achieve the Project's objectives. The EIR comprehensively analyzed traffic, waste, and "related issues" of the shoreline improvements that are part of the Project. Refer to Response to Comment 84-5 regarding the inability of the suggested alternative (port-related heavy industrial uses) to achieve the Project's objectives or to offer any benefit beyond that provided by the Project, and its incompatibility with the City's vision or the redevelopment plans adopted for the area.

Response to Comment 84-18

The predicted transit usage is based on a statistical regression analysis developed from travel patterns currently made by travelers within other neighborhoods of San Francisco that have similar transit service to what is proposed by the Project. The forecasting model accounts for type of trip (work vs. non-work), destination parking costs, and travel times as influential predictors of transit use. Other variables were considered but found to not be statistically significant (i.e., they were not useful predictors of transit use).

Response to Comment 84-19

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response required.

Response to Comment 84-20

Refer to Response to Comment 17-1 for a discussion of the process that would be required for the bridge to be open for public use.

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of travel time and reliability improvements, as well as a reduction of mixed-traffic congestion, arising from the use of the Yosemite Slough bridge for bus rapid transit. Also refer to Response to Comment 43-2, which describes the relationship of this Draft EIR with the BTIP Draft EIR, which is at yet unpublished.

Response to Comment 84-21

The CEQA Guidelines, Section 15151 provide that "an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences." The EIR presents the environmental impacts

of the Project, variants, and alternatives so that decision-makers are fully informed as they deliberate on what to ultimately approve.

Refer to Response to Comment 48-3 regarding the selection of alternatives.

Response to Comment 84-22

These comments outline criteria for alternatives development. Refer to Response to Comment 48-3 for the discussion of the CEQA criteria for alternatives development, as well as the process that was employed to identify alternatives in the Draft EIR.

Response to Comment 84-23

The commenter is proposing a comparison of two alternate alternatives to the Alternatives identified in the Draft EIR. As stated in Response to Comment 48-3, all possible alternatives need not be analyzed, just a reasonable range of alternatives. Further, many of the concepts in these two new alternate alternatives were previously addressed in the Draft EIR. As these new alternate proposals include some portions of the Project, some portions of the Alternatives, and some portions of the Variants identified in the Draft EIR, it is difficult to try to compare these alternate scenarios to any one proposal (Project, variant, or alternative) in the Draft EIR. (Also refer to Responses to Comments 84-24 to 84-28 for additional discussion of these alternatives.) However, the key concepts in those scenarios can be addressed. The key components of the AFS Stadium Alternative identify several aspects: retaining Candlestick, additional housing on HPS Phase II, heavy industrial port-related uses on Parcel C, and a neighborhood-oriented transit loop. This alternative could supposedly eliminate one mile of driving to the HPS Phase II, reduce traffic/air/noise with a new transit loop, and comply with ABAG minimum habitat guidelines.

Retaining Candlestick stadium is addressed in Alternative 3 and Alternative 5, which both include this possibility. Alternative 3 reduces seven significant unavoidable impacts identified for the Project in traffic, air quality, and noise. Alternative 5 reduces five significant unavoidable impacts identified for the Project in traffic and noise. Additional housing on HPS Phase II is addressed in Alternative 5, which also retains Candlestick stadium. Alternative 5 reduces five significant unavoidable impacts identified for the Project in traffic and noise. As these alternatives have already been evaluated in some form within the Draft EIR, no new analysis involving such alternatives is necessary.

Heavy industrial port-related uses were not identified for the Project. As identified on page VI-170, these uses could "result in new impacts, including, but not necessarily limited to, impacts on air quality, noise, hydrology and water quality, and biological resources." Refer to Response to Comment 84-5 for more discussion of Port heavy industrial uses.

A neighborhood-oriented transit loop was not identified for the Project. The Project would provide enhanced transit services, as described on page II-39 of the Draft EIR:

> ### *Transit Services*
>
> Supported by Project revenues and infrastructure, the San Francisco Municipal Transportation Agency proposes the following transit services:
>
> - Extending existing Muni bus routes to better serve the Project site

- Increasing frequencies on existing routes to provide more capacity
- Complementing existing routes with new transit facilities and routes that would serve the Project's proposed land use program and transit demand
- Connecting to regional transit with BRT

The Transportation Plan would propose new direct transit service to serve employment trips to and from downtown San Francisco. Connections to the regional transit network (BART and Caltrain) would serve employment centers in the South Bay. The proposed transit improvements are illustrated in Figure II-13 (Proposed Transit Improvements) and described below:

A. **Extended bus routes and new bus routes.** Existing Muni routes 24-Divisadero, 44-O-Shaughnessy, and 48-Quintara-24th Street would be extended to HPS Phase II; route 29 would terminate at Candlestick Point. Service frequencies on these lines would be increased. New Downtown Express routes would connect both Candlestick Point and HPS Phase II with the Financial District.

B. **Harney/Geneva BRT/Transit Preferential Street.** The Harney Way/Geneva Avenue corridor would have exclusive bus and BRT lanes between Hunters Point Transit Center and Bayshore Boulevard, through Candlestick Point and the Bayshore Caltrain Station.

C. **Hunters Point Transit Center.** Hunters Point Transit Center would serve HPS North and Hunters Point Village Center districts. The transit center would have approximately ten bus bays. Most bus lines serving HPS Phase II would terminate at the transit center.

D. **Bus Rapid Transit Stops.** BRT stops would be at Hunters Point Shipyard Transit Center, at three locations within Candlestick Point, and at two intermediate locations.

E. **Palou Avenue Transit Preferential Street.** One Muni line (24-Divisadero) would be extended along Palou Avenue to serve Hunters Point Shipyard Transit Center. Transit-priority technology would be installed on Palou Avenue including installation of new traffic signals. This would improve transit travel times and reliability on the 24-Divisadero and also the 23-Monterey and 54-Felton, which would continue to operate on Palou Avenue but would not be extended into the Project.

Many of the proposed transit lines would include transit priority systems, with roadway sensors that would detect approaching transit vehicles and would alter signal timing to improve transit efficiency."

It is not clear that a neighborhood-oriented transit loop would provide benefits beyond those identified for the Project transit improvements. Development of a neighborhood-oriented transit loop would require consultation with the SFMTA, and is speculative at this time.

The reduction in any one element of the Project would not necessarily reduce the cost of the Project, or eliminate Project impacts as asserted by the commenter, since other elements or features would be introduced. As can be seen with the Yosemite Slough bridge, alternatives without the bridge encounter Project impacts in other resource areas, either from elimination of that access point or from construction of new elements to replace the bridge. The tradeoffs among alternatives are rarely simple numeric calculations but involve a trading and weighting of desirable and often mutually excluding objectives.

Response to Comment 84-24

The commenter states that the Draft EIR describes Alternative 3, as compared to the Project, as having greater transportation-related impacts on game days because vehicular ingress and egress to and from the stadium would be delayed and traffic would be increased on located streets, including Innes Avenue, Evans Avenue, and Ingalls Street, and the commenter states that this assessment is not credible. The commenter

is incorrect in characterization of the Alternative 3 game day traffic impacts. Both the Transportation Study (pages 342 through 343) and the Draft EIR discussion of Alternative 3 impacts (page VI-65) state that game-day impacts would be similar to the No Project conditions. No further response is necessary.

Response to Comment 84-25

Refer to Response to Comment 48-3 regarding the selection of alternatives. As addressed in 48-3, a reasonable range of alternatives is presented in Chapter VI of the Draft EIR.

With respect to the "port-related heavy industrial uses" portion of the suggested alternative, refer to Response to Comment 84-5 for a discussion of why such uses would not achieve the Project's objectives nor offer any benefit beyond that provided by the Project, and the incompatibility of such uses with the City's vision or the redevelopment plans adopted for the area. The other aspects of the AFS No-Stadium Alternative (research and development, historic, arts and cultural, parks, and housing) have been addressed in the analysis of the Project contained in Chapter III of the Draft EIR. Table VI-11, pages VI-170 to VI-172, of the Draft EIR identifies specific proposals and identifies why they could result in greater impacts than those outlined by the Project or Alternatives.

Response to Comment 84-26

Refer to Response to Comment 84-5 for a discussion of why the "port-related heavy industrial uses" portion of the suggested alternative would not offer any benefit beyond that provided by the Project; therefore, reconfiguration of Alternative 5 is not warranted.

Response to Comment 84-27

The comment that early transfer brings the portion of the cleanup to be performed by the Agency or Project Applicant under the umbrella of CEQA is acknowledged. The Draft EIR evaluates the potential environmental activities undertaken by the Agency or Project Applicant in the case of early transfer. Impact HZ-12 analyzes the potential impacts of such remediation, and characterizes the impact as less than significant with mitigation. Under mitigation measure MM HZ-12, the Agency, Project Applicant, or contractor, shall comply 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. Under the agreements, the Agency and Project Applicant would be responsible for remediating previously unidentified hazardous material releases to the extent agreed to with the Navy; the Navy would pay the Agency for completing the specified work and would pay for the costs of environmental insurance for the work. The Navy will remain liable for costs not covered by the agreement or insurance, and in particular for any radiological material releases that need to be addressed. Refer to Impact HZ-12 and mitigation measure MM HZ-12 for further detail.

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of for the applicability of Proposition P to early transfer.

Response to Comment 84-28

Refer to Response to Comment 48-3 regarding the selection of alternatives.

Response to Comment 84-29

Refer to Response to Comment 84-5 regarding the inability of the suggested alternative (port-related heavy industrial uses) to achieve the Project's objectives or to offer any benefit beyond that provided by the Project, and its incompatibility with the City's vision or the redevelopment plans adopted for the area.

Response to Comment 84-30

Page VI-59 of the Draft EIR describes how a direct crossing of Yosemite Slough would provide benefits that would not accrue without a direct bridge connection. The visual and physical connection at the mouth of the slough, the utility and ease of access that a bridge at the mouth of the slough would provide for multiple modes of transit (pedestrians, bicyclists, and transit riders), would each encourage travel that would not otherwise occur.

With regard to the compatibility of high-rise towers with the existing five story, and fewer, buildings of the Bayview neighborhood, less than significant impacts were identified. Page III.B-39 of the Draft EIR states regarding Candlestick Point:

> The Project would result in a substantially different built environment compared to the existing character of the site and vicinity. The scale of development would contrast with existing patterns; Candlestick Point would include residential towers ranging from 220 feet to 420 feet in height, and regional retail and arena uses. The mixed-use pattern with the Project at Candlestick Point would transition from lower-density residential uses near existing neighborhoods to higher density residential and commercial uses. Development at Candlestick Point would have similar land uses as existing and proposed uses in Executive Park immediately to the west. With the transition in scale and uses, the extension of the existing street grid, and with the connectivity of new open space with existing shoreline open space, the Project would be compatible with surrounding land uses. The Project would not result in a substantial adverse change in the existing land use character at Candlestick Point or adjacent areas. The impact would be less than significant.

Further, page III.B-40 of the Draft EIR states regarding HPS Phase II:

> The Project would result in a substantially different built environment compared to the existing character of the site and vicinity. The scale of development would contrast with existing patterns; HPS Phase II would include two residential towers ranging from 270 feet to 370 feet in height. The football stadium would be a large-scale public facility, with related parking and dual-use open space areas. While this would be a new land use element at HPS Phase II, it would replace the similar-scale use at Candlestick Point. The mixed-use pattern with the Project at HPS Phase II would transition from lower-density residential uses near existing neighborhoods to higher density residential and R&D uses. With the transition in scale and uses, the extension of the existing street grid, and with the connectivity of new open space with existing shoreline open space, the Project would be compatible with surrounding land uses. The Project would not result in a substantial adverse change in the existing land use character at HPS Phase II or adjacent areas. The impact would be less than significant.

Therefore, towers would be located away from existing low-scale residential uses, and would not be incompatible with existing uses.

Response to Comment 84-31

The comment makes an affirmative statement, and proposes that the AFS alternatives are superior to the Project without stating any reasons. No response is required.

Response to Comment 84-32

As described on pages II-49 and II-50 of the Draft EIR:

II.E.6 Green Building Concepts

The Project would comply with all applicable provisions of the City's Green Building Ordinance, which is contained in Chapter 13c of the San Francisco Building Code, and would provide recycling, composting, and trash facilities as required by the City's specifications. The Project has set an energy efficiency performance target of 15 percent below the energy efficiency standards articulated in Title 24, Part 6 of the 2008 California *Code of Regulations* (CCR). Lennar Urban would include measures such as high performance glazing, efficient lighting, daylighting, shading, envelope optimization, reflective roofs, and natural ventilation in the Project design. ENERGY STAR appliances are proposed for all new residential units. In addition, Lennar Urban could also implement renewable energy strategies, such as the use of photovoltaic cells to provide electricity; the use of solar thermal energy to provide space cooling with the use of absorption systems; and/or water for space heating and domestic water systems.

Lennar Urban has also voluntarily committed to constructing all Project buildings to the LEED® for Neighborhood Development Gold standard based on the Pilot Version of the rating system released in June 2007.[29] Following the 2007 LEED® ND Pilot Program rating system, preliminary analysis indicates the Project could achieve approximately 63 points, which is in the LEED® ND Gold range, through strategies including but not limited to the following:

- Compact, infill development (including 90 percent of the new buildings fronting on public streets or open space)
- Enhanced habitat values
- Brownfield remediation and urban reuse
- Close proximity to transit and bicycle networks (75 percent of all development would be within ¼-mile walk to a transit stop and Class I, II, and III bikeways provide connections throughout the site and to the greater Bayview community)
- Urban design that promotes walking and discourages driving
- Diversity of land uses and housing types
- Affordable housing that supports a community of mixed ages and income
- Community participation in the community planning and design
- Compliance with the San Francisco Green Building Ordinance
- ENERGY STAR compliance to be documented by a Home Energy Rating System (HERS)
- Unbundled parking
- Drought tolerant plant species and the use of efficient irrigation systems such as drip irrigation, moisture sensors, and weather data-based controllers
- Tree-lined streets throughout the development and streetscape improvements extending from the Project Site to Third Avenue along Gilman and Palou
- Access to public space and recreational amenities through the creation of parks and playfields
- Efficient use of water and the potential use of recycled water for non-potable water uses such as irrigation, toilets, vehicle washing
- Progressive stormwater management to retain and treat stormwater on site and/or in adjacent areas

Essentially, a sustainability plan that identifies each of the strategies that the Project would employ would be adopted as part of the Project. This would address parks and open space, transit, pedestrian connections,

storm water treatment wetlands, and hazardous remediation and cleanup. There is no evidence provided that the AFS Alternatives would meet the Project objectives to a greater degree than the Project.

Response to Comment 84-33

A discussion of the Brisbane Baylands site as a proposed 49ers stadium site is discussed in the Draft EIR on pages VI-161 through VI-163. Page VI-163 states:

> The Brisbane Baylands locations are not considered feasible sites for the 49ers stadium for the following reasons:
>
> - The Baylands Specific Plan, although not yet formally adopted, does not include a stadium as an allowed use in either the northern or southern portions of the site. Both sites are designated for commercial, office, institutional, and industrial uses. While planning considerations in a particular jurisdiction can evolve over time, it is expected that the range of uses identified in the Phase I Specific Plan reflect Brisbane's long-term planning goals for the Brisbane Baylands, which plans do not include developing a professional football stadium.
> - The Brisbane sites are outside of the City and County of San Francisco. Planning review, and approval of a stadium in Brisbane Baylands would be subject to City of Brisbane jurisdiction. Neither the San Francisco Redevelopment Agency (Agency), the City and County of San Francisco, nor Lennar Urban would reasonably be able to acquire, control, or otherwise have access to a Brisbane site for the purpose of pursuing such alternative locations. Thus, the Brisbane Baylands sites were determined to be infeasible for development of the stadium, and were rejected from further consideration in the EIR.

In conclusion, the Brisbane Baylands site is not a feasible alternative.

Response to Comment 84-34

The AFS Alternative is likely to have a similar "fiscal prudence" to Alternatives 2, 4, and 5, since those alternatives similarly do not include a bridge. Refer to Response to Comment 48-3 about the selection of alternatives. Alternatives are selected to reduce identified significant impacts, and also to attain most of the basic objectives of the Project.

Response to Comment 84-35

Refer to Response to Comment 84-23 about the key concepts in the AFS alternatives and how they have already been evaluated in some form within the Draft EIR; therefore, no new analysis involving such alternatives is necessary. In addition, these ideas were addressed in Chapter VI Alternatives (pages VI-160 through VI-173). Page VI-167 states:

> Overall, the Arc Ecology land use alternatives are rejected because they do not reduce or avoid environmental effects of the Project in ways different from the Alternatives examined above. …

Response to Comment 84-36

The commenter is proposing a comparison of two alternate alternatives to the Alternatives identified in the Draft EIR. The alternate proposals include some portions of the Project, some portions of the Alternatives, and some portions of the Variants identified in the Draft EIR and so are not directly comparable to any one proposal (Project, variant, or alternative) in the Draft EIR. However, the key concepts in these alternate scenarios can be addressed. The key components of the AFS No-Stadium

Alternative include several aspects (aside from the key concepts in common with the AFS Stadium Alternative which are addressed in Response to Comment 84-23): housing is increased to 11,000 units; a second research and development campus on Candlestick Point, with total of 3.5 million of R&D; more parks instead of a new stadium. This alternative would increase housing, R&D, and parks and open space.

Increasing housing in lieu of developing a stadium was evaluated in the Housing Variant (Variant 2) (in Chapter IV (Project Variants). The Housing Variant (Variant 2) included analysis of 10,500 units, which is within 5 percent of the AFS No Stadium Alternative housing. The Draft EIR analysis shows that the Housing Variant (Variant 2) would likely have fewer impacts compared to the Project in traffic, aesthetics, shadows, wind, noise, hydrology and water quality, and public services.

Increasing R&D in lieu of developing a stadium was evaluated in the R&D Variant (Variant 1) in Chapter IV (Project Variants). The R&D Variant (Variant 1) included analysis of 5 million gsf of R&D, which is more than that proposed in the AFS No Stadium Alternative. The Draft EIR analysis shows that the R&D Variant (Variant 1) would likely have fewer impacts compared to the Project in shadows and wind; and greater impacts compared to the Project in traffic, noise, hydrology and water quality, public services, and greenhouse gas emissions.

Increasing parks in lieu of developing a stadium was evaluated in Alternatives 3 and 5. Alternative 3 proposes less development all around and is not a good comparison to the AFS No Stadium Alternative. Alternative 5 was developed to reduce construction impacts generally and to avoid impacts to biological resources associated with bridge construction and operation. Significant traffic, noise, and air quality impacts would not be reduced. Construction impacts that relate to the size of the development footprint would be reduced by this alternative.

As with the analysis of the AFS Stadium Alternative, the reduction in any one element of the Project would not necessarily reduce the cost of the Project, or eliminate Project impacts as asserted by the commenter, since other elements or features would be introduced. The tradeoffs among alternatives are rarely simple numeric calculations but involve a trading and weighting of desirable and often mutually excluding objectives.

Response to Comment 84-37

The Draft EIR does analyze an alternative with no bridge and in which the proposed BRT route travels in the route around Yosemite Slough proposed by the commenter. Refer to Section VI.C (Analysis of Project Alternatives) in the Draft EIR, and refer to subsection VI.C.2 Alternative 2 (CP-HPS Phase II Development Plan; No Yosemite Slough Bridge).

Response to Comment 84-38

The commenter suggests that the Project could impede the inland migration of tidal marsh habitat, presumably as sea level rises. In a few areas that are gradually sloped from the bay shoreline inland, small patches of tidal salt marsh could gradually migrate inland as sea level rises. In most area, however, in the absence of the proposed shoreline improvements, shoreline habitat would be lost to sea level rise, and high waters of the Bay may encroach into developed areas that do not provide suitable conditions for tidal marsh. However, the proposed shoreline improvements will allow for shoreline conditions to be adapted as sea level rises. Furthermore, sediment accretion on the outboard sides of these shoreline treatments may

keep pace with sea level rise so that at least some mud flat, and possibly some tidal marsh, could be maintained in areas that currently provide such habitat (i.e., in more sheltered areas such as South Basin that are not subject to heavy erosion).

Response to Comment 84-39

In reference to the comment that sea level rise may inhibit the movement of wildlife under the Yosemite Slough bridge in the future, refer to Response to Comment 75-7.

Response to Comment 84-40

In reference to the comment that the Project could impede the inland migration of tidal marsh habitat, refer to Response to Comment 84-38. The commenter's suggestions regarding the potential locations of areas on CPSRA where planning for marsh progression as sea level rises may have merit, but restoration of marshes on CPSRA would be subject to the master planning effort being performed by State Parks rather than being something that can be planned by the CP/HPS applicant.

Refer to Response to Comment 101-34 for a discussion of how the Project ensures no net loss of wetlands or jurisdictional/regulated waters.

Response to Comment 84-41

Refer to Responses to Comments 84-38 and 84-40 for a discussion of potential effects of the Project on the locations of tidal wetlands as sea level rises

Response to Comment 84-42

In reference to the comment that sea level rise may inhibit the movement of wildlife under the Yosemite Slough bridge in the future, refer to Response to Comment 75-7.

Response to Comment 84-43

In reference to the comment that the Draft EIR does not adequately address the impacts of sea level to tidal wetlands and the wildlife that depends on them, refer to Response to Comment 57-3.

Response to Comment 84-44

Refer to Response to Comment 47-29 for a discussion of how the EIR arrived at an appropriate standard of significance for evaluating impacts to recreational facilities, and how parkland ratios at the Project site would be well above this significance standard at all phases of the Project.

Response to Comment 84-45

Candlestick Point and HPS Phase II will provide a continuous set of parks that will allow, and invite, residents and others to view and use them as a single, integrated open space. Pedestrian, bicycle, and transit travel between the two sections of the site will be facilitated by the proposed bridge over Yosemite Slough,

which would connect two key pieces of open space with its proposed green roadway. Thus, it is reasonable to consider the parkland ratio for the Project site as a whole.

As the commenter notes, the parkland ratios for both Candlestick Point and HPS Phase II exceed the ratio that the EIR uses as a standard of significance standard of significance—there is sufficient parkland in both sub-areas to avoid a significant adverse impact. Even if the two subareas of the Project are considered separately, each subarea has sufficient parkland to serve its population without causing substantial physical degradation.

Moreover, the commenter's calculation includes employment figures as part of the population using parkland. The "benchmark" figure that the commenter proposes, however, the 7.1 parkland acres per 1,000 population ratio in the City as a whole in 2008 does not include employees. Adding employees to this ratio would reduce it substantially, and the Project's parkland ratios would be much closer to the proposed "benchmark."

Moreover, including employees in the parkland ratio, the approach that is also used by the Draft EIR, is quite conservative. Many people employed on the Project site will also live here; these population figures count such residents twice, and therefore overstate the service population. Further, it is very likely that people employed on the site would use local parks at a significantly lower frequency than residents. To accurately account for the use caused by people working on the site (and the accompanying degradation of the facilities), an analysis would likely count each such user as some fraction of a resident, because they use parks less than residents. Thus, the effective population served by the Project's parkland likely will be smaller than reported in the EIR and the parkland ratios likely will be higher. The Draft EIR, by taking a conservative approach and counting every person employed on the site as a part of the service population, overstates the use of parks. The calculations in the Draft EIR demonstrate that there will be sufficient parkland on site to meet residents' and employees' needs without causing overuse and deterioration of parks.

Response to Comment 84-46

In reference to the question regarding whether construction-related impacts to biological resources were assessed in the Draft EIR, refer to the "Construction Impacts" section of Section III.N (Biological Resources) on pages III.N-50 through III.N-100 of the Draft EIR.

Response to Comment 84-47

Refer to Response to Comment 83-3 for a discussion of environmental health concerns associated with Project operation. Further, the Project evaluated potential health effects due to potential exposure to diesel particulate matter during construction activities in Impact AQ-2 and proposed MM AQ-2.1 and MM AQ-2.2 to address these issues. TACs from construction activities were addressed in Impact AQ-3. Refer to Master Response 19 (Proposed BAAQMD Guidelines), which provides updated community-scale analyses based on the most recent guidance, and Master Response 5 (Health of the Bayview Hunters Point Community) for a discussion of health outcomes in the Bayview community.

Response to Comment 84-48

Refer to Response to Comment 84-47.

Response to Comment 84-49

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of Proposition P.

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Response to Comment 85-1

This comment contains introductory or general background information and also reflects the commenter's opinions. This comment states that the commenter is resubmitting their Alternatives for Study document that was submitted prior to publication of the Draft EIR. As mentioned in Response to Comment 84-1, which also makes reference to the Alternatives for Study document prepared by Arc Ecology, page VI-160 of the Draft EIR affirms the receipt of the alternatives study mentioned in this comment, stating:

> A number of alternatives were proposed during the planning and public scoping process for the Project. Several of these alternatives were identified by Arc Ecology, a local community organization. In January 2009, Arc Ecology published a report titled *Alternatives for Study, Draft Outline of Issues, Positions, and Alternatives for Public Comment and Further Study* (Arc Ecology Report).[1350]

As stated on page VI-165 of the Draft EIR:

> Five alternative land use plans were proposed by Arc Ecology and studied in concept for this document. They include proposals to locate the stadium on Parcels B, C, and G of HPS Phase II; one proposal with no stadium at HPS Phase II; and one alternative land use plan for Candlestick Point. …

Each of these alternatives has been analyzed on pages VI-165 through -172 of the Draft EIR.

In summary, comments 85-2 through 85-49 were already considered during preparation of the Draft EIR given that it is the same document that was submitted as part of the NOP public review process; nonetheless, responses to these comments have been provided below in Responses to Comments 85-2 through 85-49. Comments 84-1 through 84-49 also pertain to Arc Ecology's Alternatives for Study refer to Responses to Comments 84-1 through 84-49 for the extent to which the information contained therein was addressed in the Draft EIR.

Response to Comment 85-2

This comment contains introductory or general background information and also reflects the commenter's opinions. No response is required.

Response to Comment 85-3

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-4

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-5

This comment primarily contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

With respect to the Arc Ecology alternatives, they were evaluated in the Draft EIR, as further described in Response to Comment 85-1.

Also, in terms of the planning process for the Project, Section I.B (History of the Planning Process), presented on pages I-1 through I-6 of the Draft EIR, describes a planning process that has occurred over three decades and has included hundreds of community meetings and other forms of public outreach. More specifically, in the recent past, between February 2007 and the date of publication of this document, there have been approximately 236 public meetings addressing this Project, including, but not necessarily limited to, meetings with the Bayview Hunters Point Project Area Committee (and its various subcommittees or working groups); the Mayor's Hunters Point Shipyard Citizen's Advisory Committee (and its various subcommittees or working groups); the Agency; the City and County of San Francisco Board of Supervisors (including its various committees or Departments); the Bayview Transportation Improvement Project Committee; the Alice Griffith Tenants Association Meeting; the Parks, Recreation, and Open Space Advisory Committee; Shipyard Artists; Sierra Club; Little Hollywood, Executive Park, and Visitation Valley Planning Association; Morgan Heights Homeowners Association; India Basin Neighborhood Association; Bayview Hill Neighborhood Association; San Francisco Housing Action Coalition; and BCDC Design Review.

Beyond the meetings that have already occurred, there are numerous additional meetings planned during the upcoming entitlement process (estimated to conclude by the summer of 2010), which will include, but is necessarily limited to, the following:

- Community discussion of Community Benefits Plan, Below Market Rate Housing Plan, Design for Development, Redevelopment Plan Amendments, Open Space Plan and Disposition and Development Agreement, and other related Project documents with the PAC/CAC, Agency Commission, Planning Commission, SFMTA Commission, and the Board of Supervisors (full and relevant subcommittees)
- PAC/CAC recommendation to adopt/approve Disposition and Development Agreement and related documents (Community Benefits Plan, Below Market Rate Housing Plan, Design for Development, Redevelopment Plan Amendments, Open Space Plan and Disposition and Development Agreement)
- Joint Agency Commission/Planning Commission Hearing
- Certification of the EIR and other Project Documents
- Final Approvals with the Agency Commission, Planning Commission, and Board of Supervisors (full and relevant subcommittees)

Response to Comment 85-6

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-7

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-8

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-9

This comment contains general information (a partial list of wildlife species observed at CPSRA) and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment 85-10

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

Response to Comment 85-11

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-12

The City considered numerous alternative locations for siting the stadium, as described in Chapter VI (Alternatives) of the Draft EIR. Commenter is incorrect in stating that the decision to locate a new 49ers stadium was made in the wake of the 49ers decision to move to Santa Clara, implying that the decision was not well thought out. As noted, beginning on page VI-160 of the Draft EIR, alternatives considered, but eliminated from further analysis in the Draft EIR, were evaluated in concept, but were eliminated for one or more factors, including (1) they did not reduce significant environmental effects; (2) they did not achieve most of the basic Project objectives; and/or (3) they were not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors. Alternate locations considered included City of Brisbane or Port of San Francisco sites, as well as locations elsewhere within and outside the City of San Francisco. Several pages of the Draft EIR are devoted to an analysis of the reasons for rejecting these alternative sites (refer to Draft EIR pages VI-161 through -170). The City has carefully and thoughtfully examined possible locations for the new 49ers stadium, and has reasonably chosen a feasible option based on a number of complex economic, social, and technological factors.

Response to Comment 85-13

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-14

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-15

The comment is acknowledged. This comment suggests that the Project does not define ecological objectives, and that the Project represents an opportunity for "bottom-up" ecological planning in which enhancement of biodiversity is the starting point for subsequent design and planning. Though it incorporates a variety of ecological enhancements, the Project is primarily a redevelopment project, and incorporation of ecological enhancements has occurred during the planning process together with a variety of other important policy and planning concerns, including job creation, affordable housing, and other concerns.

Response to Comment 85-16

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment 85-17

Refer to Response to Comment 85-12 regarding the numerous alternative locations that the City considered for siting the stadium, as described in Chapter VI (Alternatives) of the EIR, including alternatives that were considered and evaluated in concept, but eliminated from further analysis due to one or more factors.

Response to Comment 85-18

The proposed improvements to CPSRA would provide substantial areas of restored habitat, as discussed in the Draft EIR on pages III.P-19 to -26. The precise acreage and location of the habitat will be determined through the CPSRA General Plan Amendment process.

Response to Comment 85-19

Refer to Master Response 11 (Parcel E-2 Landfill) regarding conditions at the Parcel E-2 landfill, and Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principal relate to the remediation program and the project.

Response to Comment 85-20

Refer to Response to Comment 39-3 with regard to representation of African-American, Asian-American, and Native American communities as part of the Project.

Response to Comment 85-21

As discussed in Section III.P (Recreation) and in Response to Comment 47-28, the proposed reconfiguration would substantially improve CPSRA and thus advance the goals of the State Park System. The reconfiguration would not add land to CPSRA on Hunters Point, and, as explained in the discussion of "The Neck" on Draft EIR page III.P-19, it would increase the width of the park at what is currently its narrowest point.

Refer to Impact BI-20, beginning on Draft EIR page III.N-108, for discussion of wildlife movement.

Response to Comment 85-22

The comment proposes a study of expanding Yosemite Slough and creating connections to Third Street and its Muni stops. It is unclear what specific suggestions the comment is proposing; however, the Project does include improved connections to Third Street for bicycles, pedestrians, and transit vehicles and the Draft EIR also includes evaluation of an alternative (Alternative 2) that would not include a new bridge over Yosemite Slough.

Response to Comment 85-23

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-24

The commenter's assumptions in developing planning alternatives included the removal of the landfill on Parcel E2 of HPS and construction of a treatment wetland in its place. Whether the landfill is removed is subject to the Navy's decisions regarding the approach to remediation on HPS.

Response to Comment 85-25

The comment is noted. The Project does not propose any actions within Yosemite Slough itself, other than the proposed bridge. Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the need for the proposed bridge.

Response to Comment 85-26

This comment contains general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-27

Refer to Response to Comment 85-18 for a discussion of habitat restoration within CPSRA. The Project would create continuous open space around the entire shoreline of Candlestick Point and Hunters Point.

Response to Comment 85-28

This comment consists of general information regarding CPSRA and the commenter's opinion regarding opportunities, constraints, and recommendations regarding potential development in this part of the Project. It is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment 85-29

This comment represents the commenter's opinion regarding what the ecological objectives of planning for the CP/HPS Project should be. This comment suggests that the Project improve existing habitat "by capitalizing on the site's topography, hydrology, and potential connections to nearby habitats." The Project incorporates a number of ecological enhancement measures, as outlined in the Draft Parks, Open Space,

and Habitat Concept Plan provided in Appendix N3 of the Draft EIR. These enhancements were developed while taking the site's existing biological resources and physical conditions into account.

As discussed in Responses to Comments 47-5, 47-20, and 47-26 through 47-30, and Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]), the Yosemite Slough bridge will not have a significant impact on the slough's recreational, aesthetic, or biological resources.

Response to Comment 85-30

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-31

These ideas were addressed in Chapter VI (Alternatives) (pages VI-160 through -164). Page VI-163 states:

> The Brisbane Baylands locations are not considered feasible sites for the 49ers stadium for the following reasons:
>
> - The Baylands Specific Plan, although not yet formally adopted, does not include a stadium as an allowed use in either the northern or southern portions of the site. Both sites are designated for commercial, office, institutional, and industrial uses. While planning considerations in a particular jurisdiction can evolve over time, it is expected that the range of uses identified in the Phase I Specific Plan reflect Brisbane's long-term planning goals for the Brisbane Baylands, which plans do not include developing a professional football stadium.
> - The Brisbane sites are outside of the City and County of San Francisco. Planning review and approval of a stadium in Brisbane Baylands would be subject to City of Brisbane jurisdiction. Neither the San Francisco Redevelopment Agency (Agency), the City and County of San Francisco, nor Lennar Urban would reasonably be able to acquire, control, or otherwise have access to a Brisbane site for the purpose of pursuing such alternative locations. Thus, the Brisbane Baylands sites were determined to be infeasible for development of the stadium, and were rejected from further consideration in the EIR.
>
> The Port locations are not considered feasible sites for the 49ers stadium for the following reasons:
>
> - A stadium would displace maritime-dependent cargo handling and industrial uses not available or feasible elsewhere in San Francisco.
> - Sports facilities are not allowable uses at either site under the Waterfront Land Use Plan.
> - A stadium use at either site would be subject to approval by voters at a public election.
>
> Thus, the Port sites were determined to be infeasible for development of the stadium and were rejected from further consideration in the EIR.

Response to Comment 85-32

Refer to Response to Comment 85-12 regarding the numerous alternative locations that the City considered for siting the stadium, as described in Chapter VI (Alternatives) of the EIR, including alternatives that were considered and evaluated in concept, but eliminated from further analysis due to one or more factors.

Response to Comment 85-33

This idea was addressed in Chapter VI (Alternatives) (pages VI-168 through -169). Page VI-170 states:

> With an assumed development of the same magnitude as the Project, construction and operational impacts are generally similar. As this alternative is not substantially different from a Project Variant, it was rejected from further consideration in this EIR.

Response to Comment 85-34

These ideas were addressed in Chapter VI (Alternatives) on page VI-170 of the Draft EIR:

> The Arc Ecology report identified additional alternative land uses and concepts for development at Candlestick Point, HPS Phase II, and improvements to areas outside of the Project site. Table VI-11 (Summary of Arc Ecology Land Uses and Concepts for Candlestick Point and HPS Phase II) outlines those concepts and includes a comparison to Project features and impacts. To the extent that these are duplicative of Project or Alternative components, impacts associated with these concepts are analyzed in Chapter III or this Chapter VI. Reasons for rejecting other concepts are explained below.

These ideas were also addressed in Table VI-11 on pages VI-170 through -172.

Response to Comment 85-35

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 85-36

These comments identify three scenarios: sports and entertainment, boat yard/small craft repair/small ship breaking, and academic/institutional. For these scenarios, the key concepts are addressed in the Draft EIR on pages VI-165 to -170, and in Table VI-11 (Summary of Arc Ecology Land Uses and Concepts for Candlestick Point and HPS Phase II) in Chapter VI (Alternatives), pages VI-170 through -172. In general, these scenarios do not provide alternatives that have not been previously evaluated, or that result in fewer impacts than those identified for the Project, Variants, or Alternatives.

Response to Comment 85-37

Refer to Response to Comment 85-12 regarding the numerous alternative locations that the City considered for siting the stadium, as described in Chapter VI (Alternatives) of the EIR, including alternatives that were considered and evaluated in concept, but eliminated from further analysis due to one or more factors.

Refer to Response to Comment 85-36 regarding alternative scenarios.

Response to Comment 85-38

The key concepts outlined here are addressed in the Draft EIR on pages VI-167 to -169, and in Table VI-11 (Summary of Arc Ecology Land Uses and Concepts for Candlestick Point and HPS Phase II) in Chapter VI (Alternatives), pages VI-170 through -172.

> The Arc Ecology report identified additional alternative land uses and concepts for development at Candlestick Point, HPS Phase II, and improvements to areas outside of the Project site. Table VI-11 (Summary of Arc Ecology Land Uses and Concepts for Candlestick Point and HPS Phase II) outlines those concepts and includes a comparison to Project features and impacts. To the extent that these are duplicative of Project or Alternative components, impacts associated with these concepts are analyzed in Chapter III or this Chapter VI. Reasons for rejecting other concepts are explained below.

In general, these scenarios, or combinations of key concepts, do not provide new alternatives that are outside the range of alternatives that have been previously evaluated, or that would result in fewer impacts than those identified for the Project, Variants, or Alternatives.

The remainder of this letter contains background material, and does not require a response.

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Letter 86: California State Parks (1/12/10)

Response to Comment 86-1

Refer to Master Response 3 (Impacts of the Proposed Project on Yosemite Slough [Biological Resources]), specifically subheading Consideration of Yosemite Slough and the Yosemite Slough Restoration Project in the Draft EIR, regarding inclusion of the Yosemite Slough within the Project boundary.

With regard to comment A regarding Air Quality and subcomments A.1, A.2, and A.5, refer to Response to Comment 47-42 (California State Parks Foundation) for a discussion of air monitoring and dust mitigation related to construction activities. Mitigation measure MM HZ-15 (based on *San Francisco Health Code*) requires recordkeeping of dust monitoring results and establishing a hotline for surrounding community members who may be potentially affected by Project-related dust.

The comment recommends monitoring for DPM; however, there is no current technique to directly collect and analyze DPM. DPM is the particulate component of diesel exhaust from diesel-fueled combustion sources. DPM generally consists of elemental carbon (EC), sulfates, silicates, and various organic compounds adsorbed on the particulate. DPM is often used as a surrogate for emissions of all toxic air contaminates from diesel-fueled compression-ignition internal combustion engines, regardless of whether it is a solid or gaseous phase constituent. Since there is no current technique for monitoring DPM, EC often serves as a surrogate. To quantify EC as a surrogate for DPM, ambient $PM_{2.5}$ (particulate matter with aerodynamic diameter < 2.5 micrometers [μm]) is collected on a filter and analyzed using thermal/optical methods to determine EC content. Then a multiplying factor is applied to the resulting EC concentration to estimate ambient DPM concentration.

There are also inherent limitations in attempting to quantify excess cancer risk through monitoring for DPM. As discussed earlier, it is impossible to directly monitor DPM; therefore EC is used as a surrogate. However, EC can originate from a variety of natural and anthropogenic sources not associated with the combustion of diesel fuel. For example, EC can be generated during forest fires or as a component of wood smoke. As such, using EC to approximate DPM can dramatically overestimate potential health impacts. In addition, the ratio used to estimate DPM concentrations from measured EC concentrations can vary quite significantly depending on the type of source of the DPM, the engine operating conditions (e.g., load factors), and a variety of other factors. Therefore, defining an appropriate multiplier to accurately estimate DPM concentrations is extremely difficult, especially when DPM comes from a variety of types of sources of DPM, such as would be expected from construction equipment. The quantification of DPM using EC as a surrogate in ambient air monitoring may result in significant uncertainties for estimating potential health impacts. Instead, comparing health risks (based on modeled air emission concentrations) to the designated BAAQMD CEQA significance thresholds is the best available methodology for evaluating potential health impacts, consistent with BAAQMD CEQA guidance.

With regard to subcomment A.3, analytical results for chemicals in soils within the CP area were available from two investigations conducted by Geomatrix Consultants, Inc. (Geomatrix): *Site Investigation and Risk Evaluation Report for the Proposed San Francisco 49ers Stadium and Mall Site: North Park and Last Port Areas* (Geomatrix 1998a) and *Addendum 1 to the Site Investigation and Risk Evaluation Report for the Proposed San Francisco 49ers Stadium and Mall Site: North Park and Last Port Areas* (Geomatrix 1998b). As part of their

evaluation, Geomatrix evaluated potential onsite construction worker exposure and risks during construction/development. As estimated risks to the construction workers at occupational dust levels were below levels of significance, they concluded that all off-site populations, which would include park visitors, would also be below levels of concern. As discussed in Response to Comment 47-42 (California State Parks Foundation), the Dust Control Plan (DCP) for the Project will require specific actions to control dust to the extent deemed necessary by the SFDPH to achieve no visible dust at the property boundary.

The analyses conducted to evaluate $PM_{2.5}$ impacts were based on annual average traffic estimates from the Project, which do take into account traffic on the 10 to 12 game days per year and evaluates major roadways where this traffic occurs. As such, the impact of game day traffic was evaluated in Appendix H3 of the Draft EIR, Attachment IV, and shown to be less than significant.

With regard to subcomment A.6, Appendix H3 of the Draft EIR, Attachment III, addresses potential operational emissions (emissions of toxic air contaminants [TAC]) from proposed R&D areas including any portion of Parcel E that might be designated for R&D. Parcel E-2 and most of Parcel E will be open space areas. As the estimated air concentrations and corresponding risk would decrease with distance from the R&D areas, the estimated air concentrations and corresponding risks for receptors even farther away (e.g., Candlestick Point SRA) would be lower than those predicted for nearby receptors in this evaluation, as stated in the Draft EIR on pages III.H-33 to -34. Refer to Master Response 19 (Proposed BAAQMD Guidelines), which provides an assessment of localized cumulative effects of TAC and $PM_{2.5}$ within the Project site and 1,000 feet outside of the Project site based on the most recent BAAQMD guidance.

Response to Comment 86-2

Refer to Response to Comment 47-48 with regard to shadow effects on Candlestick Point State Recreation Area.

Response to Comment 86-3

As described on pages III.K-6 to -8, there have been three environmental assessments of Candlestick Point, including the State Recreation Area conducted since 1998, the most recent in March of 2009. Extensive soil and groundwater sampling was conducted. As a result of these assessments, the DEIR concludes, on page III.K-53 that there are no sites with known contamination requiring remediation at Candlestick Point. The EIR also concludes that the low-levels of hazardous materials detected in the sampling and general knowledge of the types of materials that can be in bay fill lead to the conclusion that there is a potential for exposure to hazardous materials from development activity in the Bay fill areas of Candlestick Point, including CPSRA. MM HZ-1a requires that, prior to engaging in development activity at CPSRA, the Project Applicant must conduct an environmental assessment and, if necessary, implement a site mitigation plan, equivalent to what is required by *San Francisco Health Code* Article 22A (sometimes called the "Maher Ordinance'). In response to the comment, the text in mitigation measure MM HZ-1a, page III.K-55 of the Draft EIR, has been revised as follows (new text is shown as underlined):

MM HZ-1a Article 22A Site Mitigation Plans. *(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 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 commenter that California State Parks has no interest in accepting title to any lands within HPS Phase II is noted. This comment will also be forwarded to the decision-makers for their information prior to approval or denial of the Project.

Comment C.1

As stated on pages II-54 and II-55 of the Draft EIR:

> The estimate of earthwork grading requirements for HPS Phase II was based on a profile along the edge of development of Parcels B and C, which allows for overland flow and piped storm drainage flow. Earthwork at the 49ers stadium location and parking lot would be raised and graded by providing five feet of embankment over existing ground surface. This allows for buried pipeline with limited penetration of the existing soil. There would be some excavation on site. The material would be imported from Candlestick Point or other off-site sources.

Therefore, on HPS Phase II, soil would need to be imported, rather than exported, and any excavation would be localized for the purpose for installing utilities. No HPS Phase II soils would be used for grading adjustments within the CPSRA. In response to this comment, text in the Draft EIR has been revised in Chapter II (Project Description) on page II-54, as follows:

> The estimate of earthwork grading requirements for Candlestick Point was based on a profile along the edge of development, which allows for overland flow and piped storm drainage flow. All earthwork is assumed to be used on site for Project grading and for grading improvements to the State Park land, or is exported to HPS Phase II. Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA. …

Additionally, text in the Draft EIR has been revised in Section III.K (Hazards and Hazardous Materials) on page III.K-54 as follows:

> The requirement for a site assessment prior to obtaining a grading permit for new construction would be triggered by Article 22A for sites at Candlestick Point located bayward of the 1851 high tide line, which are the Candlestick Point North and Candlestick Point South districts, comprising the bulk of the area previously investigated in 1998. Compliance with Article 22A requirements would ensure current conditions are assessed in the area previously investigated in 1998, and that they are assessed in light of the specific planned depths of excavation. As stated below on page III.K-68, Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA, but may be reused on the Shipyard to the extent permissible under the Navy remedial program.

And in Section III.K on page III.K-68:

> Various construction activities at HPS Phase II, such as grading, trenching, compacting, and excavating, would result in soil being handled and moved. The excavated soil may be used as fill elsewhere at HPS Phase II, to the extent permissible under the restrictions discussed below, but would not be reused at CPSRA or any other off-site locations.

Comment C.2

This comment does not raise environmental issues or comment on the adequacy of the Draft EIR. The request should be made directly to the Project Applicant.

Comment C.3

The description the commenter requests of contingency measures is not appropriate for the Current Conditions discussion on page III.K-7 of the Draft EIR where the commenter asks it be added. There is a description of contingency measures in the discussion of Impact HZ-1a and Impact HZ-2a (Draft EIR, pages III.K-53 and -54; III.K-58 and -59), which address the potential at Candlestick Point for harmful exposure to contaminants from known and unknown sources of contamination as a result of soil and groundwater disruption from construction activities. Implementation of the associated mitigation measures MM HZ-1a and MM HZ-2a.1 renders the potential impact less than significant. The mitigation measures include contingency plans to address unexpected hot spots and prevent exposure to workers, the public, and the environment.

Comment C.4

With respect to groundwater monitoring at HPS, as explained in Section III.K.2 (Setting), pages III.K-11 through -26, as part of the ongoing remediation of HPS, extensive groundwater monitoring networks exist throughout the various parcels. Furthermore, mitigation measure MM HZ-1b requires that, before any development activity that disturbs soil or groundwater may occur, SFDPH must verify that the activities would be done in compliance with all applicable restrictions from environmental documents, including requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, and health and safety plans, which include protocols for the management and monitoring of groundwater.

Comment C.5

In the event development activity within SRA indicates a hazardous material release, the contingency plan created pursuant to mitigation measure MM HZ-2a.1 and approved by the SFDPH would be implemented. Implementation of the contingency plan would involve site control procedures, and appropriate notification. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), which revises MM HZ-2a.1 to specify that the notification required in the contingency plan must include nearby property owners, which includes California State Park staff. Also note the revision to MM HZ-1a described above in the response to the opening paragraph of this comment adding an express requirement to notify California State Parks staff if the required environmental site assessment on CPSRA property identifies conditions requiring preparation of a site mitigation plan.

Comment C.6

Impact HZ-4, on page III.K-64 of the Draft EIR, addresses the potential for underground utility lines at Candlestick Point to serve as conduits that convey toxics and expose workers, the public, or the environment to hazardous materials. As discussed above, MM HZ-1a requires the implementation of a site mitigation plan if the environmental assessment required before development activity is conducted at Candlestick Point identifies contamination requiring mitigation, and MM HZ-2a.1 requires implementation of an unknown contaminant contingency plans if unknown contaminants are otherwise discovered at

candlestick point (or HPS). If the conditions addressed by these required plans could potentially be spread through utility lines or other subsurface improvements, the plans would specify measures to prevent the conveyance of toxics through such conduits. Such measures may include backfilling portions of trenches with segments of concrete, compact clay, or a cement and bentonite mixture. These less-permeable materials may be placed at 200-foot intervals or at the edges of known areas of groundwater contamination.

Comment C.7

As stated in Impact HZ-7, the specific control measures that will be implemented to protect workers, the public, and the environment from hazardous materials in stormwater runoff will be developed to account for the specific characteristics of each site, contaminant type and concentrations, potential exposure pathways, and populations that could be at risk. The control measures will be part of a site specific Storm Water Pollution Prevention Plan (SWPPP). Mitigation measures MM HY-1a.1 and MM HY-1a.2 provide examples of Best Management Practices (BMPs) that will be employed as part of the SWPPP. The BMPs range from scheduling practices, to sediment and erosion control, and waste management. By way of example, some of the soil and erosion control BMPs include, but are not limited to stabilizing and re-vegetating disturbed areas immediately after construction; installing temporary slope breakers during rainy season on slopes greater than 5 percent where the base is less than 50 feet from a water body; using filter fabric or other measures to prevent sediment from entering storm drain inlets; and detaining and treating stormwater using sedimentation basins, sediment traps, baker tanks, and other measures to ensure discharges meet water quality objectives. Further, monitoring and reporting requirements are likely to include SWPPP inspections, written reports, and monitoring of the water quality of discharges from the site to assess the effectiveness of control measures. For more information on the exact requirements and regulatory structure, refer to mitigation measures MM HY-1a.1 and MM HY-1a.2, as well as Impact HZ-7.

Comment C.8

As discussed above, contingency plans developed pursuant to mitigation measure MM HZ-2a.1 will address unexpected contaminants and health risks, and implementation of the plans will involve site control procedures and appropriate notification. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), which revises MM HZ-2a.1 to specify that the notification required in the contingency plan must include nearby property owners, which includes California State Park staff. Also note the revision to MM HZ-1a described in the response to the opening paragraph of this comment adding an express requirement to notify California State Parks staff if the required environmental site assessment on CPSRA property identifies conditions requiring preparation of a site mitigation plan.

Comment C.9

As stated in Impact HZ-9 on pages II.K-77 and -78 of the Draft EIR, before any work begins on the Yosemite Slough bridge, a removal action workplan would be submitted to and approved by the FFA Signatories and the California Department of Public Health for excavation of any potentially radiologically contaminated areas, to ensure that there are no significant risks from radiological exposure. If unexpected radiological contaminants are later found during bridge construction, the applicable unknown contaminant contingency plan, approved by SFDPH under mitigation measure MM HZ-2a.1, would be implemented, and California State Parks would be notified as nearby property owner per the revisions made to that

mitigation measure in Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues).

Comment C.10

Refer to Master Response 10 (Pile Driving through Contaminated Soils) and mitigation measure MM HZ-5a for a discussion of the precautions that will occur prior to and throughout pile driving to ensure the process does not mobilize and spread contamination. Note also that USEPA is one of the FFA signatories that must approve the removal action workplan to excavate radiologically contaminated soil before any construction work at Yosemite Slough may take place.

Comment C.11, Comment C.12

Parcel E shoreline is proposed to be used as open space. As discussed in Impact HZ-10b, construction along the Parcel E shoreline would likely consist of installing natural-looking shoreline protection using fill and Articulated Concrete Block (ACB) mats. Under mitigation measure MM HZ-10b, before undertaking any such shoreline improvement, the Agency or Project Applicant must prepare design documents that describe how the Navy-installed cover and riprap will be evaluated to determine if their integrity could be compromised by the shoreline improvements, and how construction activities would be performed to mitigate environmental risk, including risk of redistribution of toxins and mobilization of contaminated groundwater. The Agency or Project Applicant must demonstrate to SFDPH that it will comply with all requirements incorporated into the design documents, as well as the work plans, health and safety plans, and any other document or plan required under the AOC, including the CERCLA documents, in order to obtain a permit for construction. A preliminary conceptual groundwater monitoring approach will be finalized in the Parcel E Remedial Design, and will probably be consistent with monitoring approaches presented in Parcel C and Parcel D Feasibility Study reports.[122] At Parcel E-2, ongoing monitoring programs include Storm Water Discharge Management Program, Landfill Cover Inspection and Maintenance Program, Basewide Groundwater Monitoring Program, and Landfill Gas Control and Monitoring Program (refer to Draft EIR, page III.K-23). Other measures to reduce the potential impact of shoreline improvement construction, as indicated in mitigation measure MM HZ-10b, include the implementation of mitigation measures MM BI-4a.1, MM BI-4a.2, MM BI-5b.4, MM BI-12b.1, MM HY-1a.1, and MM HY-1a.2. As discussed above, the latter two mitigation measures will help ensure toxins are not redistributed through stormwater runoff, and include monitoring and reporting BMPs. Refer to the specific mitigation measures for more detail.

Comment C.13

In Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) , MM HZ-15 is revised to include an express requirement to notify property owners (which would include California State Parks) when monitoring results indicate asbestos levels that have exceeded the standards set forth in the asbestos dust mitigation plan.

[122] *See* Draft Feasibility Study Report for Parcel E, Appendix C (July 2009).

Comment C.14

The sole purpose of Impact HZ-18 on pages III.K-105 to -107 is to discuss the potential of the Project to result in a human health risk due to the potential disturbance of hazardous substances, including hazardous air emissions, within one-quarter mile of a school. This discussion is included in the Draft EIR because, as indicated on page III.K-48 of the Draft EIR, one of the significance criteria related to hazards and hazardous materials is whether the project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of a school. The potential for the Project to result in exposures to hazardous materials at other types of nearby properties (like CSPRA) is addressed throughout the Impacts discussion in the hazards section: for example, in Impact HZ-8 on pages III.K-71 to -77; Impact HZ-15 on pages III.K-97 to -100; and Impact HZ-16 on pages III.K-101 to -103.

Response to Comment 86-4

With regard to the auxiliary water supply system, the separated sanitary sewer system, low-pressure water system, and reclaimed water systems will extend appropriately sized services to Candlestick Point SRA. The AWSS is a dedicated fire protection system that serves to back up the low-pressure water fire protection system. The AWSS main locations will be designated by the SFFD.

With regard to a membrane bioreactor (MBR) system, the Draft EIR presents a graphic that depicts potential locations for an MBR system (refer to Figure IV-22 [Utilities Variant Location of Decentralized Wastewater Treatment Plants], which is provided on page IV-183 of the Draft EIR). However, all of these locations are preliminary; other locations could be identified, and locations that are depicted on Figure IV-22 may be eliminated from further consideration. This EIR does not analyze the impacts of an MBR in a particular location. If Variant 4 is approved with an MBR system, such a system would only be allowed as a secondary use, and the specific siting and type of MBR system would be subject to future review and discretionary approval by the Agency, including the necessary review required under CEQA. As described in Appendix T2 of the Draft EIR, in general, odors from MBR facilities can be easily mitigated by using odor control devices such as scrubbers and ensuring that the tanks, treatment works and buildings are well sealed.

Response to Comment 86-5

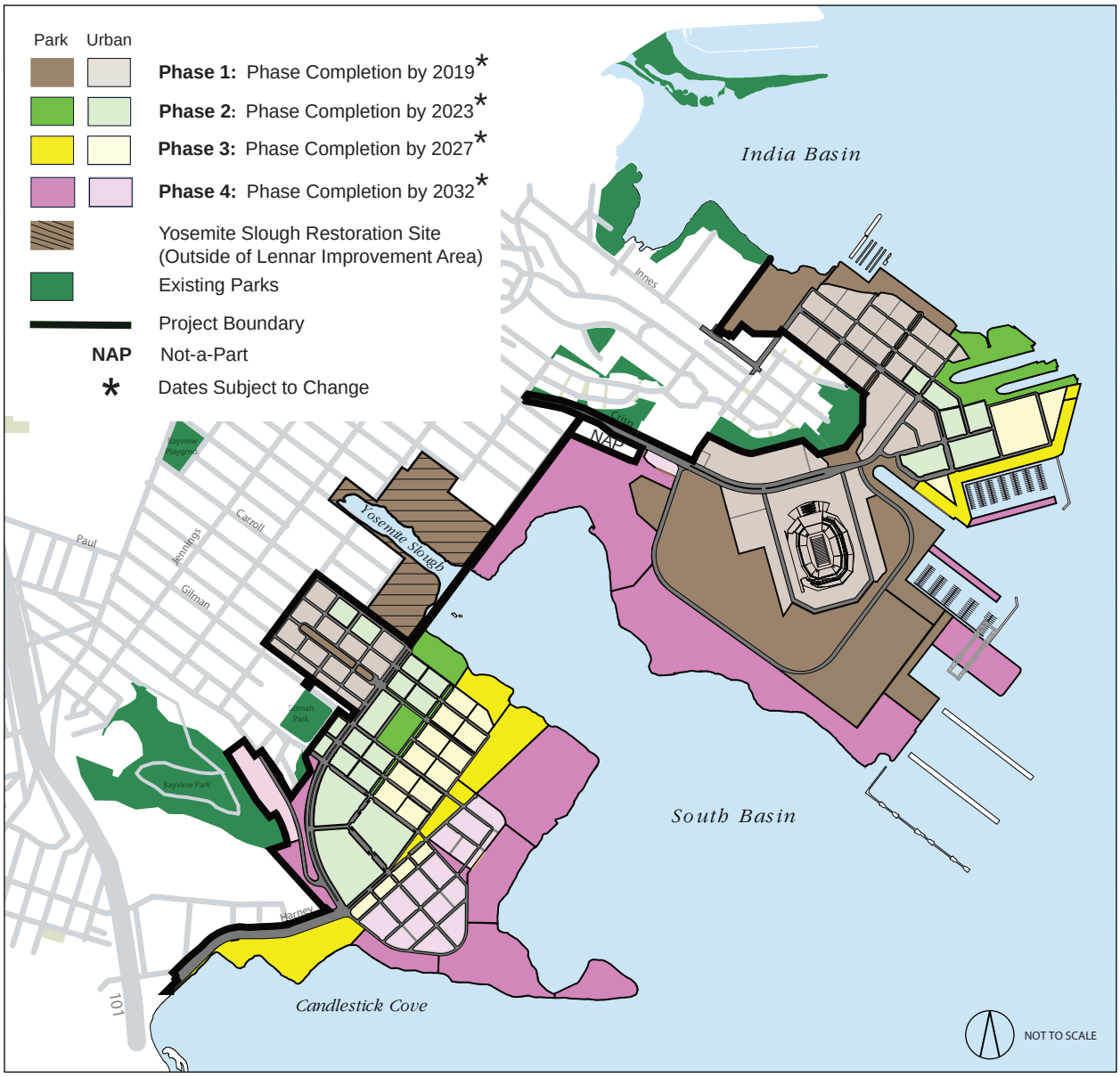
In response to the comment, Section III.B (Land Use and Plans), Draft EIR page III.B-34, second full paragraph, has been revised as follows:

> … Pedestrian access to the CPSRA and the San Francisco Bay <u>from surrounding land uses</u> is limited. …

In response to the comment, Figure II-17 (Proposed Building and Parks Construction Schedule) indicates that the completion dates are estimated and subject to change. CPSRA improvements outside of the control of Lennar Urban may be completed as determined appropriate by California State Parks.

In response to the comment, Chapter II (Project Description), Draft EIR page II-55, fourth paragraph, a new last sentence is added:

> … several locations. <u>The creation or expansion of beaches or tidal habitat will be determined during the public general plan process for the CPSRA.</u>



SOURCE: Lennar Urban, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED BUILDING AND PARKS CONSTRUCTION SCHEDULE

FIGURE II-17

In response to this comment, Figure II-9 (Proposed Parks and Open Space) correctly reflects the proposed Bay Trail route.

In response to this comment, Draft EIR page III.P-2, last partial paragraph, a new third and fourth sentence are added:

> … underutilized (totaling approximately 73 acres). The CPSRA lands to the northeast of Yosemite Slough include a now defunct auto salvage yard, old warehouse, and two business locations that are currently occupied by a sound studio and a cabinet shop. CDPR leases the buildings to these tenants on a month-to-month basis. The southern portions …

In response to this comment, Draft EIR page III.P-27, seventh bullet, last sentence has been revised:

> … environmental education. The 44.9-acre Grasslands Ecology Park at Parcel E and the 37.2-acre Grasslands Ecology Park at Parcel E-2 on HPS Phase II are contiguous to CPSRA~~ and may be offered to the CDPR by the Agency~~.

Response to Comment 86-6

In reference to comments pertaining to potential impacts of the Yosemite Slough bridge, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of these potential effects, including the potential impacts of the bridge on migratory and resident birds that could use the restoration site.

Potential temporary impacts to avian species, including those species that would use the Yosemite Slough restoration site, are addressed in Impact BI-2 of the Draft EIR.

The commenter is correct in pointing out that a portion of the Yosemite Slough Bridge and approach road on HPS Phase II will impact upland and wetland habitats of the Yosemite Slough Restoration Project. Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the impacts to wetlands of the restoration project (only temporary impacts to new restored wetlands are expected to occur), and to the new Figure III.N-7 (also provided in Master Response 3) for a map showing the potential effects of the Yosemite Slough bridge on wetlands of the restoration site. Master Response 3 also provides a discussion of mitigation for these temporary impacts to new restored wetlands of the Yosemite Slough Restoration Project.

Comments indicating that California State Parks retains the final authority over any mitigation, habitat enhancements, and planting lists for activities within CPSRA are noted and the authority of California State Parks over such activities on its lands are acknowledged.

Similarly, the commenter suggests that text in Appendix N3 of the Draft EIR, the Draft Parks, Open Space, and Habitat Concept Plan, be revised to indicate that habitat and ecology parks shown on CPSRA are concepts only; that the SRA's general plan will make final decisions regarding use and management of the SRA; and that nesting boxes will not be used in the SRA. The Draft Parks, Open Space, and Habitat Concept Plan has not been finalized. The commenter's request to include language related to the fact that the habitat and ecology parks shown on CPSRA are proposed concepts only, as the SRA's general plan will make final decisions regarding use and management of the SRA, and that nesting boxes will be provided on HPS Phase II will be forwarded to the Project Applicant and the Lead Agencies for review and consideration.

SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED PARKS AND OPEN SPACE

FIGURE II-9

The commenter suggests that the Draft Parks, Open Space, and Habitat Concept Plan be revised to state that California State Parks is not responsible for financing habitat enhancement measures that the EIR proposes within the CPSRA to mitigate the Project's impacts to natural resources. This Plan does not discuss habitat restoration for mitigation purposes or otherwise suggest that State Parks would be responsible for financing any habitat enhancement measures that are required as mitigation of the Project's impacts.

The commenter's suggestions that vegetation communities be more accurately described and that a consistent naming and classification system be used are noted. As stated on Draft EIR page III.N-5, second full paragraph:

> … The vegetation communities are defined according to CDFG Wildlife and Habitat Data Analysis Branch List of California Terrestrial Natural Communities,[647] H.T. Harvey & Associates' wetland delineation for HPS Phase II and Candlestick Point,[648] and PBS&J's Biological Technical Report prepared for the Project.[649]

Thus, no single naming/classification system for these communities was used. In response to the comment concerning the correct citation for the CDFG's vegetation classification system, the following revisions have been made to the text and footnote in the first paragraph under the Vegetation Communities heading from page III.N-5 of the Draft EIR:

> The vegetation communities are defined according to CDFG's Vegetation Classification and Mapping Program of the Biogeographic Data Branch ~~Wildlife and Habitat Data Analysis Branch List of California Terrestrial Natural Communities~~,[647] H.T. Harvey & Associates' wetland delineation for HPS Phase II and Candlestick Point, and PBS&J's Biological Technical Report prepared for the Project.
>
> ---
>
> [647] California Department of Fish and Game (CDFG), *The Vegetation Classification and Mapping Program: List of Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, ~~Wildlife and Habitat Data Analysis Branch,~~ Sacramento, California, September 2003 edition.

Response to Comment 86-7

In response to the comment, the text in Section III.B (Land Use), beginning on page III.B-10, has been revised as follows:

> The Facilities Element lists the following types of recreational uses for the park: trails (hiking, jogging, and bicycling), group picnic areas, family picnic areas, group campgrounds, fishing piers, wind surfing facilities, a sand beach, a quiet area in the southeastern point, scenic overlooks, and a cultural program center. Maritime facilities proposed in the CPSRA General Plan include a non-powered boat/wind surfing rental facility; a boating center for boat classes and education; a boat access facility that includes a four-lane launching ramp; a ~~200~~251-space parking area for car-boat trailers; a boat service station; and a ferry landing. A family dinner restaurant and family picnic rest stop are proposed for the Last Port area to the west of Hermit's Cove, off Harney Way.
>
> The facilities and land uses called for in the current CPSRA General Plan have only been partly realized. Current uses in the park include hiking, limited bicycling, day use picnicking, group picnicking, jogging, nature viewing, three sand beaches, undeveloped windsurfing, two piers used by fishermen, and three restroom buildings. The park also includes a park staff/maintenance facility, ~~140~~275 parking spaces for the developed portion of the park and a community garden. However, substantial portions (73 acres) of the park remain undeveloped (refer to Section III.P [Recreation]). Of this, approximately 40 acres of the park are used for parking for football games and other events at Candlestick Park.

Mitigation measure MM TR-38 requires the stadium operators to develop and maintain a Transportation Demand Management Plan for the stadium. One required element of that plan, as indicated on page III.D-133 of the Draft EIR, is for the stadium operator to work with CPSRA to develop measures to ensure that game day spectators do not park in CPSRA day use parking lots.

Response to Comment 86-8

A more specific description of proposed, conceptual uses for CPSRA land is provided in Section III.P (Recreation). This section clarifies at pages III.P-6 and -7 that uses at CPSRA will be determined through the General Plan Amendment process.

In response to the comment, the text in Section III.B (Land Use and Plans), the fourth paragraph on page III.B-12, has been revised as follows:

> Pursuant to SB 792, no CPSRA General Plan Amendment is required for the reconfiguration of the recreation area. However, before new facilities would be developed, a CPSRA General Plan Amendment would be required to reflect the boundary changes and the proposed new uses that would located on park lands ~~removed from the park~~ following the reconfiguration. The proposed improvements described in Draft EIR Section III.P (Recreation) will be reviewed as one a several alternatives for the development of CPSRA. …

The proposed reconfiguration of CPSRA includes proposed improvements to the park's facilities, which would reverse the impacts of current disrepair. As discussed in Impact RE-2, the improvements and provision of new parkland throughout the Project site will prevent deterioration of existing facilities.

The text on Draft EIR pages III.P-30 and -31 discusses the importance of concurrency between residential development and park improvement. Mitigation measure MM RE-2 ensures that park development will keep pace with residential development and that the Project site's parkland ratio will remain high enough to prevent overuse and deterioration of facilities.

The cited paragraph is intended to discuss parks outside the Project site. Thus, in response to the comment, the first paragraph, first sentence, Section III.P, page III.P-30, has been revised as follows:

> Despite the availability of sufficient park acreage on the Project site, new residents or employees of the Project site may also choose to use existing ~~nearby~~ parks outside of the Project site (refer to the Setting section for discussion of nearby parks), which could result in the deterioration or degradation of those existing resources. …

The comment regarding bicycle use of the Bay Trail is noted.

Section III.F (Shadows) discusses shadow effects on CPSRA on pages III.F-8, -10, -14, -18, -23, and -26 and in the accompanying figures. This discussion shows that new shadow on CPSRA would be limited. Almost all of the new shade created by the Project and falling on CPSRA would be experienced in afternoon periods in the winter months of November through January, when park use is likely to be reduced and cooler temperatures and shade are an accepted part of the winter environment. Shadow impact on CPSRA would be less than significant. Wind effects at CPSRA are discussed on page III.G-7. Mitigation measure MM W-1a would reduce any impacts to a less-than-significant level.

Response to Comment 86-9

Refer to Response to Comment 82-18 for a discussion of the ability of the community facilities district (CFD) or similar funding mechanism to fund improvements along the Candlestick Point shoreline that protect park facilities as well as other Project improvements.

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur. At the time of construction of the adaptive management measures to account for additional increases in sea level rise, approvals from regulatory agencies will be required and designs will be reviewed to ensure that to the maximum extent possible public views of the bay will be maintained.

With respect to responsibility of CPSRA for flood management within the Project area, the Draft EIR is referring to CPSRA's responsibility for the land under their jurisdiction within the Project area (Candlestick Point parks).

Response to Comment 86-10

The Draft EIR includes a project-level analysis that quantifies potential water quality impacts, identifies feasible mitigation measures, and is adequate for CEQA requirements. Best management practices for stormwater management, as described in mitigation measures MM HY-1a.1, MM HY-1a.2, and MM HY-6a.1, would be designed to benefit water quality and aquatic resources, which could provide benefit to the CPSRA. While the commenter requests that alternative stormwater management strategies are evaluated, the analysis contained in Section III.M (Hydrology and Water Quality) of the Draft EIR provides feasible mitigation measures to reduce all impacts to a less-than-significant level. No additional analysis of stormwater management techniques is required.

The commenter requests that California State Parks be provided the opportunity to review and approve the stormwater facilities to be located within the CPSRA, and it is acknowledged that CDPR would approve any improvements to CPSRA land. The details of that process would be set forth in the Park Reconfiguration Agreement between the Agency and CDPR.

Mitigation measure MM HY-6a.1, starting on page III.M-82 of the Draft EIR, requires the Project Applicant to prepare a Storm Water Control Plan (SCP) and a Stormwater Drainage Master Plan (SDMP). The treatment control best management practices identified in the SCP shall be designed in accordance with the SFPUC's San Francisco Stormwater Design Guidelines. Also in accordance with the San Francisco Stormwater Design Guidelines, the Project SCP shall incorporate to the extent feasible, low impact development principles that include site design and treatment control measures, which would treat runoff close to the source.

Appendix A (BMP Fact Sheets) of the San Francisco Stormwater Design Guidelines include the design criteria for treatment control BMPs, including how the BMPs should be designed to bypass flows in excess of the required design storm. The infrastructure design for the stormwater treatment bypass would be included in the SDMP. In response to the comment J.2, and to ensure that extreme flow events are managed by the BMPs, the text in mitigation measure MM HY-6a.1, starting on page III.M-83, has been revised as indicated above.

In response to the comment J.3, the text in mitigation measure MM HY-1a.2, starting on page III.M-61 of the Draft EIR, has been revised as follows (the following represents only the first paragraph of the mitigation measure, and the remaining part of the mitigation measure has not been changed):

> *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.*

As described in mitigation measure MM HY-6a.1, the Project Applicant shall submit a SCP in accordance with the San Francisco Stormwater Design Guidelines to the SFPUC for approval. The use of swales, wetlands, and other stormwater treatment measures to control pollutants to the maximum extent practicable to protect water quality satisfies the requirements of the San Francisco Stormwater Design Guidelines (described on pages III.M-47 through III.M-48), which satisfy the requirements of the Municipal Stormwater General Permit (described on pages III.M-37 through III.M-38). Implementation of mitigation measure MM HY-6a.1 would reduce the impacts to nearshore water quality in the Bay resulting from stormwater runoff to a less than significant level. Therefore, the Draft EIR is not required to examine other stormwater management approaches (including the feasibility of discharging runoff via outfalls extending offshore).

As shown in Table III.M-5, on page III.M-96, the change in Project flows from the existing stormwater runoff flows results from the Project impervious area being reduced from 72 percent in the existing condition to 54 percent for the Project condition. The flows in Table III.M-5 are discharges to the separate stormwater drainage system, except for flows from Candlestick Point, identified in parenthesis, which represent existing stormwater flows to the combined sewer system. The decrease in the peak runoff rate at Candlestick Point of 228 CFS or 48% with Project implementation is not a function of whether the discharge is conveyed to the combined sewer or separate storm drain systems, but rather is due to the reduction in impervious area resulting from Project implementation. The effects of BMPs have not been accounted for because the Project SCP has not yet been developed.

In response to the comment, the title of Table III.M-5 (Estimated Existing and Project Stormwater Peak Flow Rates and Runoff Volumes Without BMPs), Draft EIR page III.M-96, has been revised as follows:

Also in response to the comment, the following sentence has been added to the first paragraph under Impact HY-10, Draft EIR page III.M-96:

> … Because of the increase in permeable surface area, infiltration would be expected to increase, resulting in a corresponding decrease in runoff volumes. Grading would reduce slopes at both sites, slowing runoff rates. The runoff flow rates and volumes do not account for the effect of Project BMPs.

Table III.M-5 Estimated Existing and Project Stormwater Peak Flow Rates and Runoff Volumes Without BMPs [Revised]

Storm Event	*Existing (cfs)* [b]	*Project (cfs)* [c]	*Project Increase*[a]	
			(cfs)	*(%)*
Candlestick Point				
5-Year	477 (130)[d]	249 (0)[d]	-228	-48%
10-Year	545	284	-261	-48%
100-Year	783	408	-375	-48%
Hunters Point Shipyard[e]				
5-Year	644	448	-196	-30%
10-Year	730	509	-221	-30%
100-Year	1,052	733	-319	-30%
2-year 24-hour (acre-feet)				
Candlestick Point	36	20	-16	-44%
HPS Phase II	64	39	-24	-38%

SOURCE: PBS&J 2009

a. A negative number denotes a reduction in Project flow rates compared to existing conditions.
b. Existing flows are based on 72 percent impervious surfaces (505.3 acres).
c. Project flows are based on 54 percent impervious surfaces ~~9~~ (379.1 acres).
d. Values in parenthesis denote the amount of total Candlestick Point site runoff flowing to the combined sewer system.
e. Off-site flow from HPS Phase I is not included in these runoff calculations. Required HPS Phase I diversions into the HPS Phase II separate stormwater sewer system would be 108 cfs.

The City through SFPUC would assume responsibility for operation and maintenance of any stormwater drainage facilities that were primarily for the benefit of the larger development Project but out of necessity located within the CPSRA. This would be accomplished through a City utility easement. In response to the comment, the text in mitigation measure MM HY-6a.1, starting on page III.M-82, has been revised as indicated above.

Appendix M1 of the Draft EIR, page 10, paragraph 3 summarizes the data sources for pollutant concentrations in stormwater runoff that were used to estimate the change in annual pollutant loads resulting from the Project without the incorporation of BMPs for stormwater management (Table III.M-3 on page III.M-81 of the Draft EIR, and Table III.M-4 on page III.M-87 of the Draft EIR).

The California State Park's recommendation to include a program to monitor trash and pollutants in stormwater prior to its discharge to the CPSRA will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

As stated on page III.Q-30 of the Draft EIR, with Project implementation, Candlestick Point would not contribute stormwater to the combined sewer system. Therefore, existing flows within the CPSRA would not be diverted to the combined sanitary sewer, but would discharge into a newly constructed separate stormwater drainage system. Stormwater runoff treatment requirements for the Project are described in mitigation measure MM HY-6a.1, starting on page III.M-82 of the Draft EIR. Stormwater runoff discharge locations would be provided in the SCP and SDMP, and preparation of these documents is discussed in mitigation measure MM HY-6a.1. As indicated above, the City through the SFPUC would assume responsibility for operation and maintenance of any stormwater drainage facilities located within the CPSRA that are primarily for the benefit of the larger development Project.

In response to the comment, the text on pages 2 to 3 (of 5) of Appendix Q3 of the Draft EIR has been revised as follows:

> Currently, the CP site contributes sanitary sewage to the CSS via gravity sewers from three locations: the stadium, the Alice Griffith housing development, and the RV Park on ~~State Park grounds~~ Gilman Avenue. The existing sanitary flows from these three sources are as follows:
>
> - …
> - The existing sanitary flow from the ~~State Park~~ RV Park is based on average monthly meter data for the period January, 2007 through September, 2009 provided by SFPUC (via email from Hayden Kam, September 30, 2009).

As stated above, CDPR would have the opportunity to review and comment on the components of the SCP and SDMP that would convey stormwater discharges into the CPSRA. The use of stormwater best management practices at Candlestick Point that rely on infiltration will be evaluated during development of the Project-specific Stormwater Control Plan (SCP). Mitigation measure MM HY-6a.1, as described starting on page III.M-82 of the Draft EIR, requires preparation of a Project-specific SCP.

Response to Comment 86-11

Figure 28 in the Transportation Study (Appendix D of the Draft EIR) illustrates the geographic distribution of Project-generated traffic and is not intended to describe vehicle access to the CPSRA parking lots. Draft EIR Chapter II (Project Description) includes information and figures regarding proposed access to the CPSRA: Figure II-11 (Proposed Street Network), Figure II-12 (Proposed Roadway Improvements), and Figure II-14 (Proposed Bicycle Routes). (Figure II-12 has been revised in Response to Comment 7-1 to clarify the two separate proposed projects at the new US-101 interchange and to eliminate Phase I and Phase II improvements.) As presented in the Chapter II, Draft EIR pages II-35 to II-39, Project transportation improvements would provide new roadway, pedestrian, and bicycle facilities that as illustrated in the figures would serve as access to the CPSRA. (Refer also to Transportation Study (Appendix D) Figure 4, which presents the proposed roadway improvements; Figure 7, which presents proposed transit improvements; Figure 8, which presents proposed bicycle and bay trail improvements; and Figure 9, which presents proposed pedestrian improvements.) The Draft EIR does not identify specific access points for parking at the CPSRA. As described in Draft EIR Chapter II, page II-28; Section III.B (Land Use and Plans), pages III.B-10 to 12; and Section III.P (Recreation), page III.P-6 to 7, the CPSRA General Plan Amendment will provide a public process to evaluate past uses and determine future uses and facilities, including parking and other visitor access. The Project proposals that would provide new vehicle, pedestrian and bicycle improvements along the CPSRA frontage would facilitate safe and convenient access to driveways and parking at CPSRA.

Way-finding signage and similar features to facilitate visitor access to CPSRA would be part of the CPSRA General Plan Amendment process and as well as the refinement of streetscape plans for the Project.

The Project would include new open space with direct access to the CPSRA, as noted on Draft EIR page II-30, and Figure II-9 (Proposed Parks and Open Space), showing that Bayview Gardens/Wedge Park, Mini-Wedge Park, and boulevard parks at Candlestick Point would lead directly to CPSRA.(Revised Figure II-9 is presented in Response to Comment 86-5.) Further, the proposed configuration of Harney Way, which would likely continue to provide access to CPSRA, would include a number of pedestrian

amenities designed to improve shoreline access. The reconstruction would include two new signalized intersections, at Thomas Mellon Drive and Executive Park East. Each of these new signalized intersections would provide new crosswalks across Harney Way and allow controlled crossings for pedestrians. The reconstructed Harney Way has also been designed in two phases—the first being a narrower, interim phase, and the second being a slightly wider ultimate phase when traffic volumes warrant—such that pedestrian crossing distances remain as short as possible for as long as possible. Section III.D (Transportation and Circulation), Figure III.D-7 and Figure III.D-8 show both phases of Harney Way plans, with pedestrian and bicycle access to CPSRA on those segments of roadway. Figure III.D-12 (Project Parking Supply) also notes that general on-street parking would be available on parts of the CPSRA frontage.

Project features, including the Bay Trail and Yosemite Slough Bridge would provide access to shoreline open space from US-101 on the south to India Basin north of HPS. Other public open space, such as Bayview Park, is not directly accessible from candlestick point because of steep topography and lack of trails. Figure III.D-11 (Project Pedestrian Circulation Plan) illustrates a proposed improved trail to Bayview Park from outside the Project site at Key Avenue.

Overall, Project impacts to pedestrian and bicycle conditions were found to be less than significant and no mitigation measures, such as grade-separated access to CPSRA, would be required.

Refer to Response to Comment 47-38 through 47-40 for further discussion regarding the increase in roadway noise levels due to implementation of the Project and the potential impacts that such an increase would have on CPSRA users. As described in the responses, such increases in roadway noise levels would result in less-than-significant impacts to users of the CPSRA. With respect to local air quality impacts, refer to Draft EIR Section III.H (Air Quality); Section F (Draft EIR Revisions) of this Comments & Responses document for text changes related to air quality; Responses to Comments 47-42, 47-44, 82-2, and SFRA1-20; and Master Response 19 (Proposed BAAQMD Guidelines).

Response to Comment 86-12

The proposed bridge design includes pedestrian connections to the bridge from the Bay Trail around Yosemite Slough. South of Yosemite Slough, the Bay Trail would veer to the south of the edge of the slough by about 250 feet to the signalized intersection of Arelious Walker Drive and Carroll Avenue. Pedestrian- and bicycle-actuated signals and crosswalks would be provided at the intersection. A separate path would also be provided to connect with overlook decks on either side of the bridge, to the 12-foot wide Class I bicycle lane and 7-foot-wide sidewalk on the east side of the bridge, and to the 40-foot wide bicycle/pedestrian pathway on the west side of the bridge. North of Yosemite Slough, the Bay Trail would veer to the south of the proposed Bay Trail alignment to a pedestrian- and bicycle-actuated crossing of Yosemite Slough Bridge about 150 feet north of the slough. The crossing would also connect with the Class I bicycle path and the sidewalk that would be provided on the east side of the Yosemite Slough Bridge and to the 40-foot-wide bicycle/pedestrian parkway.

The bridge has been designed to facilitate passage of non-motorized recreational vessels, such as canoes and kayaks. The clearance at the middle of the span would be over 18 feet at mean tide levels, which would be adequate for this type of use. During 100-year flood events, the clearance would decrease to just under 13 feet.

Accounting for projected sea-level rise of 36 inches for the Project development, the clearance would decrease by 36 inches, but would remain over 15 feet at mean tide levels and over 10 feet during 100-year flood events. This would be adequate for kayaks, canoes, and other non-motorized "paddle craft." Further, in a July 27, 2009 letter from the U.S. Coast Guard (Coast Guard) to the City,[123] the Coast Guard indicated that no bridge permit would be required because the bridge design would allow the existing use (or potential use) of the slough by vessels up to the size of small motorboats.

Additional graphics have been included (refer to Section F [Draft EIR Revisions] of this document) to provide further clarification regarding the views from the Yosemite Slough. The bridge will include pedestrian/bicycle paths on both sides to provide viewing opportunities for pedestrians and bicyclists.

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for discussion of the bridge's impacts to biological resources. Refer to Master Response 3 and Responses to Comments 47-41 for a discussion of vibration from bridge construction and traffic on the slough. Refer to Master Response 4 (Purpose and Benefits of Yosemite Slough Bridge) for discussion of the negative consequences of routing the BRT around Yosemite Slough.

In response to the comment suggesting that effects of coffer dams be mitigated, text has been added to mitigation measure MM BI-4a.2 on page III.N-63 of the Draft EIR to indicate how temporarily impacted wetlands and other jurisdictional waters should be restored following construction. Refer to Master Response 3 for this text change.

The comment is acknowledged. The aesthetic issues of bridge colors, materials and surfacing have not been defined to date. The bridge abutments could utilize any number of surfacing material and colors. If they are concrete, integral coloring or aggregate could be used to match or complement the existing site's rock/soil color. It may be preferable to use a light-colored surface under the bridge where the Bay Trail passes underneath to make the undercrossing lighter and more inviting. This will be determined as bridge plans are finalized.

If, as Project plans are finalized, any temporary access roads or contractor laydown areas differ from those depicted in the Draft EIR; additional environmental documentation may be required.

Response to Comment 86-13

Growth-inducing impacts were fully evaluated on pages V-10 through V-14 of the Draft EIR. Pages V-10 through V-11 of the Draft EIR state that:

> Growth can be induced in a number of ways, including the elimination of obstacles to growth or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in growth unforeseen at the time of Project approval.
>
> In general, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the criteria identified below:
>
> - The project establishes a precedent-setting action (e.g., a change in zoning or general plan amendment approval)

[123] Letter from the U.S. Coast Guard to Peg Devine, Department of Public Works, City and County of San Francisco. July 27, 2009.

- The project results in the urbanization of land in a remote location (leapfrog development)
- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area)
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc.)

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects: (1) are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure, such as sewer and water facilities or roadways; or (2) encourage premature or unplanned growth.

With respect to growth related to the CP-HPS Project, it would most likely occur as a result of economic growth, and page V-14 of the Draft EIR concludes the following:

Therefore, the positive revenue stream and the resulting increased economic viability of the Project site could result in indirect growth-inducing impacts.

However, the Project would implement a number of smart-growth principles, including:

- Mixed uses that promote living and working in the same area to limit vehicle miles traveled
- Uses oriented around existing and proposed transit to discourage use of the personal vehicle
- Transit connectivity so other City residents can take advantage of the opportunities offered by the Project
- Pedestrian and bicycle pathways to encourage these alternative methods of transportation
- Bicycle racks and pedestrian seating in prominent locations to encourage walking and cycling activities
- A mix of recreational uses to provide for the recreational needs of the community

Implementation of these features would limit indirect growth-inducing impacts by providing all necessary services within one development. Provision of most, if not all, needed services and amenities within the Project would reduce the need to develop such uses elsewhere in the City.

Further, the City and Agency have a planning and entitlement process for all development projects to ensure that environmental impacts are addressed, including impacts related to access, views, visual quality, and water quality. This process would apply to any future development projects in the vicinity of the Yosemite Slough, and the agency would continue to work with the California State Parks if any future development would potentially impact the CPSRA. Any future development in the vicinity of the Yosemite Slough would also be required to analyze that development's consistency with the City's plans and policies, including but not limited to the City of San Francisco's General Plan and the BVHP Area Plan which provide for protection and consideration of impacts to the CPSRA from future development. Further as the Draft EIR includes a cumulative analysis of all impact areas, the combination of the Project with all reasonably foreseeable development has also been addressed in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) under each issue area.

Response to Comment 86-14

Chapter III.C.1, page III.C-4, paragraph 3, does not contain the language to which the commenter refers (Chapter III.C relates to population, employment, and housing).

However, Chapter III.P, beginning at page III.P-2 under "CPSRA," contains the following language, which has been changed as follows:

> CPSRA (120.2 acres), on the shoreline of Candlestick Point, was acquired … underutilized (totaling approximately 73 acres). The CPSRA lands to the northeast of Yosemite Slough include a now defunct auto salvage yard, old warehouse, and two business locations that are currently occupied by a sound studio and a cabinet shop. CDPR leases the buildings to these tenants on a month-to-month basis. The southern portions … Until recently, the Last Rubble area was characterized by large piles of rubble and debris, remnants of the site's previous use as a dumping ground. California State Parks, with a grant from the California Integrated Waste Management Board, removed 10 acres of rubble and debris in 2009. ~~The California Integrated Waste Management Board completed a rubble and debris removal project in April 2009.~~ As a result of this, the majority of the rubble and debris was either removed or crushed on site. Yosemite Slough is part of the CPSRA, but is not within the Project site except for at its neck, where the proposed bridge would be constructed.

Response to Comment 86-15

As shown on Figure II-10 (Proposed CPSRA Reconfiguration), Draft EIR page II-29; Figure III.P-3 (Proposed CPSRA Reconfiguration), page III.P-18; and Figure III.P-8 (Aerial View of CPSRA within the Project Site [Excluding the Yosemite Slough]), page III.P-24, the change in CPSRA boundary on the north side of Yosemite Slough required to accommodate the proposed bridge would be very small, removing approximately 0.8 acre from the park. Any such reconfiguration would "substantially conform" to the diagram included in Senate Bill 792 (SB 792), as required by Section 26(a)(4) of the statute. The Project is, therefore, consistent with SB 792. The precise locations of the future boundaries of CPSRA and the proposed bridge have not yet been determined. The Agency and the City look forward to working with the California Department of Parks and Recreation in developing the details of the reconfiguration.

Figure II-8 and Figure III.P-3 have been revised and presented in Response to Comment 50-23 to correct the legend and clarify the park boundaries around the stadium site.

Response to Comment 86-16

In response to the comment, the second sentence of the first paragraph under Table II-7, Draft EIR page II-28, is revised as follows:

> … Prior to construction of park improvements, the California Department of Parks and Recreation (CDPR) must undertake a ~~community~~ public planning process and complete an update to the general plan.

In response to the comment, the second sentence in the first paragraph under the Ecological Enhancement of Parks and Open Space Areas heading on page II-33 is revised as follows:

> … The following ecological enhancement measure would be implemented in open space areas outside the CPSRA. At the CPSRA, ecological enhancements would be identified during the CDPR ~~community~~ public planning process and CPSRA general plan update described above and could include the enlisted measures or other measures …

Response to Comment 86-17

The comment cites the Draft EIR discussion on page III.J-21 on historic resources at Candlestick Point. Page III.J-21 refers only to historic architectural resources, not archaeological resources, including maritime remains, as discussed below.

Section III.J, page III.J-20, notes the potential for buried ship resources at the Project site, including at Candlestick Point:

> Buried ship resources may include shipwrecks, abandoned hulks, and ships that were converted into residences during the 1930s. Numerous ships have been found buried in San Francisco, most of which were buried as the city's shoreline was extended during land filling operations. A search of the California State Lands Commission's online shipwreck database revealed six ships that wrecked in or in close proximity to Hunters Point. Fragments of these wrecks and their cargo may have washed ashore or used as landfill and may be buried within the Project site as the shoreline was filled in. Few shipwrecks that date to the nineteenth century have been archaeologically studied and documented. Most of the studies have involved only the portion of the wreck that was encountered or the bottom of the hulls. Documentation of complete vessels is extremely rare. Although these deposits may not be complete specimens or in their original location, remains of shipwrecks, abandoned hulks, and ship cargo may be able to answer important research questions relating to maritime trade, ship wrecks, abandonment, or reuse of the wreck.[249]
>
> Waterfront infrastructure resources may include wharves, retaining walls, driven piles, ship-breaking yards, and hardware related to the construction of these resources.
>
> Any sites that contain onshore or offshore maritime archaeological deposits that have the potential to adequately address research questions such as those presented in the Archaeological Research Design and Treatment Plan for the Project[250] would be considered significant archaeological resources.

Impact CP-2a (Impact at Candlestick Point on Archaeological Resources), Draft EIR page III.J-36, also recognizes the potential for effects on maritime resources:

> **Impact CP-2a** **Construction at Candlestick Point would not result in a substantial adverse change in the significance of archaeological resources, including prehistoric Native American, Chinese fishing camp, and *maritime-related archaeological remains* [emphasis added]. (Less than Significant with Mitigation) *[Criterion J.b]***

The Archaeological Research Design and Treatment Plan for the Project noted in the Draft EIR as part of the mitigation measure would ensure appropriate treatment for any discovered maritime remains at Candlestick Point.

Response to Comment 86-18

The sentence on page III.K-91 noted by the commenter refers to existing natural conditions that reduce the severity of potential impacts on the environment. Further down on the same page in the discussion specifically regarding dust control, the Draft EIR states:

> … natural environmental conditions would also be a factor in minimizing the potential for contaminated dusts to adversely affect ecological systems. Avian species could be exposed to windblown dust through inhalation and ingestion during preening and prey consumption. Although various avian species use Candlestick Point for nesting and foraging, the mobility of the bird species results in their use of a relatively large home range and foraging range. Due to this mobility, avian species would not be present in one foraging area for an extended period of time in which they could receive substantial exposure to contaminants in dust. …

Refer to pages III.K-91 through III.K-92 for further discussion of this and similar examples.

Response to Comment 86-19

The City is interested in exploring opportunities for coordination between the Police Department and CPSRA law enforcement personnel. Similarly, neither the City nor the developer intends to ask State Parks personnel to provide security for construction sites or law enforcement services outside of CPSRA. Specific law enforcement policies are, however, outside the scope of environmental review.

CEQA requires analysis of whether increased demand for law enforcement services would result in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Refer to Draft EIR pages III.O-8 through -12 for discussion of impacts related to police services. Thus, particular law enforcement policies are not relevant to the content of the EIR. Moreover, while the Project and the proposed improvement of CPSRA may increase demand for State Park law enforcement services, any new personnel would be housed in the facilities proposed to be constructed as part of the park improvements. Impact RE-1 discusses the environmental effects of constructing such facilities, and concludes that such impacts would be less than significant.

Response to Comment 86-20

Refer to Response to Comment 47-63 for a discussion of the *Land and Water Conservation Fund Act*.

Response to Comment 86-21

In response to the comment, the text in Section III.P, page III.P-32, has been revised as follows:

> …Moreover, the agreement between CDPR and the City or the Agency, providing for the reconfiguration of CPSRA, would also provide ~~at least $10 million in~~ substantial funding for operation and maintenance of the park. The precise amount of operations and maintenance funding to be provided has not yet been determined, but per the requirements of SB 792, it is likely to be at least $10 million. This funding will further enable~~ing~~ the park to accommodate increased demand.

Response to Comment 86-22

The Draft Parks, Open Space, and Habitat Concept Plan has not been finalized. The commenter's request to include language related to providing opportunities for interpretation and for people to explore nature, learn about global climate change, and acquire environmental literacy will be forwarded to the Project Applicant and the Lead Agencies for review and consideration.

Response to Comment 86-23

The Draft Parks, Open Space, and Habitat Concept Plan has not been finalized. The commenter's request to include language related to providing for discovery and personal connection with the natural and cultural resources and to achieve environmental literacy will be forwarded to the Project Applicant and the Lead Agencies for review and consideration.

A dot (●) indicates material that has been revised since publication of the Draft EIR.

CANDLESTICK POINT–HUNTERS POINT SHIPYARD PHASE II DEVELOPMENT PLAN PROJECT

Comments & Responses

Volume VI: Final EIR Comments & Responses
(Letter 87 through Section G)

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San Francisco Redevelopment Agency
One South Van Ness Avenue, Fifth Floor, San Francisco, California 94103, *and*
City and County of San Francisco Planning Department
1650 Mission Street, Suite 400, San Francisco, California 94103

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Table III.S-2 Project Construction GHG Emissions [Revised] ..... C&R-2352
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Table IV-7 R&D Variant (Variant 1) Operational Criteria Pollutant Emissions (Year 20302032) [Revised] ..... C&R-2363
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Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New] ..... C&R-2455
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Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised] ..... C&R-2463
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Letter 87: San Francisco Bay Trail (1/12/10)

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Letter 87: San Francisco Bay Trail (1/12/10)

This letter is identical to Letter 31 (Comments 87-1 through 87-15 are identical to Comments 31-1 through 31-15). Both letters are dated January 12, 2010, and both were jointly submitted to the Agency and the San Francisco Planning Department. Therefore, the responses to this letter are contained in the Responses to Comments 31-1 through 31-15 and are not repeated here.

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Letter 88: Porter Sumchai, Ahimsa (12/11/09)

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Letter 88: Porter Sumchai, Ahimsa (12/11/09)

Response to Comment 88-1

The comment letters do not directly comment upon the adequacy of the Draft EIR or the information contained therein. No response is required. The information provided will be forwarded to the decision-makers.

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Letter 89: Da Costa, Francisco (1/12/10)

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Letter 89: Da Costa, Francisco (1/12/10)

Response to Comment 89-1

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment 89-2

With respect to hazardous conditions at the Project site, including conditions related to the former landfill, Section III.K (Hazards and Hazardous Materials) of the Draft EIR fully analyzes and discloses potential impacts related to hazardous materials resulting from construction and/or operation of the Project. The commenter makes a general statement about mistakes, misinformation, and areas that are not characterized, but does not provide any specific comments; therefore, a specific response cannot be provided.

Response to Comment 89-3

Draft EIR Section III.J pages III.J-17 through -19 discuss potential prehistoric shellmound sites that could be affected by the Project. Potential effects on such sites and mitigation measures to avoid significant adverse effects are discussed on pages III.J-36 through -42. Refer also to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18 and to Master Response 2 (Potential Native American Burial Sites).

Response to Comment 89-4

The comment regarding Ohlone tribe concerns on the Project is not a direct comment on the content or adequacy of the Draft EIR.

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Letter 90: Hunters Point Shipyard Citizen's Advisory Committee (1/12/10)

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Letter 90: Hunters Point Shipyard Citizen's Advisory Committee (1/12/10)

Response to Comment 90-1

Chapter VI (Alternatives) provides several tables that make these comparisons. Table VI-12 (Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives), pages VI-173 through VI-179, identifies the significant and unavoidable impacts of the Project and identifies whether any of the alternatives lessens or avoids those impacts. The table identifies whether the alternatives result in the same (=), lesser (<), or greater (>) impacts as compared to the Project. The table also provides the level of significance for the Project and the Alternatives after the implementation of all feasible mitigation measures. In addition, because this EIR includes variants to the Project, any one of which could be approved instead of or in combination with the Project, Table VI-13 (Comparison of the Significant and Unavoidable Impacts of the R&D Variant (Variant 1) to Each of the Alternatives) through Table VI-17 (Comparison of the Significant and Unavoidable Impacts of the 49ers/Shared Stadium Variant (Variant 5) identify the significant and unavoidable impacts of the variants and identify whether any of the alternatives lessens or avoids those impacts. The tables identify whether the alternatives result in the same (=), lesser (<), or greater (>) impacts as compared to the variants. The table also provides the level of significance for the Project and the variants after the implementation of all feasible mitigation measures. Due to the number of Project impacts that are presented across the Project, the variants, and alternatives, the tables are the most concise way to present this information. These summary tables provide a meaningful way to compare the most important environmental impacts (i.e., those that cannot be addressed by mitigation measures) across the Project, variants, and alternatives.

For the commenter's example, comparing the Project, with 52 significant and unavoidable transportation impacts, with Alternative 2, which does not contain a bridge and also results in 52 significant and unavoidable transportation impacts, a broad brush comparison can be done that each option results in a similar number, if not magnitude, of transportation impacts. While some transportation impacts may be reduced by eliminating a bridge, other impacts would occur without a bridge.

Response to Comment 90-2

The potential for direct and indirect residential displacement due to differences in the employment sectors offered within the Project Area is not an environmental impact under CEQA. Residential displacement in the CEQA context means that residents are physically removed from their current residence to allow for development or the development indirectly causes displacement that otherwise would not have occurred. Pages III.C-21 and III.C-22 of the Draft EIR disclose that no residents would be displaced as the residents of Alice Griffith would reside in reconstructed units, and there are no housing units on HPS Phase II. The Project would result in an in-migration of residents, not an out-migration.

The breadth of jobs offered by the Project is not expected to cause existing residents to move from the Bayview; it is expected that existing residents would continue to live in the Bayview; they will either continue working at their present job, wherever that may be, or they could potentially accept a job offered by implementation of the Project. As reflected in the EIR, the existing employment for the Project site is 529 jobs, whereas once the Project is implemented, it is expected that there would be 10,730 jobs. The

Project would result in a substantial increase in employment opportunities at the Project site. Refer to Response to Comment 64-1.

Response to Comment 90-3

Responses to the commenter's transportation questions are provided in the same order as presented in the comment.

A. Projected Service Delivery of Transit. Phasing of transit improvements is shown in Table 2 on page 31 of the Project Transportation Study, included as Appendix D of the Draft EIR. A more detailed roadway and transit service timing and phasing plan would be provided as part of the Project's Infrastructure Plan, which would be included in the Project's DDA. The Project would be implemented in four overlapping phases, with transportation infrastructure improvements (both transit and roadway) linked to the development phases. The majority of development and infrastructure improvements would be completed by the end of the second phase, which has a scheduled completion date of 2023.

B. T-Third Operations. SFMTA plans for service improvements on the T-Third, which are assumed in the Draft EIR, include expected frequency increases from the existing 8-minute peak hour frequencies to 6-minute frequencies. This improvement is primarily associated with the planned Central Subway Project, and not as a result of the Project.

Impacts TR-21 through TR-27 identify significant impacts to transit routes serving the study area that may experience increased delays due to Project-related traffic generation increases. With the exception of Impact TR-25, mitigation measures have been identified that would improve transit travel times and reduce the magnitude of Project-related impacts, although not to less than significant levels in all cases. Refer to Master Response 8 (Transit Mitigation Measures) for greater detail and supporting graphics to illustrate the specific proposals for mitigation measures intended to reduce transit delays. Because this conclusion is based on a series of assumptions regarding Project and regional traffic increases, as the Project builds out, the Project Applicant is required to conduct a feasibility study of these measures in coordination with SFMTA and other relevant City agencies to determine whether the physical improvements are, in fact, necessary, and whether they are feasible and ultimately desirable to the City. If physical improvements are warranted and feasible, they would be implemented and the purchase of new transit vehicles may not be necessary. However, based on conditions at the time, if they would not reduce Project impacts to transit travel times to less than significant levels, the Project Applicant may be required to purchase new vehicles to allow Muni to maintain proposed headways (albeit at lower travel speeds due to congestion).

C. Mitigation Measures Requiring Additional Transit Vehicles. The costs for the additional vehicles required as part of mitigation measures have been estimated. The Project is estimated to generate enough funds through the combination of General Fund revenues (e.g., on-street parking revenues, parking sales tax, and highway user taxes) to pay for capital and operating costs to both implement the phased improvement program, and to cover the cost of the additional vehicles needed to maintain proposed headways. The purchase of new vehicles, if required, and the associated timing would be coordinated with SFMTA.

D. Proposed TDM Measures. Although the proposed TDM measures and carpool/vanpool/carshare services provide an important toolbox of measures that encourage walking, bicycling, and transit use, the analysis does not make specific adjustments in the travel demand forecasts based on individual measures.

The travel demand analysis is based on a combination of local, regional, and national travel behavior studies and adjustments are based only on those elements where statistically significant relationships have been identified. To date, the body of research on the effectiveness of TDM measures, including promotion of carpooling, vanpooling, and carshare services, has not identified adequately valid and statistically significant relationships between those elements and travel behavior, including their effects on mode choice. Therefore, the analysis is relatively conservative in that it does not account for the enhanced level of TDM measures proposed by the Project relative to other developments in San Francisco, the Bay Area, and nationally.

E. Operational Improvements. The comment suggests that operational improvements, such as signal timing adjustments, could at least reduce the magnitude of Project impacts at study intersections. Although the analysis assumes some minor improvements to traffic signal timings, it conservatively does not assume major changes in signal operations. SFMTA regularly monitors and adjusts traffic signal timings as conditions warrant. It is reasonable to assume that by year 2030, particularly with the high level of development anticipated in the southeastern portion of San Francisco, traffic signal timings will continue to be monitored and adjusted as suggested by the commenter, and traffic levels of service may be somewhat better than reported in the Draft EIR. However, this would not be required as part of mitigation since SFMTA already performs this function and will continue to do so in the future.

The comment also suggests that widening the on-ramps listed in Impact TR-12 may alleviate the impacts related to freeway merge sections. On-ramp widening was determined to be infeasible because doing so would exacerbate cumulative impacts to freeway mainline operations, and freeway widening was not considered feasible. Impacts to on-ramp merge sections as identified in Impact TR-12 would remain significant and unavoidable.

F. Alternative 3 (Reduced CP-HPS Phase II Development; San Francisco 49ers Stay at Existing Stadium; Limited State Parks Agreement; Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians). The commenter questions how BRT bus breakdowns on the bridge would be handled without causing interruptions to service if there is only one lane per direction on the bridge. In this Alternative, similar to the Project, the Yosemite Slough bridge would contain two BRT lanes, one in each direction. In the rare circumstance that a vehicle breaks down on the bridge, BRT vehicles would be able to maneuver into the opposing lane and pass the disabled vehicle.

G. Alternative Yosemite Slough Bridge with a Single Travel Lane. The bridge is proposed to provide two BRT lanes, one in each direction, whether there is a new NFL stadium (and the associated 40-foot promenade/game day-only traffic lanes) or not. Given the proposed peak period frequencies of five-minutes, and the expected travel time across the bridge (between Carroll Avenue and Shafter Avenue) of over two minutes, providing only a single lane would very likely result in delays to the BRT service since vehicles in one direction would frequently arrive during the period when vehicles were traveling across the bridge in the opposing direction.

H. Jitney Service. Local jitney service is not included as part of the Project or its Transportation Plan. However, this type of service would not be precluded by the Project. Jitneys are regulated through the Police Code (Section 1150 – Jitney Permits), and a new jitney route would need to be applied for through the Police Department Permit Bureau and approved by the Police Commission and Board of Supervisors.

I. Marketing Potential of HPS R&D Without Yosemite Slough Bridge and Poor Operating Conditions on Third Street. Refer to Response to Comment 17-1, which describes that the Project's Infrastructure Plan will require that the bridge be closed to autos except on football game days, and that the Infrastructure Plan could only be amended by the Board of Supervisors. The issue of the effect of poor intersection level of service on the marketing potential of R&D uses in Hunters Point Shipyard is not an environment issue requiring CEQA analysis.

J. Geographic Distribution of Secondary Event Patrons. As noted in the Draft EIR, trip generation and geographical distribution of trips associated with secondary events at the new stadium would vary depending on the type of event. The analysis assumes similar distribution of trips for secondary events as was identified for NFL games at the proposed stadium because it represents a common distribution pattern for a regionally significant event held in this part of San Francisco.

K. Use of Barges during Construction Activities. As indicated on page III.D-68 of the Draft EIR, approximately 40 percent of the required import fill materials for the Project would be brought into the Project site via barge.

L. Project Parking Demand. Impact TR-35 describes the parking impacts associated with the Project. As shown in Table III.D-21, the Project would result in a shortfall of at least 2,316 spaces. As a result, it is possible that some drivers may seek parking in adjacent Bayview residential and industrial areas to the west. However, as noted in the Draft EIR, if parking is found to exceed supply in the existing Bayview residential area, the City's residential parking permit program could be introduced to the area to help ensure availability of parking for local residents. The extent of spillover into the nearby industrial and residential neighborhoods to the west would be limited by the existing topography (e.g., steep grades due to the Bayview Hill), the distance between the Project site and available parking supply, and concerns related to safety in the industrial area.

In San Francisco, parking supply is not considered a permanent physical condition, and changes in the parking supply would not be a significant environmental impact under CEQA, but rather a social effect. Since the City does not consider parking shortfalls to be a significant impact, no mitigation is required.

M. Innes Avenue. Intersections along Innes Avenue were projected to operate within acceptable standards and no specific traffic-related mitigation measures were required for locations on Innes Avenue. The Draft EIR does include mitigation measure MM TR-2, which would require the Project to implement a robust Transportation Demand Management plan to reduce overall auto traffic generation of the Project and minimize the Project's contribution to cumulative significant impacts.

Mitigation measure MM TR-17 would require implementation of the Project's transit operating plan, which would benefit residents of Innes Avenue in two ways. First, this robust transit operating plan would reduce the amount of Project-generated auto traffic that would otherwise be generated. In fact, the analysis forecasts that approximately 20 percent of all person-trips would be made via transit. Without the transit operating plan, these trips would likely occur via autos, many of which would travel on Innes Avenue. The second benefit of this increased transit is that residents along Innes Avenue would, themselves, get better access to transit, including frequent service on the 44-O'Shaughnessy, 48-Quintara-24th Street, and the new HPX, which would include stops along Innes Avenue before traveling non-stop to Downtown San Francisco.

Finally, although not part of any mitigation measure, the Project would also make improvements to Innes Avenue, including new and improved sidewalks, new Class II bicycle lanes, and better transit service, including express bus service to Downtown San Francisco via the HPX.

N. Noise Impacts. Landscaping would be provided along the improved roadways; however, Caltrans research has shown that ordinary landscaping along a highway accounts for less than 1 dBA reduction (Hendriks, 1998). In order to provide effective noise reduction, vegetation would have to have a height that extends at least 16 ft above the line of sight between source and receiver, must be at least 100 ft wide and dense enough to completely obstruct a visual path to the source to attenuate traffic noise by 5 dBA. Limiting heavy commercial vehicles through residential neighborhoods would also serve to reduce isolated increases of noise caused by the noisier engines and heavier chassis; however, the total increase in passenger vehicle trips would be the main source of increased ambient roadway noise, as on average, commercial vehicles account for less than 10 percent of vehicle trips that would occur in the Project vicinity.

Response to Comment 90-4

As described on page III.E-81, third paragraph, of the Draft EIR, the geographic context for cumulative light and glare impacts is "…the area covered by the BVHP Redevelopment Plan, the HPS Redevelopment Plan, and the BVHP Area Plan (of the City's General Plan), as development in these Plan areas could affect the same scenic vistas analyzed for the Project…" Giant Stadium is located approximately 6 miles north of the Project site, and would not contribute to cumulative impacts.

Response to Comment 90-5

The comment contains opinions regarding design guidelines for the Project to maintain quality of open space, including a suggestion that all open space be south of man-made structures, to reduce shadow impacts on the open space. The comment is not a direct comment on the content or adequacy of the Draft EIR.

Because the sun crosses the southern part of the sky in midday periods, open space with no or relatively shorter buildings to the south would experience reduced shading, compared to open space with taller buildings to the south. Section III.F (Shadows) describes Project shading effects on existing and proposed open space at Candlestick Point and Hunters Point Shipyard Phase II. As shown in Figure III.F-1 (Existing and Proposed Parks and Open Space), open space would be arrayed in a range of locations and overall size, such as new parks within Candlestick Point arrayed within the street grid, and new waterfront open space at HPS Phase II. The open space would be integrated within the overall urban design plan and structures would not, and could not, all be north of open space. However, the range of shadows described in Section III.F would not create significant adverse effects on the use of open space. The design guideline suggested in the comment to place all new structures north of open space would not be necessary or feasible, and would conflict with other Project goals of integrating open space within the new development at Candlestick Pont and HPS Phase II.

Draft EIR Chapter II (Project Description), Section II.E.2 (Parks and Open Space Plan), pages II-24 through II-34, describes the range of parks or open space to be developed, how the open space would be distributed throughout Candlestick Point and HPS Phase II and features, and facilities contemplated at each park that would be intended to enhance public open space and recreational uses. The parks, as noted on Draft EIR pages II-28 to II-29 would be distributed throughout the site:

> Overall, the Project would provide a substantial increase in the amount of developed, useable, high-quality parks, recreational facilities, and open space within the Project site. The Project would create a continuous network of interconnected recreational opportunities, promoting the use of the existing parks, such as the CPSRA, as well as the 239.7 acres of new parks, sports fields, and active urban recreation uses. The Project would provide a network of pedestrian and bike pathways that would connect Project uses to the adjacent neighborhoods and would ensure 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 would allow integration of new and existing facilities into the citywide park network. The proposed bicycle and pedestrian pathways would facilitate dispersal of future demand, which would help to reduce the potential for localized physical deterioration. The improved connectivity would also direct regional users to proposed "destination" parks, parks designed to accommodate regional demand. In addition, the Project would provide a continuous series of waterfront parks from the northernmost part of HPS Phase II to the southernmost part of Candlestick Point.

Response to Comment 90-6

Draft EIR Section III.G, Wind, pages III.G-1 to III.G-2 includes setting information on existing wind conditions in the Project site and vicinity. The text notes that long-term wind data are available from records from above the old Federal building in San Francisco's Civic Center, San Francisco International Airport (SFO), and from HPS. Draft EIR page III.G-2 notes that SFO wind data establishes directional patterns but that the "dominant wind direction is known to shift with locations around the Bay, including the Project site." The Draft EIR wind analysis is thus based on relevant wind data from local and regional sources, and takes into account Project-specific conditions, such as topography. The analysis does not rely only on SFO wind data. Further, as described in revised mitigation measure MM W-1a, the Redevelopment Agency would conduct wind review of high-rise structures above 100 feet.

Response to Comment 90-7

The commenter asks how a mitigation bank might be used to provide mitigation for Project impacts and what mandates where and when mitigation credits are used. One option for mitigating impacts to jurisdictional habitats on this Project would be the purchase of credits in a bank that has already created or restored habitat of a type that would be impacted by the Project, and that can sell credits to entities requiring mitigation. Regulatory agencies such as the USACE and RWQCB have to approve such banks, and as part of the approval process, these agencies specify the service area for the bank (i.e., the geographic area in which projects can use credits from the bank). If the purchase of credits in a mitigation bank were used to compensate for Project impacts to wetlands, for example, the applicant would purchase the sufficient credits from the bank to satisfy the mitigation acreage requirement specified by MM BI-4a.1, and the bank would use those funds for the management and monitoring of wetlands that it has already created.

Response to Comment 90-8

The Arts District is mentioned in the Draft EIR on pages II-14, II-18, and II-19 in Chapter II (Project Description). Further, provisions for the artists' space are included in the Community Benefits Agreement, which would be attached to and made part of the Disposition and Development Agreement, a legally binding document that would be subject to approval by the Agency Commission.

The Grasslands Ecology Park is located on the southern shoreline of Hunters Point, on Navy Parcels E and E-2, and adjacent to the Navy's water parcel, Parcel F. The Navy is responsible for clean-up of these sites and as part of the clean-up work will construct improvements of the shoreline edge to protect the land from erosion. Navy-proposed treatments include both construction of tidal wetlands and construction of riprap slope protection.

With respect to why natural edge/riprap is a proposed treatment for the Grasslands Ecology Park, Section III.H (Recreation) does not provide a description of a "natural edge/riprap" proposed as part of the Grasslands Ecology Park; however, Chapter II (Project Description) on page II-58 of the Draft EIR does identify shoreline improvements (specifically, tidal habitat) at the natural edge/riprap of the Grasslands Ecology Park. The use of the term "natural edge/riprap" refers to the location of the appropriate parcels, and not the associated habitat modifications. As described in the footnotes of Table II-13 on page II-58 of the Draft EIR:

> Tidal Habitat: Take advantage of sloped surface (or reduce slope where needed) to install aquatic plants and create new tidally-exposed habitat

Further, Section III.N (Biological Resources) also describes how shoreline improvements can facilitate the creation of tidal habitats, as described in Impact BI-4b on page III.N-64 of the Draft EIR:

> … the CP/HPS Project would add soil or other materials on the outboard side of the revetment to facilitate the creation of tidal salt marsh in several areas along the southern shoreline of HPS by reducing the revetment's slope and providing a more suitable substrate for colonization by wetland vegetation.

Response to Comment 90-9

Refer to Response to Comment 65-24 regarding recycled water.

Response to Comment 90-10

Refer to Response to Comment 90-3 for a discussion of the proposed phasing of transit service for the Project. Refer also to Master Response 8 (Transit Mitigation Measures) for details regarding implementation of proposed mitigation. With the Project, the Housing Variant (Variant 2) would be implemented in four overlapping phases, with transportation infrastructure improvements (both transit and roadway) linked to the development phases. The majority of development and infrastructure improvements would be completed by the end of the second phase, which has a scheduled completion date of 2023.

Response to Comment 90-11

Community gardens, or growing fruits and vegetables for human consumption in native soil, are not allowed now in certain areas of HPS Phase II covered by some of the RODs already issued by the Navy. Urban agriculture in native soil would likely be precluded in other areas for which RODs have not yet been issued. The Redevelopment Plan amendments for HPS Phase II propose to address this issue. The EIR assumes certain types of uses, and the HPS and BVHP Redevelopment Plan amendments reflect the types of uses proposed for the Project and specifically prohibit certain uses that would be incompatible with planned uses. The Bayview Hunters Point and Hunters Point Shipyard Redevelopment Plans contain several mixed-use districts, each referred to as a "District" or "Land Use District." Allowable land uses

within each District will be those that are consistent with the character of the District as described in the Redevelopment Plans. The specific uses identified in the Redevelopment Plans for each District illustrate the appropriate scope and nature of permitted uses. Community gardens could be permitted in Candlestick Point provided that they are consistent with the objectives of the Bayview Hunters Point Redevelopment Pan. Community gardens could be permitted on the Hunters Pont Shipyard, provided that they use aboveground planters that include impermeable separation between planter soil and the ground below and otherwise comply with applicable environmental restrictions.

As to whether any land uses would be excluded due to EIR language, the air quality analysis in the EIR in Section III.H (Air Quality), under Impact AQ-6, analyzes potential stationary sources of toxic air contaminants, and MM AQ-6 requires that each facility with sources of TAC emissions 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 not cause these thresholds to be exceeded at the nearest residential locations. Any type of facility wishing to locate in the Project area, even if allowed by the land use plan, would be required to satisfy this mitigation measure.

Letter 91: California State Parks (12/23/09)

Letter 91 represented the California State Parks draft comment letter on the Draft EIR (dated December 23, 2009). After the close of the comment period, California State Parks requested removal of its draft letter from the Comments & Responses document and, instead, requested that responses are only provided to its final comment letter, which is dated January 12, 2010. The California State Parks final comment letter is provided in this Comments & Responses document as Letter 86. Letter 91 is intentionally omitted from this document.

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Letter 92: National Football League (1/12/10)

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Letter 92: National Football League (1/12/10)

Response to Comment 92-1

The comment notes the National Football League's opinion that the Yosemite Slough bridge, the US-101/Harney Way interchange, adequate parking supply, and improved public transit infrastructure are critical elements to providing a new stadium in Hunters Point Shipyard. The comment is noted and no response is required.

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Letter 93: California State Lands Commission (1/12/10)

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Letter 93: California State Lands Commission (1/12/10)

Response to Comment 93-1

The comments are acknowledged and commenter accurately describes the general land uses of the Project, as well as the jurisdiction and authority of the State Lands Commission (CSLC). Section III.B of the Draft EIR, pages III.B-8 and III.B-9 describe the public trust lands within the Project site.

Response to Comment 93-2

In response to this comment, page III.B-10, first paragraph, of the Draft EIR is revised:

> ***Project Consistency:*** The Project includes both trust consistent and trust inconsistent uses; they will be distributed consistent with the final Trust map approved in Senate Bill 792. A trust exchange agreement will be approved as part of the Project consistent with the final Trust map. Negotiations with the CSLC are ongoing.

Response to Comment 93-3

This comment contains general information about the application process for maintenance dredging, and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project. Refer to mitigation measure BI-12b.1 on page III.N-90 of the Draft EIR, which describes the requirements of the DMMO process and Long-Term Management Strategy.

Response to Comment 93-4

While the specific uses of various park lands have not been determined, all development on lands impressed with the Public Trust will be consistent with the Trust. In particular, parklands proposed for Public Trust lands would offer water-oriented recreation focused on San Francisco Bay, thus providing statewide benefit. Municipal, or neighborhood, park programming would be limited to non-Trust lands.

Response to Comment 93-5

Refer to Response to Comment 93-4 regarding consistency of land uses with Public Trust. Refer to Section III.B (Land Use and Plans) of the Draft EIR for a discussion of the relationship of the Project with trust land requirements. Page III.B-10 of the Draft EIR states "The Project includes both trust consistent and trust inconsistent uses; they will be distributed consistent with the final Trust map approved in Senate Bill 792. A trust exchange agreement will be approved as part of the Project consistent with the final Trust map."

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Letter 94: Harvey, Carol (1/12/10)

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Letter 94: Harvey, Carol (1/12/10)

Response to Comment 94-1

Refer to Master Response 8 (Sea Level Rise) for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur. Refer to Master Response 6 (Seismic Hazards) regarding the interaction of earthquakes and sea level rise, and refer to Master Response 7 (Liquefaction) for a discussion of sea level rise effects related to liquefaction.

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Letter 95: Koepf, Ernie (1/12/10)

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Letter 95: Koepf, Ernie (1/12/10)

This letter is identical to Letter 37 (Comment 95-1 is identical to Comment 37-1). Therefore, the response to this letter is contained in Response to Comment 37-1 and is not repeated here.

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Letter 96: Fox, Jill (1/12/10)

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Letter 96: Fox, Jill (1/12/10)

Response to Comment 96-1

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

In addition to the public hearings on the Draft EIR, page ES-7 describes the other opportunities for providing public comment prior to publication of the Draft EIR:

> The Agency and the City filed the NOP with the California Office of Planning and Research, State Clearinghouse, as an indication that an EIR would be prepared. In turn, the State Clearinghouse distributed the NOP to public agencies and interested parties for a 30-day public review period beginning August 31, 2007. In addition, the NOP was also sent to organizations, companies, and/or individuals that the Agency and the City believed might have an interest in the Project. The purpose of the public review period was to solicit comments on the scope and content of the environmental analysis contained in the Draft EIR. In addition, in order to solicit further comments on the scope and content of the environmental analysis to be included in the EIR, the Agency and the City held two public scoping meetings.

In addition, as stated in Response to Comment 85-5, in terms of the planning process for the Project, Section I.B (History of the Planning Process), which is presented on pages I-1 through I-4 of the Draft EIR, describes a planning process that has occurred over three decades and has included hundreds of community meetings and other forms of public outreach.

Lastly, an Executive Summary was published as Volume I of the Draft EIR, which totaled only 134 pages, and was prepared to provide an easy-to-read summary of the entire contents of the Draft EIR.

Response to Comment 96-2

Refer to Response to Comment 48-3 regarding the selection and analysis of alternatives. As described in Chapter II (Project Description, Section II.F Development Schedule), pages II-50 through II-80, of the EIR, each major phase of Project development would include a mix of uses, including residential, recreational, and neighborhood-serving retail. Figure II-16 (Proposed Site Preparation Schedule) and Figure II-17 (Proposed Building and Parks Construction Schedule) show that Alice Griffith Housing would be rebuilt first beginning in 2011. The new stadium would be completed by 2017. The first parks would be constructed at Alice Griffith and around the 49ers football stadium in the same timeframe. As shown in Figure II-17, the HPS Village Center (neighborhood retail) and the CP Center (regional retail) would be built by 2023 (13 years from now). Infrastructure and park development would occur along with building development, and would provide upgraded facilities and recreational uses at each increment of development.

Refer to Section B (Project Refinements) and Section F (Draft EIR Revisions) of this document, which describes changes to the Phasing Plan for the Project, and provides text and figure changes to the Draft EIR, respectively. Specifically, Figure II-16 and Figure II-17 have been revised to reflect that development activities would occur 1 to 2 years later than originally planned.)

Response to Comment 96-3

Limiting the number of permitted off-street parking spaces for residential uses to a maximum of one parking space per unit is consistent with the City's Transit First Policy and the San Francisco Planning Code. In order to encourage use of alternative modes of travel, including walking, bicycling, and transit, by Project residents and visitors, each major phase of Project development would include a mix of uses, including residential and neighborhood-serving retail, as described in Response to Comment 96-2 above. In addition, the transit phasing plan has been designed to encourage transit-oriented travel patterns from the early stages of Project implementation.

Impact TR-35 identified a projected parking shortfall associated with the proposed maximum residential parking ratio. However, as noted on page III.D-124 of the Draft EIR, as part of its "transit first" policy, the City and County of San Francisco does not require that the supply of parking spaces equal the peak demand. Consequently, as noted in the Draft EIR, even though the Project would likely provide the maximum number of spaces permitted, the supply may not be sufficient to meet peak demands.

However, because the parking supply is not considered a permanent physical condition, and also due in part to the City's Transit First Policy, the impact associated with the projected parking shortfall is considered less than significant.

Response to Comment 96-4

The Draft EIR evaluated existing and future public service levels (police, fire, schools, and libraries) in Section III.O Public Services. With regard to police services, "as the Project identifies community service use areas that could be used for police services, and as police services are not tied to a specific station, the SFPD would be able to maintain acceptable levels of police service" (Draft EIR page III.O-12). With regard to fire protection services, "construction of a new SFFD facility on land designated for community-serving uses on the Project site would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. Construction of 100,000 gsf of community facilities, which could include a new SFFD facility, has been included as a component of the Project" (Draft EIR page III.O-22). With regard to the provision of new schools, while existing neighborhood schools have capacity for Project students, "it is likely that a 12 percent Citywide overcapacity of SFUSD as a result of citywide population growth in 2030 would occur" (Draft EIR page III.O-31). "SFUSD could choose to address its potential future shortfalls in capacity through a wide range of options, including shifting students to other facilities, beginning year-round schools, and/or increasing the use of portable classrooms." "The school impact fees paid pursuant to SB 50 would go toward maintaining or improving school facilities to accommodate growth in school attendance." Finally, with regard to library services, "the new SFPL branches, which would all be completed upon build-out of the Project, would accommodate increased demand from the Project. No additional library facilities would be required to accommodate development proposed in the Project" (Draft EIR page III.O-37). No impacts were identified for public services and no mitigation is required.

Response to Comment 96-5

Reasonably foreseeable projects, such as those planned for Area C, were considered in the cumulative projects for the Project. The analysis of cumulative impacts in each technical section of the Draft EIR

accounted for reasonably foreseeable and planned projects in Area C. The Project has included all feasible mitigation measures for impacts of the development of HPS Phase II.

Response to Comment 96-6

The commenter suggests that increasing traffic (and associated effects) on Innes Avenue is a "taking." Streets are owned and maintained by the City of San Francisco and are considered public facilities. The impacts associated with Project-generated traffic increases at key areas throughout the study area were analyzed and described in the Draft EIR, and the Project would not impede access to existing properties along Innes Avenue.

It should also be noted that intersections along Innes Avenue and Evans Street from the Project boundary to and including Jennings Street were analyzed and are expected to operate acceptably in all three study peak hours in year 2030 with the Project. All streets and street improvements have been designed to accommodate the increased traffic in a safe and practical manner; crosswalks would be clearly marked and signalized intersections would have pedestrian signage to facilitate safe crossing of streets.

The Project would provide a number of streetscape improvements, including sidewalk bulb-outs, cross walks, curb ramps, street trees and planting, bus shelters, and other site furnishings and pavement treatments that would visually tie together the project with Bayview neighborhood.

Night lighting would not be detrimental to migratory birds, which are accustomed to flying through urban areas. Refer to the discussion under Impact BI-20a and Impact BI-20b in Section III.N (Biological Resources), which deals with impacts of artificial lighting on birds. Mitigation measures are included to reduce the impact to less-than-significant levels. The shadows cast by the Project's new structures would not eliminate sunlight from falling on adjacent properties; refer to Figures III.F-3 through III.F-8 in Section III.F (Shadows) for illustration of how the shadow moves throughout the day. Refer to Section III.H (Air Quality) for a comprehensive analysis of particulate emissions and air quality impacts. As all utilities for the Project would be undergrounded, there would be no electromagnetic pollution from additional power lines in front of the commenter's home as a result of the Project.

Response to Comment 96-7

Refer to Response to Comment 96-3 for a discussion of proposed parking supply, and Responses to Comments 35-1 and 35-2 for a discussion of development phasing. As discussed in that response, the impacts associated with the removal of on-street parking were identified and discussed in Impact TR-36 in the Draft EIR. As noted in the Draft EIR, this loss of on-street parking is considered less than significant and no mitigation is required. On Innes Avenue the Project would displace about 51 parking spaces between Earl Street and Hunters Point Boulevard. The parking demand on Innes Avenue is low, and the demand would be accommodated along other portions of Innes Avenue or on other streets in the area. At some locations, residents and visitors would have to park further between their parking space and destination; however, this is not considered a significant impact. On-street parking spaces are publicly owned and not for the sole use of adjacent uses, and therefore, removal of on-street spaces are not considered a taking.

The Project would not narrow sidewalks on Innes Avenue compared to their existing width, and therefore would not be removing any street trees. New sidewalks would be as wide as or wider than existing sidewalks along the roadway.

The guidelines of San Francisco's Better Streets Plan were consulted throughout the planning of the Project streets and sidewalks. In some cases, and specifically Innes Avenue, constraints in topography, transportation engineering, and abutting land uses resulted in proposed sidewalk widths narrow than the idealized suggestions of the Better Streets Plan. In the case of Innes Avenue, constraints resulted in proposed sidewalks that, while American Disabilities Act-compliant (ADA), are narrower than the suggested minimums from the Better Streets Plan.

Street trees would be provided along the portion of Innes Avenue that would be improved as part of the Project. In general, median divided roadways allow for higher, not lower, travel speeds. Therefore, the lack of a median on Innes Avenue would not necessarily encourage speeding, as stated by the commenter.

Extending Jerrold Avenue is not proposed as part of the Project. The analysis indicates that intersections along Innes Avenue would operate acceptably and no mitigation is required.

Innes Avenue is expected to be over 60 feet wide. If a collision were to occur, it is unlikely that it would block the entire width of the street such that emergency vehicle access to the Hunters Point Shipyard area via Innes Avenue would be blocked. However, if such an event were to occur, there are multiple routes through which vehicles and emergency vehicles could reach the HPS, including Palou Avenue and Arelious Walker Avenue via the Yosemite Slough bridge.

The analysis found that intersection operations, pedestrian circulation, and bicycle circulation along Innes Avenue would experience less than significant impacts due to the Project and therefore, no mitigation is required. Proposals to provide bicycle and/or pedestrian routes on Hudson Avenue are not included as part of this Project; however, they are not precluded from being included as part of additional analysis of the separate India Basin/Area C project.

The Project's transit operating plan has been studied in detail by SFMTA and others. The proposed plan is expected to provide a substantial improvement to the existing transit service in the area and is expected to be adequate to serve the Project. The Project's transit plan would also provide substantial improvements to transit serving the India Basin area, including frequent service on the 44-O'Shaughnessy, 48-Quintara-24th Street, and the new HPX, which would include stops along Innes Avenue before traveling non-stop to Downtown San Francisco.

Response to Comment 96-8

All of the parks and open space areas proposed for the Project and illustrated in Figure III.P-2 would be open to the public. The Draft EIR discusses the general proposed programming of new open space and CPSRA, all of which will be publicly owned. The specific programs for individual parks would be determined following future public process, including the CPSRA General Plan Amendment process.

As discussed in Impact RE-2, and Response to Comment 47-28, while usage of existing parks will increase, new parks, improvements to CPSRA, and operations and maintenance funding will prevent deterioration of these facilities. No mitigation is required.

Refer to Impact AE-7, beginning on page III.E-69, for a discussion of the aesthetics of the Project's potential light and glare, and to Impact BI-20a, beginning on page III.N-108, for a discussion of its impact on migratory birds.

Refer to Responses to Comments 86-8 and 47-48 for discussion of shadow impacts on CPSRA.

Refer to Response to Comment 31-12, which states the Candlestick Park stadium site does not provide public outdoor recreation opportunities; therefore, its demolition and redevelopment as part of the Project will not cause significant environmental impacts related to loss of recreational facilities.

Response to Comment 96-9

With regard to water distribution and connection, the Project will include a new on-site system that is connected to the City's low-pressure water system. As described on page II-45, there is a "…need for increased flow capacity from the City water distribution system to meet the required system performance criteria" and the Project would implement system improvements. The City has confirmed that there is capacity in the off-site system to accommodate the water demand of the Project, as identified on page III.Q-16 "… existing and projected future water supplies could accommodate estimated future water demand, including the Project …." PG&E or the SF PUC will provide electrical power. All utility electrical, cable, internet, and communication cables would be located on the Project site within an underground joint trench network, as described on pages III.Q-60 and III.Q-61. The system would serve Candlestick Point and HPS Phase II, and not specifically the neighbors on Innes Avenue. It is unknown how often Innes Avenue would be torn up in the future to accommodate utility infrastructure but all work in the streets is regulated by the Department of Public Works under the City's street excavation permit program, which controls the nature of all street work.

Response to Comment 96-10

As discussed in Draft EIR Chapter II (Project Description), page II-23, the Project would retain structures in this NRHP-eligible Hunters Point Commercial Drydock Historic District, including Drydocks Nos. 2 and 3, and Buildings 104, 204, 205, and 207. Impact CP-1b (Impact of Hunters Point Phase II), pages III.J-33 to -34, notes that the Project would have less than significant impacts on the NRHP-eligible district. Section III.J also identified a larger CRHR -eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, shown on Figure III.J-2, page III.J-23, that would include Buildings 208, 211, 224, 231, and 253. The Project would demolish those buildings, and as stated in the Draft EIR, this would be an unavoidable significant adverse impact on the CRHR-eligible district. The NRHP-eligible resources would remain and would continue to be part of the NRHP-eligible Hunters Point Commercial Drydock Historic District.

As noted in the comment, mitigation measures MM CP-1b.1 and MM CP-1b.2, pages III.J-34 to -35, requiring documentation of the CRHR-eligible resources before demolition, would reduce but not avoid the significant effect on CRHR-eligible resources.

Refer to Section F (Draft EIR Revisions) of this document, discussing Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation Alternative) that would retain the structures in the

CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, and would avoid significant adverse effects on historic resources.

Chapter II (Project Description), page II-23, states that the Re-gunning pier and crane would remain at Hunters Point Shipyard as part of the Project. The India Basin area, north of Hunters Pont Shipyard, is not part of the Project. Preservation of historic resources at India Basin would be considered under the separate planning and environmental review process under way for the India Basin Shoreline Plan, as noted on Draft EIR page I-8.

Letter 97: Brightline Defense Project (1/12/10)

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Letter 97: Brightline Defense Project (1/12/10)

Response to Comment 97-1

Comment is noted. The construction employment set forth in Section III.C (Population, Housing & Employment) of the Draft EIR is an estimate based on conceptual build-out of the Project. Table III.C-8 on page III.C-13 of the Draft EIR, which has also been revised in Section F (Draft EIR Revisions) to reflect development activities occurring 1 to 2 year later than originally planned, illustrates the maximum number of construction workers per year, for Candlestick Point and Hunters Point Shipyard separately and combined. It would not be accurate at this time to calculate the specific trade hours that will be required, as that will depend in large part on final Project design, finishes selected, and other design parameters. For purposes of a CEQA analysis, the maximum number of construction jobs has been estimated sufficiently to allow a meaningful analysis of the impacts of increased employment on the site, both temporary and permanent. No further details need be specified for environmental clearance.

Response to Comment 97-2

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

As part of the Community Benefits Agreement, the Project applicant will contribute to a workforce development fund that will be used for workforce development programs designed to create a gateway to career development for residents of District 10. Subject to the fiscal and other provisions of the City's Charter, the City intends to match the Workforce Contribution in services and programs for workforce development in the BVHP Area. The city is also developing an Employment Opportunity Program for the Project. The detailed specific information requested by the commenter about other past projects is not available and is not necessary for an adequate CEQA document on the Project.

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Letter 98: US Department of the Navy (January 12, 2010)

Letter 98 represented the US Department of the Navy's draft comment letter on the Draft EIR (dated January 12, 2010). After the close of the comment period, the US Department of the Navy requested removal of its draft letter from the Comments & Responses document and, instead, requested that responses are only provided to its final comment letter, which is dated January 14, 2010. The US Department of the Navy final comment letter is provided in this Comments & Responses document as Letter 101. Letter 98 is intentionally omitted from this document.

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Letter 99: City/County Association of Governments of San Mateo (1/12/10)

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Letter 99: City/County Association of Governments of San Mateo (1/12/10)

Response to Comment 99-1

The Draft EIR identifies significant Project impacts to facilities in San Mateo County, and where feasible, identifies mitigation measures to which the Project should contribute. The commenter notes that the Bi-County study is currently the mechanism through which the Project's fair share contribution to roadway improvements in San Mateo County, and in southern San Francisco, shall be determined. If the Bi-County Study is terminated prior to identification of required mitigations and adoption of fair share funding obligations, revised mitigation measures MM TR-6 and MM TR-8 allow for the use of and equivalent mechanism or process for the City and County of San Francisco, the SFCTA, the Redevelopment Agency, and the City of Brisbane to determine the respective fair shares of Project costs, including amounts to be contributed by Project Applicant.

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Letter 100: Shaffer, Linda (1/12/10)

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Letter 100: Shaffer, Linda (1/12/10)

Response to Comment 100-1

Refer to Response to Comment 47-29 for a discussion of the standard of significance used for determining the Project's impacts on recreational facilities.

Response to Comment 100-2

Refer to Response to Comment 84-45 for a discussion of the Draft EIR's analysis of the entire Project site.

Response to Comment 100-3

The commenter states that in the discussion of Project-related construction impacts in Impact RE-1 (Construction of Parks, Recreational Uses, and Open Space), there is no reference to Section III.N (Biological Resources). In response to this comment, the second sentence of the last paragraph in Impact RE-1 on page III.P-12 of the Draft EIR is revised as follows:

> Construction activities associated with the proposed parks and recreational facilities are considered 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), and Section III.N (Biological Resources). …

All construction-related impacts to biological resources would be reduced to a less-than-significant level, in some cases with the implementation of the identified mitigation measures.

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Letter 101: US Department of the Navy (January 14, 2010)

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Letter 101: US Department of the Navy (January 14, 2010)

All of the comments provided in this letter are exactly the same as the comments provided in Letter 98; however, where this letter was submitted as the "final" letter by the US Department of the Navy, Letter 98 represents a "draft" letter. For that reason, full responses are provided in this letter.

Response to Comment 101-1

As requested by the commenter, all comments made to the body of the Draft EIR text that would also apply to the Executive Summary will also be made to the Executive Summary.

Response to Comment 101-2

The comment clarifies the references to the Hamusek-McGann, et al., report cited in Section III.J, pages III.J-18 and -19. The following underlined text changes update the reference:

> **CA-SFR-12**
>
> Site CA SFR 12 is a shellmound, recorded by Nelson as Site #391 on the south side of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~identified~~ to identify the likely location of the site in HPS.[241]
>
> **CA-SFR-13**
>
> Recorded by Nelson as Site #392, site CA-SFR-13 may be located at the eastern end of Hunters Point.[242] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have spotted~~ to identify the likely location of the site in HPS.[243] Hamusek-McGann et al. report that based on historical maps the probable location of this site would have placed it at the original shoreline where Drydock 4 was later built. Due to extensive excavations that occurred during construction of the drydock Hamusek-McGann et al. assume that CA-SFR-13 was destroyed; however, as with other sites that were later determined to be wholly or partially intact, such as CA-SFR-7, CA-SFR-17, and CA-SFR-140, this site might also present intact discoveries.
>
> **CA-SFR-14**
>
> Site CA-SFR-14 is probably a mound, recorded by Nelson as Site #392a on the northeast end of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site in HPS.[244]
>
> **CA-SFR-11**
>
> Site CA-SFR-11 is a shell midden recorded as Nelson's Site #390 on the south side of Hunters Point.[245] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site inside HPS.[246]

Response to Comment 101-3

Refer to Response to Comment 101-2 regarding references to the Hamusek-McGann, et al., report cited in the Draft EIR.

Response to Comment 101-4

Refer to Response to Comment 101-2 regarding references to the Hamusek-McGann, et al., report cited in the Draft EIR.

Response to Comment 101-5

Refer to Response to Comment 101-2 regarding references to the Hamusek-McGann, et al., report cited in the Draft EIR.

Response to Comment 101-6

Refer to Response 34-6, clarifying that the Navy is completing the NRHP listing process for the Hunters Point Commercial Drydock Historic District identified in 1998.

Response to Comment 101-7

The comment clarifies structures identified as part of the Hunters Point Commercial Drydock Historic District on page III.J-21, third paragraph, as shown below in strike-through text:

> The Office of Historic Preservation Directory of Properties in the Historic Property Data File included Drydocks 2 and 3 and ~~associated wharves and seawalls,~~ pump houses (Buildings 205 and 140), the western portion of Drydock 1, the Gatehouse (Building 204), and the Paint and Tool Building (Building 207) as the only structures on HPS considered eligible for listing on the NRHP, consistent with the findings of the 1997 JRP report and the subsequent SHPO concurrence. No other buildings or structures had previously been evaluated for listing on the CRHR.

Response to Comment 101-8

Draft EIR page III.J-24, paragraph three, describes the potential CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District and does not describe the NRHP-eligible Hunters Point Commercial Drydock Historic District. The potential CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District does encompass a range of buildings from each of the three primary periods of significance for HPS: early drydocks, Navy use in World War II, and radiological research in the World War II and post-war periods.

The Draft EIR is correct as written.

Response to Comment 101-9

The comment accurately points out that the term "hazardous substance" as defined in CERCLA is narrower than the term "hazardous material" as defined on page III.K-4 in the Draft EIR. Most notably, the term "hazardous substance" under CERCLA does not include petroleum, and the term "hazardous material" as used in the draft EIR (and several state and federal statutes) does include petroleum, as well as all "hazardous substances" as defined in CERCLA. Because the cleanup program the Navy is required to implement under the Federal Facilities Agreement encompasses both "hazardous substances" under CERCLA and petroleum under federal and state underground storage tank cleanup and water quality laws, the Draft EIR uses the broader term "hazardous materials" to refer to the materials addressed by the cleanup program. In any instance in the Draft EIR where specific CERCLA requirements (e.g., the requirements of CERCLA Section 120(h)(3) specifying the requirements for transfer of property with releases of hazardous substances) are referenced as applying to "hazardous materials," the reader should be advised that those requirements do not apply to petroleum releases.

Response to Comment 101-10

The comment is correct in that a portion of the contamination was caused not by the Navy but by Triple A Machine Shop. As is pointed out on page III.K-9 of the Draft EIR:

> HPS was decommissioned in 1974. In 1976, the Navy leased the site to Triple A Machine Shop (Triple A), which was subsequently indicted and convicted for illegal disposal of hazardous substances at Hunters Point. In 1986, Triple A's 10-year lease expired and was not renewed. The Navy is responsible for addressing hazardous material releases resulting from Triple A's activities.

The first sentence on page III.K-2 has been revised as follows:

> There are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations, Triple A Machine Shop, Inc., and/or its lessees throughout HPS Phase II. …

Response to Comment 101-11

The comment appears to be incorrect. The Historical Radiological Assessment, Volume II, Use of General Radioactive Materials, 1939–2003, Hunters Point Shipyard states (page 1-1, end of second paragraph), "Volume I [of the HRA] concluded that berthing of and work on nuclear-powered ships at HPS resulted in no adverse effects on the human population or the environment." This statement implies that the Navy did, in fact, service nuclear powered warships at HPS. No change has been made to the Draft EIR text.

Response to Comment 101-12

The comment is correct in that a RI may not have been prepared for each and every IR and Site Identification (SI) site. Some IR or SI sites may not have required further investigation. The first sentence of the last full paragraph on Draft EIR page III.K-11 has been revised as follows:

> After the site identification process, the next step under the Navy's program is the preparation of Remedial Investigation (RI) reports for ~~all~~ the IR sites and other locations of concern in each parcel. …

Response to Comment 101-13

The comment is incorrect; there is a Final FS for Parcel F, which is dated April 30, 2008. No change has been made to the Draft EIR text.

Response to Comment 101-14

The title of the document is *Amended Parcel B Record of Decision*, and it is typically referred to as the "Amended ROD."

The second portion of this comment is incorrect. The Parcel B Amended ROD states, under Section 12.1.1 (Summary of the Rationale for the Amended Selected Remedy, Soil), "Soil will be excavated in selected areas where COCs exceed remediation goals. These areas include the methane and mercury sources areas as well as other, smaller areas where metals (lead) or organic chemicals exceed remediation goals." No change has been made to the Draft EIR text.

Response to Comment 101-15

The referenced text in the Draft EIR accurately reflects DTSC's practice of relying upon the decisions of CDPH about clearance of radiologically impacted sites. The comment accurately states that this practice is not reflected in the Federal Facilities Agreement, which specifies that the decision makers are Navy and USEPA with concurrence from RWQCB and DTSC.

Response to Comment 101-16

The most current field data indicates that an IC may not be necessary or applicable for the deep piping beneath Building 140. However, "free release" in not yet assured. No change has been made to the Draft EIR text.

Response to Comment 101-17

Property transfer will be documented in a FOST when remediation is complete (which includes when the remedy is operating properly and successfully) or in a FOSET before it is complete, as currently described in the Draft EIR on page III.K-32. No change has been made to the Draft EIR text.

Response to Comment 101-18

The fourth bullet on page III.K-32 under the Early Transfer subheading has been revised to describe the "finding by the Federal government" per CERCLA Section 120(h)(3)(C)(i)(IV).

Response to Comment 101-19

The fourth bullet on page III.K-33 has been revised to omit the term "oversight activities" and make any other necessary adjustments to the text to be consistent with CERCLA Section 120(h)(3)(C). It has been revised as follows:

- All remedial investigations~~,~~ and response actions~~, and oversight activities~~ will be completed by the transferee notwithstanding the transfer of the property.

Response to Comment 101-20

Although it is possible that the radiologically impacted area around Building 140 could be excluded from early transfer, no such decision has yet been made, and no revision to the Draft EIR text is warranted at this time.

Response to Comment 101-21

The Navy is mistaken that the Draft EIR identifies the Navy CERCLA remedial actions as CEQA mitigation measures. Further, the Draft EIR does not identify the Navy's CERCLA decisions as subject to CEQA. Page III.K-2 expressly states:

> The remediation program at HPS Phase II is being carried out under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and through a 1992 Federal Facilities Agreement (FFA) between the Navy and federal and state regulatory agencies. … these

> ongoing remediation activities are not part of the Project. Thus, the goal of this EIR is not to assess the adequacy or impacts of the Navy's remediation actions. …

The Draft EIR does address any actions that would be taken not by the Navy but by other parties implementing the Project. Page III.K-2 also states:

> … However, this EIR does evaluate the potential impacts of certain limited remedial activities proposed to be conducted in conjunction with development activities, as described below.

Instead of identifying the Navy's CERCLA remedial actions as mitigation measures, the Draft EIR requires compliance with any restrictions that may be imposed on the property by the Navy under its remedial action program. Page III.K-3 states:

> The mitigation measures set forth in this section require the Project to be consistent with any requirements imposed as part of these (the Navy) remediation programs, and the federal, state, and local laws governing those remediation programs. For example, if such laws require institutional controls such as land use covenants that prohi5it certain activities or types of land uses on portions of the Project site or require the preparation and implementation of a Risk Management Plan (RMP), the mitigation measures set forth below impose the same requirements. Similarly, the mitigation measures require the Project to be implemented consistent with the terms of any property transfer document, e.g., if the Navy transfers ownership or leases portions of HPS Phase II prior to completion of remedial activities, the mitigation measures require the transferee to comply with all applicable activity and use restrictions set forth in the lease or deed.

Response to Comment 101-22

The Draft EIR, appropriately, conservatively assumes that the bridge would be constructed prior to transfer of Parcels E and E-2 and, therefore, before the Navy has addressed all radiological hazards on these parcels. The text and mitigation measure MM HZ-9 are designed to identify possible impacts that could occur in such an event and mitigation that would avoid a significant impact as a result of the presence of radiological materials within the bridge construction area. To clarify the text, the following language will be added to page III.K-77 after the first paragraph under Impact HZ-9:

> It is expected that construction of the bridge would occur in the early phase of the Project, likely before the Navy completes remediation of Parcels E and E-2. This section describes the impacts that could occur under such a scenario due to the presence of radiological materials and the actions that would be taken to address the presence of radiological materials within the bridge construction area.

MM HZ-9 does not consider a Navy CERCLA removal action as CEQA mitigation. Rather, MM HZ-9 requires the Agency or Project Applicant to take action to avoid an impact identified under CEQA. Obviously, any action taken by the Agency or Project Applicant at the HPS site concerning the handling of hazardous substances must satisfy all regulatory requirements, including CERCLA, but MM HZ-9 does not establish what action the Navy may need to take under the FFA to comply with its own, separate CERCLA responsibilities.

Response to Comment 101-23

In response to the comment, page III.L-15 of the Draft EIR has been revised:

> Based on existing data, there is little or no risk of large translational movements.[386a,386b] Design-level liquefaction studies, which are further described in mitigation measures ~~MM GE-4~~MM GE-5a,

would address five general types of localized potential hazards, and provide treatment methods, including the following:

[386a] ENGEO, 2009.

[386b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., *Remedial Investigation/Feasibility Study Report for Parcel E-2, Hunters Point Shipyard, San Francisco, California*, February 2009.

Response to Comment 101-24

In response to the comment, page III.L-55 of the Draft EIR has been revised:

> … Extensive Young Bay Mud deposits are predominant in Parcels D and E. The rate of settlement of the Young Bay Mud from the load of the artificial fill is now very small, but any increase in loads, whether resulting from placement of new fill or the construction of buildings, would initiate a new cycle of consolidation settlement.[417a,417b] …

[417a] ENGEO, 2009.

[417b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., 2009.

Response to Comment 101-25

As explained in Response to Comment 101-22, it is assumed that the bridge work would be completed before the Navy has transferred Parcel E-2 to the Agency and it is acknowledged that any work done in the area under such a circumstances will require the approval of the Navy and the regulatory agencies. MM HZ-9, which addresses impacts associated with construction on Navy-owned property states:

> *MM HZ-9* … *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.* …

Response to Comment 101-26

In response to the comment, the third sentence in the third paragraph, Section III.N (Biological Resources), page III.N-9, has been revised as follows:

> … One of these wetlands, in the southwestern portion of HPS Phase II, consists of pools that ~~pools~~ are shallow basins that lack drainage outlets. …

Response to Comment 101-27

In response to the comment, the second sentence in the first paragraph, Section III.N (Biological Resources), page III.N-21, has been revised as follows:

> … However, because they tend to gather in winter roosting sites along the California coast in relatively few locations, roost sites that are used traditionally by large numbers of individuals are considered sensitive biological resources and, thus, this common butterfly is discussed here as a sensitive species. …

Response to Comment 101-28

In response to the comment, the third sentence in the last paragraph, Section III.N (Biological Resources), page III.N-22, has been revised as follows:

> … This striking recovery is due in large measure to the ban on the use of DDT (a synthetic pesticide) in many places, including the United States. …

Response to Comment 101-29

In response to the comment, the first sentence in the last paragraph, Section III.N (Biological Resources), page III.N-26, has been revised as follows:

> Using the likelihood of occurrence definitions provided in Table III.N-5, this species is "known" to occur within the Study Area. …

Response to Comment 101-30

In response to the comment, the first sentence in the first paragraph, Section III.N (Biological Resources), page III.N-28, has been revised as follows:

> The only special-status bat species ~~likely to occur~~ potentially occurring within the Study Area is the western red bat (*Lasiurus blossevillii*). …

Response to Comment 101-31

In response to the comment, the third sentence in the last paragraph, Section III.N (Biological Resources), pages III.N-28 and III.N-29, has been revised as follows:

> … Because ~~of~~ the larval forms of oysters are free-floating in the Bay, and a large population exists south of the Study Area at Oyster Point Marina,[729] native oysters are likely present on suitable substrate throughout the Study Area.

Response to Comment 101-32

In response to the comment, the second sentence in the first full paragraph, Section III.N (Biological Resources), page III.N-32, has been revised as follows:

> … Fall-run Chinook salmon is the most abundant ESU, documented to comprise about ~~80~~92 percent of the Sacramento Basin stock ~~in the early 1980s~~ over the past 10 years of available data.[741a] …
>
> ---
>
> [741a] California Department of Fish and Game, Fisheries Branch, Anadromous Resources Assessment. 2009. Chinook Salmon Escapement – All Runs. February 18.

Response to Comment 101-33

A list of possible tree species to be planted on the Project site is provided in Appendix N3 of the Draft EIR (Draft Parks, Open Space, and Habitat Concept Plan). Specifically, examples of native trees and shrubs and examples of site-appropriate non-native species that provide food or structural resources that are particularly valuable to native wildlife are provided on pages 71 and 72 of the plan.

Response to Comment 101-34

As discussed in Impact BI-4a, Impact BI-4b, and Impact BI-4c on pages III.N-59, III.N-65, and III.N-68 of the Draft EIR:

> Direct removal, placement of fill into, or hydrological interruption of federally or state-protected wetlands and other waters that would result in a net loss of these areas would be considered a significant impact. However, any alterations of, or discharges into, jurisdictional waters and wetlands must be in conformance with the CWA (via Sections 404 and 401 certification) and Section 10 of the Rivers and Harbor's Act, as applicable. These regulations are designed to ensure, among other things, that there is no net loss of wetlands and that water quality is maintained …

Therefore, although exact mitigation ratios will be determined through the permitting process, the minimum mitigation ratios provided in MM BI-4a.1 and MM BI-4c are to ensure that the Project does not result in a net loss of wetlands or jurisdictional/regulated waters.

Response to Comment 101-35

In response to the comment, the first sentence of the last paragraph, Section III.N (Biological Resources), page III.N-68, has been revised as follows:

> Mitigation measures MM BI-4a.1 and MM BI-4a.2 (first discussed in Impact BI-4a) 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…

Response to Comment 101-36

This comment suggests minor text revisions that do not affect the analysis or conclusions of the Draft EIR. No text change is required.

Response to Comment 101-37

Since the various components of the Draft Parks, Open Space, and Habitat Concept Plan are currently in draft form and have not been finalized as part of the final plan, requiring enhancement measures identified in MM BI-7b will ensure that specific standards associated with enhancement of raptor foraging habitat would occur.

Response to Comment 101-38

Compensatory mitigation is appropriate to mitigate potentially significant impacts to less than significant levels under CEQA. It is understood that the Navy will consult with the USFWS and NMFS in accordance with Section 7 of the Federal Endangered Species Act regarding the potential effects of its actions, including future land conveyance, on federally listed species. However, different standards apply to Section 7 consultation and CEQA analysis. Under Section 7, the federal agency needs only to avoid jeopardizing the continued existence of a listed species, whereas under CEQA, the goal is to mitigate impacts to less than significant levels.

Response to Comment 101-39

This comment is the same as Comment 101-38. Refer to Response to Comment 101-38 for a discussion of the appropriateness of compensatory mitigation as it relates to compliance with CEQA.

Response to Comment 101-40

This comment suggests a minor text revision would not affect the analysis or conclusions of the Draft EIR. No text change is required.

Response to Comment 101-41

In response to the comment, Section III.N (Biological Resources), Table III.N-5, page III.N-134, has been revised as follows:

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Letter 102: Literacy for Environmental Justice (1/12/10)

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Letter 102: Literacy for Environmental Justice (1/12/10)

Letter 102 (and its attachment entitled *Public Comments on the November 12, 2009 Candlestick Point-Hunters Point Shipyard Phase II Development Plan Project Draft EIR*) were also provided as an attachment to Letter 83, and they have been bracketed in the same manner. Therefore, responses to this letter reference Letter 83.

Response to Comment 102-1

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 102-2

Refer to Response to Comment 83-2 for discussion of safety concerns related to increased transit ridership.

Response to Comment 102-3

Refer to Response to Comment 83-3.

Response to Comment 102-4

This comment does not provide a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment 102-5

Refer to Response to Comment 83-5.

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Letter 103: San Francisco Bay Conservation and Development Commission (1/12/10)

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Letter 103: San Francisco Bay Conservation and Development Commission (1/12/10)

Response to Comment 103-1

The comment is acknowledged. No response is required.

Response to Comment 103-2

The comment is acknowledged. No response is required.

Response to Comment 103-3

The comment is acknowledged. No response is required.

Response to Comment 103-4

The comment is acknowledged. The Navy, with some exceptions, is subject to the "federal consistency" requirements of Section 307 of the federal Coastal Zone Management Act of 1972. In this regard, the Commission concurred in the Navy's 1999 consistency determination for the transfer and reuse of the Shipyard. The Navy is preparing a SEIS addressing the effects of changes in the proposed transfer and reuse of the Shipyard. The SEIS should provide the basis for any new or modified consistency determination by the Navy. Neither the City nor the Agency is required to make the consistency determination. Further, Table II-16, page II-80, includes BCDC as a permitting agency for the Project.

Response to Comment 103-5

Refer to Response to Comment 103-4 regarding federal consistency. In response to this comment, Table ES-1, page ES-5, and Table II-16, page II-81, are revised to add a third bullet under "Bay Conservation and Development Commission."

- Reviews 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.

Response to Comment 103-6

Figures II-18, II-19, and II-20 of the Draft EIR, which are located in Chapter II (Project Description) on pages II-66, II-67, and II-68, respectively, all show the lateral extent of shoreline improvements. In some of these areas, the Navy would separately be conducting remediation work, as further described in Section III.K (Hazards and Hazardous Materials) of the Draft EIR and in Master Response 9 (Status of the CERCLA Process). To the extent that any work on the Project site is carried out or funded by the federal government, it would be subject to the requirements of NEPA. The Navy is preparing an SEIS for the Hunters Point portion of the Project site, and if there is any other federal nexus related to construction or operation of the Project, such as issuance of a Section 404 permit, the appropriate environmental clearance would be obtained by the prevailing federal Lead Agency prior to taking action to approve permits or to grant funds, for example.

In terms of improvements that could occur at CPSRA, regardless of funding source, page II-33 of the Draft EIR states that:

> At the CPSRA, ecological enhancements would be identified during the CDPR community planning process and CPSRA general plan update described above …

In terms of other improvements, again, regardless of funding source, page III.B-11 similarly states that:

> The ongoing CPSRA General Plan Amendment process would evaluate previously recommended uses and determine future uses and facilities to serve the local and statewide visitor to the park.

The Draft EIR did describe the process the CPSRA would undergo for evaluating and programming improvements; however, funding for those improvements, particularly the use of grant funding, is entirely within the jurisdiction of the CDPR and does not affect the analysis or conclusions of this Draft EIR.

Response to Comment 103-7

The comment correctly states that Bay Plan amendments will be required to delete Port Priority Use designation at the Shipyard and also to modify the Park Priority Use designation at Candlestick Point. While there will be a reduction in the total acreage of the CPSRA, much of the present area of the CPSRA is undeveloped. Further, much of that area is also not included within the present Park Priority Use designation. The Project will incorporate the rest of the CPSRA into the Park Priority Use area, and the proposed uses are consistent with Policy 20 on Bay Plan Map 5. In addition, the Project will provide long-term funding and other consideration to enhance the CPSRA, including improvement of the undeveloped areas. Therefore, the decrease in area would not compromise or reduce the value of the CPSRA as a park/beach facility.

Response to Comment 103-8

The comment correctly states the requirements of the Commission's permit regulations. With respect to the need for a land exchange agreement in connection with the Commission's requirement for proof of legal interest, Commission counsel has determined that under Appendix F of the Commission's regulations, the Conveyance Agreement between the Navy and Agency for the Shipyard meets the proof of legal interest requirements in the *McAteer-Petris Act* and provides a sufficient legal interest in the underlying property to carry out the Project and comply with any conditions that the Commission may require as part of its approval of a permit at the Shipyard. With respect to the Candlestick Point area, Section 31.5(c) of SB 792 provides that:

> Notwithstanding any other provision of law, the requirement of subdivision (g) of Section 66605 of the Government Code and of Section 11721, Appendix F of Title 14 of the California Code of Regulations, that an applicant for a BCDC permit demonstrate adequate legal interest in the underlying property shall be deemed satisfied if the agency submits in a form acceptable to BCDC an agreement authorized by Section 23 or 26 of this act, provided the agreement is fully executed, all parties with an interest in the property are parties to the agreement, and the terms of the agreement allow the applicant to undertake the proposed construction and uses for which the permit is sought.

It is anticipated that such an agreement will be in place at the time of any BCDC permit application in the Candlestick area.

Response to Comment 103-9

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) with regard to Project boundary determinations relative to the Yosemite Slough.

Response to Comment 103-10

Pages III.B-13 through III.B-15 provides an analysis of how the Project is consistent with the Commission's policies regarding Bay fill. The final decision in this regard rests with the Commission and will be made as part of the Project's permitting process. Specifically, Page III.B-15 of the Draft EIR states that:

> The Project is also consistent with the Bay Plan policies to minimize Bay fill and to preserve the shoreline for uses that are regionally important, water-oriented uses needing or historically located on shoreline sites, such as ports, water-related industry, water-related recreation, airports, and wildlife refuges. The Project involves minimal filling associated with the Yosemite Slough bridge, a marina and improvement of the existing shoreline, waterfront bulkhead, piers and seawall structures. The Project includes improved access to the shoreline through shoreline improvements, open spaces and a waterfront promenade. …

Response to Comment 103-11

With respect to the commenter's understanding that the Project would result in a net increase in Bay fill, the Shoreline Improvements section of Section II.F.2 (Site Preparation and Earthwork/Grading), page II-56, of the Draft EIR states that:

> The net effect of the proposed shoreline improvements would be to increase the land surface area by approximately 0.42 acre at Candlestick Point and reduce the land surface area by approximately 8.51 acres at HPS Phase II.

This statement reflects the amount of bay fill and new bay resulting from the project, 0.42 acre of Bay fill at Candlestick Point and 8.51 acres of new bay created at HPS Phase II. Additionally, Table II-3 (Proposed Land Use) discusses the amount of new Bay or Bay fill resulting from shoreline improvements, the positive change in shoreline indicating Bay fill and the negative change indicating creation of new Bay. In response to the comment, the text of Table II-13, footnote d, has been revised as follows:

> d. These numbers represent an average estimated change in the shoreline at the specified location. A positive number indicates an increase in the shoreline (bay fill); and a negative number indicates a decrease in the shoreline (creation of bay).

As the commenter points out in Comment 103-12 there is difficulty in providing precise net fill quantities at this early date since Project details could change slightly. The net increase in Bay being provided by the Project through shoreline improvements serves as evidence of the Project's goals to provide no off site mitigation and to minimize bay fill to the maximum extent possible.

Further, the Draft EIR acknowledges the need to adhere to BCDC policies related to Bay Fill, and has attempted to do so at this preliminary level. The Applicant, the City, and the Agency also recognize that each phase and specific shoreline location along the Project's boundary along the Bay will need to be approved by BCDC, and are committed to doing so. As a part of this commitment the applicant has met with BCDC several times and will continue to work with the BCDC on Project issues.

Response to Comment 103-12

Page III.B-15 of the Draft EIR states:

> The Project is consistent with the intent of the Bay Plan as it relates to the Candlestick Point area. The Project would provide park improvements, and on-going funding for park operation and maintenance. The ultimate configuration of improvements to various areas of the CPSRA would be determined by the ~~CPDR~~CDPR but the Project would not preclude a water trail camping site or fishing, windsurfing, hiking and viewing opportunities. The inclusion of the Yosemite Slough bridge would not conflict with the Bay Plan's policy regarding additional bridges over the Bay, which aims to preserve the visual impact of the large expanse of the Bay. Expansive views of the Bay would remain from numerous vantage points, even with inclusion of the bridge over the neck of the slough.
>
> The Project is also consistent with the Bay Plan policies to minimize Bay fill and to preserve the shoreline for uses that are regionally important, water-oriented uses needing or historically located on shoreline sites, such as ports, water-related industry, water-related recreation, airports, and wildlife refuges. The Project involves minimal filling associated with the Yosemite Slough bridge, a marina and improvement of the existing shoreline, waterfront bulkhead, piers and seawall structures. The Project includes improved access to the shoreline through shoreline improvements, open spaces and a waterfront promenade. …

With respect to the Project's inconsistency with the Bay Plan's biological resources policies, a summary of the Bay Plan policies related to wildlife, wetlands, and other biological resources are provided in the Regulatory Framework in Section III.N (Biological Resources) on pages III.N-45 and III.N-46:

> **Policies Concerning Fish, Other Aquatic Organisms and Wildlife in the Bay, Tidal Marshes and Tidal Flats Around the Bay, and Subtidal Areas in the Bay**
>
> The SFBCDC shall protect native fish species, other aquatic organisms, other listed wildlife species and their specific habitats under the California Endangered Species Act or federal Marine Mammal Protection Act within the Bay's tidal marshes, tidal flats, and subtidal habitat. To the greatest extent feasible, specific habitats such as tidal marsh, tidal flats, and subtidal habitats shall be conserved, restored, and increased. Specific habitats that are needed to conserve, increase or prevent the extinction of any native species, species threatened or endangered, species that the CDFG has determined are candidates for listing as endangered or threatened under the California Endangered Species Act, or any species that provides substantial public benefits, should be protected, whether in the Bay or behind dikes. In reviewing or approving habitat restoration programs the SFBCDC should follow the recommendations in the Baylands Ecosystem Habitat Goals and provide a diversity of habitats for native aquatic and terrestrial plant and animal species. For projects that may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species the SFBCDC should consult and give appropriate consideration to the recommendations of the California Department of Fish and Game and the US Fish and Wildlife Service or the National Marine Fisheries Service and not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal endangered species acts, or species that are candidates for listing under the CESA, unless the project applicant has obtained the appropriate "take" authorization from the US Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Game. However, the SFBCDC may permit a minor amount of fill or dredging in wildlife refuges, shown on the Plan Maps, necessary to enhance fish, other aquatic organisms and wildlife habitat or to provide public facilities for wildlife observation, interpretation and education.

In consideration of these and other policies protecting biological resources, an analysis of the effects of Project construction activities on wetlands (including tidal marshes, tidal flats, and non-tidal marshes) and jurisdictional waters is provided in Impacts BI-4a, BI-4b, and BI-4c of the Draft EIR. Mitigation measure

MM BI-4a.1 on page III.N-60 of the Draft EIR explicitly states that wetlands and jurisdictional waters shall be avoided to the maximum extent practicable, and that permits shall be obtained only where avoidance of existing wetlands and drainages is not feasible:

> *MM BI-4a.1* *Wetlands and Jurisdictional/Regulated 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: …*

Therefore, the Draft EIR provides analysis demonstrating that the Project would be consistent with the Bay Plan. However, the commenter correctly states that if the Commission determines that a feasible alternative exists involving less fill in the Bay, the Commission could not find the Project fully consistent with its laws and policies regarding fill.

Response to Comment 103-13

Comments noted. The Project would be required to adhere to Bay Plan policies related to flooding, public access, and sea level rise for the safety of fills, and the Project has been designed to do so. Moreover, each phase and specific shoreline location along the Project's boundary along the Bay will need to be approved by BCDC, thereby ensuring compliance with the Bay Plan's policies.

Response to Comment 103-14

Refer to Response to Comment 103-13.

Response to Comment 103-15

In response to the comment, the text in Section III.D (Transportation and Circulation), under the State heading, page III.D-27, has been revised as follows:

> ~~There are no state transportation regulations applicable to the Project.~~The San Francisco Bay Plan was prepared by the San Francisco Bay Conservation and Development Commission (BCDC) pursuant to the McAteer-Petris Act of 1965 which established the Commission as a temporary agency to prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline. The Bay Plan contains the following transportation policies that are relevant to the Project:
>
> - Transportation Policy 1: Because of the continuing vulnerability of the Bay to filling for transportation projects, the Commission should continue to take an active role in Bay Area regional transportation and related land use planning affecting the Bay, particularly to encourage alternative methods of transportation and land use planning efforts that support transit and that do not require fill. The Metropolitan Transportation Commission, the California Department of Transportation, the California Transportation Commission, the Federal Highway Administration, county congestion management agencies and other public and private transportation authorities should avoid planning or funding roads that would require fill in the Bay and certain waterways.

- Transportation Policy 2: If any additional bridge is proposed across the Bay, adequate research and testing should determine whether feasible alternative route, transportation mode or operational improvement could overcome the particular congestion problem without placing an additional route in the Bay and, if not, whether a tunnel beneath the Bay is a feasible alternative.
- Transportation Policy 3: If a route must be located across the Bay or a certain waterway, the following provisions should apply:
- The crossing should be placed on a bridge or in a tunnel, not on solid fill.
- Bridges should provide adequate clearance for vessels that normally navigate the waterway beneath the bridge.
- Toll plazas, service yards, or similar facilities should not be located on new fill and should be located far enough from the Bay shoreline to provide adequate space for maximum feasible public access along the shoreline.
- To reduce the need for future Bay crossings, any new Bay crossing should be designed to move the largest number of travelers possible by employing technology and operations that increase the efficiency and capacity of the infrastructure, accommodating non-motorized transportation and, where feasible, providing public transit facilities.
- Transportation Policy 4: Transportation projects on the Bay shoreline and bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.
- Transportation Policy 5: Ferry terminals should be sited at locations that are near navigable channels, would not rapidly fill with sediment and would not significantly impact tidal marshes, tidal flats or other valuable wildlife habitat. Wherever possible, terminals should be located near higher density, mixed-use development served by public transit. Terminal parking facilities should be set back from the shoreline to allow for public access and enjoyment of the Bay.

A discussion of how the Project relates to each of these five policies is provided below:

Transportation Policy 1 generally states that applicable agencies should avoid new fill in the Bay to provide new transportation facilities. For the reasons stated below, the fill proposed for the proposed bridge should meet permitting requirements.

Transportation Policy 2 generally states that if a bridge is proposed, adequate research and testing should be conducted to determine whether an alternate route or operational improvement would overcome the particular congestion problem without placing a new route in the bay. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for discussion of alternative solutions that have been evaluated and determined to provide much lower level of service for bicycles, pedestrians, and transit compared to the bridge. Also refer to Response to Comment 47-109 for discussion of feasibility of tunnel under Yosemite Slough.

Transportation Policy 3a states that if crossing must be provided, it should be in a bridge or tunnel not on fill. It would be prohibitively costly to tunnel under the neck of the slough for a BRT crossing due to the relatively short length (less than 1,000 feet) of the crossing. In addition, a tunnel would require more extensive approaches than an aboveground bridge, which could create additional environmental impacts or increase the severity of impacts identified for the Project.

Transportation Policy 3b states that bridges should provide adequate clearance for vessels that normally navigate the waterway. Refer to Response to Comment 86-12 that describes the bridge's clearance, which would be adequate for recreational paddle craft including canoes and kayaks, which are the only watercraft that would navigate the upper reaches of the Yosemite slough.

Transportation Policy 3c states that toll plazas and service facilities should not be on fill. No toll plazas or service facilities are proposed as part of the Yosemite Slough bridge.

Transportation Policy 3d states that new crossings should be designed to maximize crossing capacity to reduce the need for new crossings. The bridge would accommodate high-frequency transit connections (five-minute frequencies during peak hours) across Yosemite Slough. If additional transit service were required, it could be provided on the bridge without the need to construct a new crossing either through increased frequencies or additional, higher-capacity vehicles.

Transportation Policy 4 states that transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along shoreline. The proposed facility would enhance access along the shoreline by providing a more direct connection across the slough, and would also provide direct connections to the San Francisco Bay Trail. The bridge would accommodate Bay Trail crossings such that users would not have to cross BRT routes.

Transportation Policy 5 relates to ferry terminal construction, which is no longer part of Project). However, the Project does not preclude a ferry terminal, which if added, would relieve congestion on roadways and transit crowding.

Response to Comment 103-16

The Project Applicant will provide all images, drawings, and other information that BCDC requires for permitting purposes at the time of permitting. The level of detail included in the EIR is sufficient for CEQA purposes.

In response to the comment, text on page III.E-47, under the San Francisco Bay Plan heading between Policy 4 and Policy 8, of the Draft EIR has been revised to include Policy 6, as follows:

> Policy 6 Additional bridges over the Bay should be avoided, to the extent possible, to preserve the visual impact of the large expanse of the Bay. The design of new crossings deemed necessary should relate to others nearby and should be located between promontories or other land forms that naturally suggest themselves as connections reaching across the Bay (but without destroying the obvious character of the promontory). New or remodeled bridges across the Bay should be designed to permit maximum viewing of the Bay and its surroundings by both motorist and pedestrians. Guardrails and bridge supports should be designed with views in mind.

Refer to Responses to Comments 31-5, 47-34, 47-36, 47-46, 47-57, 47-73, and 47-75 for discussion of the proposed bridge and its aesthetic impacts on views and the Yosemite Slough. Response to Comment 47-76 also contains additional simulations of the proposed Yosemite Slough bridge from four additional reference points.

There are no graphics illustrating the appearance of potential adaptive management strategies for sea level rise. However, the Draft EIR, page III.E-58, states, about the shoreline at Candlestick Point and HPS Phase II: "The proposed shoreline improvements would improve the aesthetic quality of the shoreline…reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline."

Response to Comment 103-17

Draft EIR Figure IV-13, Figure IV-14, Figure IV-15, and Figure IV-16 provide illustrations of tower locations. Figure III.E-11 through Figure III.E-30 provide numerous simulations of the visual character of the Project. Architectural renderings are not required for the EIR process. When the Project is presented to BCDC, preliminary drawings that illustrate the goals of the design policies will be presented by the Project applicant.

Response to Comment 103-18

Refer to Response to Comment 47-46 for additional simulations of the proposed bridge. The commenter requested views from the bridge; not every view could be represented in the views of the Project site. However, more than 30 images are presented in Section III.E (Aesthetics) to document the existing conditions and future conditions with the Project. Final architectural renderings are not required for the EIR process. The bridge design may be addressed by the Commission in its consideration of the bridge permit.

Response to Comment 103-19

The quantitative estimates of the temporary and permanent impacts on the waters of the Bay and the potential mitigation measures for these impacts are the most precise available at this stage of Project design. As the commenter notes, these could change. However, the final assessment of these impacts on the Bay under the Commission's policies, including any additional mitigation requirements, rests with the Commission and will be made during the permitting process. Therefore, all of the issues raised by the commenter will have to be fully addressed in the course of the Commission's review of the Project.

Refer to Response to Comment 103-12 for a discussion of the Bay Plan policies related to wildlife, wetlands, and other biological resources that were provided in Draft EIR.

Refer to Response to Comment 103-11 on the proposed fill quantities.

Refer to Response to Comment 101-34 for a discussion of how the Project ensures no net loss of wetlands or jurisdictional/regulated waters.

With regard to mitigation measure MM BI-9b, the commenter correctly states that consideration of recommendations made by resource agencies (i.e., use of pile-driving devices) would be considered by the City/Agency and the Commission.

With regard to the in-water construction work window identified in MM BI-12a.1 on page III.N-89 of the Draft EIR, this window would be applicable to special-status fish species such as green sturgeon, Chinook salmon, Central Valley steelhead, longfin smelt and Pacific herring. In response to this comment, the

following text has been added to Section III.N (Biological Resources) of the Draft EIR, specifically to the discussion of mitigation for Impact BI-11a (page III.N-86):

> … Implementation of mitigation measures MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these mitigation measures would minimize any adverse effects on aquatic habitat of special-status fish, …

In response to this comment, the following text has also been added to the discussion of mitigation for Impact BI-11b (first full paragraph on Draft EIR page III.N-87) and Impact BI-11c (last paragraph on page III.N-87):

> … Implementation of mitigation measure MM BI-12a.1 and BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

The commenter correctly notes that BCDC is a State agency and not a Regional government body. This correction has been made to the Regulatory Framework of Section III.N (Biological Resources).

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of shading impacts of Yosemite Slough bridge, and potential impacts on the Yosemite Slough Restoration Project.

Response to Comment 103-20

Public access will be provided all along the shoreline as part of the Project, and will be developed at a pace consistent with the build-out of the Project. The Bay Plan standards will be met. The proposed uses at the CPSRA are consistent with Policy 20 on Plan Map 5.

Response to Comment 103-21

The Draft EIR's analysis includes only residents and people employed on the Project site in its parkland-to-population ratios. The existence of other potential park users does not, however, undermine its conclusions. Initially, the parkland-to-population ratio is a standard measure representing total use. Every park receives some use from people outside the local population, but analyses of the impacts of such use, including the analysis in the current San Francisco General Plan, adopted in 1986, generally use the type of ratio used here. Moreover, for the reasons discussed in Response to Comment 84-45, the Draft EIR's conservative analysis likely overstates the effective population of the Project site. The additional users mentioned by the commenter are unlikely to increase actual use beyond the level provided in the analysis. Moreover, the Draft EIR acknowledges at page III.P-32 that there will be an increase in CPSRA visits by people from outside the Project site, and concludes that this increased use will not cause significant impacts.

Response to Comment 103-22

The comment is acknowledged. No response is required.

Response to Comment 103-23

Refer to Response to Comment 31-13 regarding shoreline access during construction.

Response to Comment 103-24

The multi-use lawn and playing field areas would be used for parking for San Francisco 49er home games (between 10 and 12 days annually). The number of further special events at the stadium that would require the parking area is not known at this time. However, such events would be few enough that the reduction of parkland on these days would not be significant in the context of the entire Project site and the entire year. The multi-use lawn and other parks will be open to the public, subject to those types of restrictions, such as hours of operation, applicable to parks generally. The sports fields similarly will be available to the public, although a reservation system will be required. The details of park management have not been determined yet.

Response to Comment 103-25

Impact TR-35 describes the parking impacts associated with the Project. As noted by the commenter, and as shown in Table III.D-21, the Project would result in a shortfall of at least 2,316 spaces. As a result, it is possible that some drivers may seek parking in adjacent Bayview residential and industrial areas to the west. However, as noted in the Draft EIR, if parking is found to exceed supply in the existing Bayview residential area, the City's residential parking permit program could be introduced to the area to help ensure availability of parking for local residents. The extent of spillover into the nearby industrial and residential neighborhoods to the west, as well as the parking areas for public access to CPSRA, would be limited by the existing topography (e.g., steep grades due to the Bayview Hill), the distance between the Project site and available parking supply, and concerns related to safety in the industrial area.

The location of parking areas for public access to the CPSRA have not been determined, however, the locations and number of spaces would be developed in consultation with State Parks. The SFMTA is responsible for parking enforcement activities on San Francisco Streets, while State Park Peace Officer Rangers are responsible for a variety of enforcement activities in California State Parks.

In San Francisco, parking supply is not considered a permanent physical condition, and changes in the parking supply would not be a significant environmental impact under CEQA, but rather a social effect. Since the City does not consider parking shortfalls to be a significant impact, no mitigation is required.

It should be noted that mitigation measure MM TR-38 requires the stadium operators to develop and maintain a Transportation Demand Management Plan for the stadium. One required element of that plan, as indicated on page III.D-133 of the Draft EIR is for the stadium operator to work with CPSRA to develop measures to ensure that game day spectators do not park in CPSRA day use parking lots.

Response to Comment 103-26

The marina amenities are outlined on page II-23 of Chapter II (Project Description) of the Draft EIR:

> The marina would include up to 300 slips accessed by a series of gangways and floating docks. Guide piles would horizontally restrain the floating docks. Each slip would include potable water, electrical,

> cable television, and telephone connections. The marina would provide sewage pump-out stations at each slip or at a central pull-up station. Landside improvements adjacent to the marina could include parking, restroom facilities, a classroom to teach sailing, and a harbormaster's office.

With respect to maintenance dredging, page II-23 of the Draft EIR discloses that:

> … Maintenance dredging would be required in the future to maintain adequate clearance.

At this time, the precise quantities of dredged material resulting from routine operation are not known; however, any such activities would be subject to review by the Dredged Materials Management Office (DMMO). While the DMMO does not issue a permit, per se, the office oversees the approval process. Page III.K-83, the last sentence of bullet a, b, c, and d is revised to reflect their review authority:

a. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
b. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
c. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
d. … ~~a~~ review by the DMMO ~~permit~~ would likely be required.

Response to Comment 103-27

Strategies to mitigate Project water quality impacts are described in mitigation measures MM HY-1a.1 (Storm Water Pollution Prevention Plan: Combined Storm Sewer System), starting on page III.M-58 of the Draft EIR; MM HY-1a.2 (Storm Water Pollution Prevention Plan: Separate Storm Sewer System), starting on page III.M-61, MM HY-1a.3 (Groundwater Dewatering Plan), starting on page III.M-65; MM HY-6a.1 (Regulatory Stormwater Requirements), starting on page III.M-82; MM HY-6a.2 (Recycled Water Irrigation Requirements), starting on page III.M-84, MM HY-6b.1 (Limitations on Stormwater Infiltration), on page III.M-88; MM HY-6b.2 (Industrial General Permit), starting on page III.M-89; and MM HY-6b.3 (Clean Marinas California Program), on page III.M-91 of the Draft EIR.

Per the State and local regulatory requirements described starting on page III.M-33 of the Draft EIR, implementation of the mitigation measures does not require certification by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB); however the mitigation measures would assure compliance with the Water Quality Control Plan for the San Francisco Bay Basin, and would reflect the policies, recommendations and decisions of the State Water Resources Control Board and the SFRWQCB. The only SFRWQCB certification required for the Project is a Clean Water Act (CWA) Section 401 Water Quality Certification or Waste Discharge Requirements, for the placement of fill material or other physical changes to waters of the State, as described on page III.M-31 of the Draft EIR. The CWA Section 401 Water Quality Certification or Waste Discharge Requirements would be obtained through the Joint Aquatic Resources Permit Application process described on page III.M-44, at which time BCDC input would be incorporated into the permitting process.

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Letter 104: Da Costa, Francisco (1/13/10)

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Letter 104: Da Costa, Francisco (1/13/10)

Response to Comment 104-1

Refer to Master Response 1 (SB 18) for a discussion of the process required by SB 18 and the process undertaken for this Project.

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Letter 105: Da Costa, Francisco (1/18/10)

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Letter 105: Da Costa, Francisco (1/18/10)

Response to Comment 105-1

With respect to hazardous conditions at the Project site, refer to Section III.K (Hazards and Hazardous Materials) of the Draft EIR, as well as Master Response 7 (Liquefaction), and Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving though Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures), which also discuss hazardous materials, cleanup to unrestricted use (Proposition P), HPS radiation cleanup and restrictions, containment remedies (capping versus removal), status of the HPS CERCLA process, process for decisions and responsibility for cleanup, and notification regarding restrictions, contaminations, and releases or violations of mitigation measures.

Response to Comment 105-2

Refer to Response to Comment 65-2 for a description of the noticing process relative to release of the Draft EIR. In addition, the Draft EIR was made available on the City's website, as well as at the Planning Department and Agency offices, as described on page I-10 of the Draft EIR.

This comment also provides links to two websites: one, the official homepage of the Muwekma Ohlone California Indian tribe, and the second, a website supported by San Franciscan's for our City's Health with information about the Hunters Point Naval Shipyard. No response is required.

Response to Comment 105-3

Refer to Response to Comment 1-1 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. Refer to Response to Comment 85-5 regarding the three-decade planning process for the Project which has included hundreds of community meetings and other forms of public outreach.

Refer to Section III.H (Air Quality) of the Draft EIR for a discussion of potential impacts related to toxic air contaminants. Refer also to Section III.K (Hazards and Hazardous Materials) of the Draft EIR for a discussion of hazardous materials at the Project site, including contaminated soil. The specific impact discussions that address the potential for encountering contaminated soil include Impacts HZ-3, HZ-3a, HZ-3b, HZ-18, HZ-18a, HZ-18b, BI-15a, BI-15b, UT-6, UT-6a, and UT-6b. Refer also to Master Response 5 (Health of the Bayview Hunters Point Community) for a discussion of health outcomes in the Bayview community.

Response to Comment 105-4

The comment is acknowledged. No response is required.

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Letter 106: Da Costa, Francisco (1/18/10)

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Letter 106: Da Costa, Francisco (1/18/10)

Response to Comment 106-1

The comment is acknowledged. No response is required.

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Letter 107: Muwekma Ohlone Indian Tribe (1/12/10)

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Letter 107: Muwekma Ohlone Indian Tribe (1/12/10)

Response to Comment 107-1

The comment refers to a Planning Department letter dated January 5, 2010.[124] That letter, as discussed in Master Response 1 (SB 18) is part of City and County of San Francisco outreach with Native American groups related to the General Plan changes proposed as part of the Project; that consultation is not part of the EIR process. The Planning Department letter included a CD of the Draft EIR as information. The November 12, 2009, to January 12, 2010, dates refer to the Draft EIR public review, not the Senate Bill 18 (SB 18) consultation steps.

Refer to Responses to Comments 1-1 and 85-5 with regard to the extension of the Draft EIR comment period and the opportunities to provide public comment on the EIR. Refer to Master Response 1 (SB 18) with regard to consultation with the Native American community under SB 18.

Response to Comment 107-2

Draft EIR Section III.J (Cultural Resources and Paleontological Resources), pages III.J-2 through -5 discusses the prehistoric context, the presence of indigenous Native American peoples, identified as the Ohlone (Costanoan) people. The Draft EIR, pages III.J-17 through -19, then notes and describes the sixteen known prehistoric Native American sites within, or within 0.25 mile of, the Project site. For reasons of confidentiality, the locations of the sites are identified only generally. The Draft EIR concludes that the Project could have potential adverse effects on such Native American sites, as noted in Impact CP-2a, page III.J-36; Impact CP-2b, page III.J-40; and Impact CP-2, pages III.J-40 to -41. The Draft EIR also recognizes that the other potential resources may be present, in addition to identified sites. With regard to HPS Phase II, Impact CP-2b, Draft EIR page III.J-40, states:

> Moreover, previous archaeological investigations have shown that prehistoric archaeological sites in the HPS Phase II site tend to be located along the original shoreline. Therefore, it is possible that Project-related construction activities may encounter previously unknown archaeological resources.

The Draft EIR identifies the Project effects and mitigation measures that would avoid significant adverse effects on such sites. Mitigation measure MM CP-2a, Section III.J, pages III.J-36 through -39, provides for a series of steps, for implementation of the Project Archaeological Research Design and Treatment Plan (ARDTP), including preconstruction testing under the direction of a qualified archaeologist, to identify potential cultural resources. The measure requires that all work and reporting by the archaeologists shall be under the further direction and approval of the City's Environmental Review Officer (ERO).

Refer to Master Response 1 (SB 18) with regard to consultation with the Native American community under Senate Bill 18 (SB 18), and to Master Response 2 (Potential Native American Burial Sites), with regard for the potential for disturbance of Native American burial sites on the Project site. As discussed in Master Response 1, the City is undertaking outreach, separate from the EIR process, intended to elicit a full understanding of concerns that Native American tribes and organizations have about the Project, how

[124] Letter from San Francisco Redevelopment Agency and San Francisco Planning department to Rosemary Cambra, chairperson, Muwekma Ohlone Indian Tribe, regarding availability of the Candlestick Point–Hunters Point Shipyard Phase II Development Plan Project Draft EIR, January 5, 2010.

the concerns may be addressed, and any other suggestions or recommendations the Native American tribes or organizations may have. Those suggestions or recommendations may include the use of specific research methods at Native American archaeological sites.

The identification of potential prehistoric sites in the ARDTP is not based on a formal predictive model but on the informal predictive model used by the Planning Department MEA Prehistoric Period Archeo GIS Project that employs prior documentation and historical ecology data. Such cultural resources could be present at or near known sites, or elsewhere at the Project site. The ARDTP, as discussed above, relies on the information of known sites, but also includes measures to be implemented should Project development uncover or disturb previously unknown cultural resources.

The comment refers to the Muwekma Ohlone (Park) Sanctuary at Islais Creek. An area on the north shoreline of Islais Creek east of Third Street, about two miles north of Hunters Point, had been improved by community groups. That site is owned by the Port of San Francisco and is now secured, not accessible to the public, and does not provide open space. The area is not a prehistoric or historic Native American cultural resources site. The Project would have no effect on that area.

Response to Comment 107-3

The comments contain information on the history of the Muwekma Ohlone tribe and its legal status as a Native American tribe and are not direct comments on the content or adequacy of the Draft EIR. No response is required.

Letter 108: Hunters Point Shipyard Citizen's Advisory Committee (12/18/09)

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Letter 108: Hunters Point Shipyard Citizen's Advisory Committee (12/18/09)

Response to Comment 108-1

The comments in this letter concern the remediation strategy for Installation Restoration (IR) Sites IR-07 and IR-18 in Redevelopment Area Parcel B in the vicinity of Buck's Beach, which, as stated on pages III.K-17 through -18 of the Draft EIR, are subject to remediation by the Navy prior to transfer to the City/Agency. The various e-mail exchanges attached to the comment letter discuss the Navy's process for selecting the remediation strategy as well as the status of the Navy's cleanup. For Parcel B, The Navy has completed the preliminary investigation, site inspection, remedial investigation, feasibility study, and proposed plan, and issued an initial Record of Decision (ROD) in 1997, prepared a remedial design, and proceeded with remedial action implementation. After a decade of work and additional study, it developed a revised remedy. The Navy issued an amended ROD in 2009.

As noted in Master Response 9 (Status of the CERCLA Process), the Navy has completed the remedial design (RD) for Sites IR-07 and IR-18, an area of fill in the northwestern area of the parcel. This RD includes plans for remediation of near-shore sediments and construction of a protective revetment along the shore of San Francisco Bay in IR-07. The method of remediation is determined through the CERCLA process. Even if Sites IR-07 and IR-18 are subject to an early transfer, the Navy must complete remediation of these two specific sites in accordance with the strategies determined in the CERCLA process prior to transfer. Therefore, the selection of specific strategies for and/or remediation process for Sites IR-07 and IR-18 is outside the control of the Lead Agencies and the Project Applicant.

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Letter 109: San Francisco Building and Construction Trades Council (1/4/10)

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Letter 109: San Francisco Building and Construction Trades Council (1/4/10)

Response to Comment 109-1

This letter is in support of the Project and makes no specific comment on environmental issues or the content or adequacy of the Draft EIR.

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Letter 110: Singer, Sam (1/5/10)

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Letter 110: Singer, Sam (1/5/10)

Response to Comment 110-1

This letter is a copy of a media clip from the San Francisco Chronicle and makes no direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of naturally occurring asbestos and dust minimization.

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Letter 111: San Francisco Organizing Project (1/5/10)

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Letter 111: San Francisco Organizing Project (1/5/10)

Response to Comment 111-1

This is a handout of talking points for 2010 public hearings on the Project. These comments were raised in oral comment on January 5, 2010. Refer to Response to Comment SRFA2-14.

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Letter 112: San Francisco Chamber of Commerce (1/5/10)

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Letter 112: San Francisco Chamber of Commerce (1/5/10)

Response to Comment 112-1

This comment letter describes the benefits and key features of the Project, briefly describes the alternatives addressed in the Draft EIR, states that the Draft EIR is adequate, and urges that there be no further delay in the comment period for the Draft EIR. Refer to Response to Comment 1-1 for a discussion of the Draft EIR public review period. The letter does not contain direct comments on environmental issues. No further response is required.

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Letter 113: San Francisco Housing Action Coalition (1/5/10)

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Letter 113: San Francisco Housing Action Coalition (1/5/10)

Response to Comment 113-1

This letter is in support of the Project and makes no specific comment on environmental issues or the content or adequacy of the Draft EIR.

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Letter 114: Hamman, Michael (1/5/10)

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Letter 114: Hamman, Michael (1/5/10)

Response to Comment 114-1

Refer to Responses to Comments 35-5 and 96-9 for a discussion of the water distribution and delivery system, including impacts on local domestic water pressure.

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Letter 115: Da Costa, Francisco (1/10/10)

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Letter 115: Da Costa, Francisco (1/10/10)

Response to Comment 115-1

This e-mail provides a link to http://www.indybay.org/newsitems/2010/01/10/18634866.php, which is an article dated Sunday January 10, 2010, written by the commenter.

Response to Comment 115-2

The comment contains opinion and is not a direct comment on the adequacy of the Draft EIR. No further response is required.

Response to Comment 115-3

The comment contains opinion and is not a direct comment on the adequacy of the Draft EIR. Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18). Refer also to Responses to Comments 107-1 through 107-3.

Response to Comment 115-4

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18). Refer also to Responses to Comments 107-1 through 107-3.

Response to Comment 115-5

Refer to Master Response 2 (Potential Native American Burial Sites) for a discussion of burial sites in the Project area. Refer also to Responses to Comments 107-1 through 107-3.

Response to Comment 115-6

The comment contains opinion and is not a direct comment on the adequacy of the Draft EIR. Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under Senate Bill 18 (SB 18). Refer also to Responses to Comments 107-1 through 107-3.

Response to Comment 115-7

The purpose of Appendix C1 (Environmental Justice) of the Draft EIR was to provide an analysis of environmental justice issues as they may apply to the entire Bayview neighborhood, and included many different groups of people, including the Ohlone people. The issue of Public Trust Lands is discussed in the Draft EIR in Section III.B (Land Use and Planning), and again in Section III.J (Cultural Resources and Paleontological Resources), the latter of which contains an extensive discussion of the Muwekma Ohlone people. Refer also to Responses to Comments 93-4 and 93-5. A comprehensive Historic Context Statement was prepared by CIRCA Historic Property (July 2009) and is contained in Draft EIR Appendix J1 (CIRCA, Historic Context Statement, July 2009). This report contains extensive information concerning the Muwekma Ohlone people (refer to pages 23 through 25). In addition, the Draft EIR contains 20 pages of historic context, including identification of known shellmound sites. Refer also to Responses to Comments 107-1 through 107-3.

Response to Comment 115-8

The majority of this comment is directed at the Navy's Environmental Impact Statement preparation and does not pertain to the Draft EIR. The remainder of this comment contains information about Alice Griffith Public Housing land and other Public Trust Land. Refer to Section III.B (Land Use and Plans), Draft EIR pages III.B-8 and -9 for a discussion of Public Trust lands. Refer also to Responses to Comments 107-1 through 107-3, 93-4, and 93-5, which discuss lands in the Public Trust.

Response to Comment 115-9

Refer to Responses to Comments 115-5 and 115-7.

Letter 116: Bay Access (1/11/10)

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Letter 116: Bay Access (1/11/10)

Response to Comment 116-1

Boat access in the CPSRA is described in Section III.P (Recreation) of the Draft EIR. In fact, on Draft EIR page III.P-17, it is stated that the portion of the CPSRA that is currently undeveloped or used for Candlestick Park stadium parking would be substantially improved to enhance overall park aesthetics and landscape ecology; reconnect visitors to the bay shoreline; and provide direct access to the bay for swimming, fishing, kayaking, and windsurfing. This comment contains information concerning non-motorized boat access and difficulty with rough water, wind, mud, and the southern surge. The commenter states that the beach between Wind Meadow and Heart of the Park has not been mentioned as a boating site in the Draft EIR. However, the fact that both of these areas contain a sandy beach with access to the water is described on Draft EIR page III.P-25. Specific areas of improvements in the CPSRA are discussed below. The discussion in the Draft EIR is presented to provide an overview of the conceptual design that is currently proposed for CPSRA improvements. However, the ultimate configuration of each of these areas would be at the discretion of the California Department of Parks and Recreation through the ongoing planning process for the CPSRA. It is assumed that the Blue Greenway Roadmap vision and the Bay Water Trail proposals would be taken into consideration during that process. The goals of the Project for shoreline improvements would not conflict with the vision of the Blue Greenway Roadmap with regard to providing access to the shoreline and creating a waterfront inviting to all.

For the Heart of the Park, the Project proposes changes to the CPSRA boundary in this area to add approximately 1.5 acres of additional land. The Project would retain and enhance much of the existing landscape structure. Planting and overall aesthetics would be improved, pedestrian pathways would be renovated and added, and program areas would be developed for greater use. Improvements are proposed to existing restrooms, picnic areas, and trails. Additionally, new overlooks, an interpretive amphitheater, and reconfigured park entrance and parking facilities are proposed. For Wind Meadow, proposed features would include new trails, restrooms, picnic areas, restored natural landscape areas, waterfront overlooks, and access to the water. It is not anticipated that boating activities would be precluded in and between these areas; rather, the intent of the improvements is to facilitate enjoyment and use of the shoreline for pedestrians, picnickers, boaters, and windsurfers.

Figure III.B-3 (Existing San Francisco Bay Trail Plan Route), Draft EIR page III.B-18, has been revised to include Bay Area Water Trail access points in the Project vicinity and to show the Bay Trail in the preferred alignment along the Yosemite Slough shoreline (refer to Section F [Draft EIR Revisions] of this document). Refer also to Responses to Comments 31-9 and 44-1, which both address non-motorized boat launch sites, illustrated by revised Figure III.B-3.

Response to Comment 116-2

As indicated in Response to Comment 31-9, Figure III.B-3 (Existing San Francisco Bay Trail Plan Route) has been revised to include Bay Area Water Trail access points in the Project vicinity. While the precise location of access points within the Project area would be determined through future public processes, including the CPSRA General Plan Amendment process, the Project would provide access for small non-motorized recreational watercraft and, therefore, would advance the purposes of the Bay Area Water Trail.

It is further acknowledged that BCDC has jurisdiction over the first 100 feet of shoreline on the Project site. Refer to Response to Comment 47-58 for a discussion of the project's consistency with the BCDC San Francisco Bay Plan. Refer also to pages III.B-13 through -15 for a discussion of consistency with BCDC policies related to fill. Project consistency with the Bay Trail Plan is analyzed on Draft EIR pages III.B-16 through -19 of Section III.B (Land Use and Plans). Refer also to Responses to Comments 31-9 and 44-1 and Figure III.B-3.

Response to Comment 116-3

Refer to Response to Comment 31-13 for a discussion of access to the Bay Trail during Project construction. Outside the CPSRA, the City, Agency, and Lennar Urban are committed to working with Bay Trail planners and stakeholders to develop plans for the specific Bay Trail alignment and to seek safe, feasible interim alignments.

Letter 117: India Basin Neighborhood Association (1/12/10)

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Letter 117: India Basin Neighborhood Association (1/12/10)

Response to Comment 117-1

This comment states the Draft EIR fails to contain sufficient detail to address the transportation issues associated with the Project. The Traffic Impact Analysis, Draft EIR Appendix D and the foundation for the EIR section, consisted of 406 pages of text and tables and two volumes of substantiating data. The commenter states they are proposing several mitigations, described in the detailed comments that follow the cover page. These comments are addressed below in responses to comments. The remainder of the comment contains opinion or is not a direct comment on the adequacy or content of the Draft EIR.

Response to Comment 117-2

The transportation impact analysis presented in Impact TR-1 through Impact TR-58 specifically addresses potential impacts of the Candlestick Point–Hunters Point Shipyard Phase II Development Plan and identifies appropriate mitigation measures. Impacts resulting from development within India Basin/Area C are being analyzed as part of a separate environmental review process. However, as indicated on Draft EIR page III.D-40, the preliminary estimates of development potential within India Basin/Area C was included as a background project for the 2030 Cumulative No Project condition. Therefore, the analysis for Cumulative No Project includes the travel demand that would be generated by India Basin/Area C development.

Response to Comment 117-3

The Project includes the provision of a bicycle lane in both directions on Innes Avenue. The impact assessment did not identify any safety issues related to bicycle use of these lanes that would necessitate providing off-street bicycle facilities, such as the referenced potential multi-modal bridge over India Basin, parallel to Innes Avenue along the Hudson Avenue right-of-way.

A Class II bicycle lane, as proposed for Innes Avenue, is consistent with the bicycle lanes for Innes Avenue included in the San Francisco Bicycle Plan, which was cleared in its own environmental review process. Further, the proposed roadway design would meet City and County of San Francisco design standards. These standards were developed to safely accommodate all roadway users, including transit, bicycles, trucks, pedestrians, and private automobiles.

Response to Comment 117-4

Draft EIR Table III.D-4 (Project Person and Vehicle Trips by Mode), page III.D-58, presents a summary of the travel demand generated by the Hunters Point Shipyard and Candlestick Point components of the Project. As indicated in the table, the majority of the Project trips would be generated by the Candlestick Point component, rather than the Hunters Point Shipyard component. During the AM peak hour, about 55 percent of total trips would be generated by the Candlestick Point component and 45 percent by Hunters Point Shipyard component. During the PM peak hour, 69 percent of the total trips would be generated by the Candlestick Point component and 31 percent by the Hunters Point Shipyard component.

The Project includes improvements to numerous roadways to the south of Hunters Point Shipyard for access to US-101. Residents and visitors to development within Candlestick Point would be able to use Harney Way and US-101 to access I-280 directly, and would not need to drive over the Hunters Point Hill.

Vehicle trips generated by development within Hunters Point Shipyard would be able to access Hunters Point Shipyard via Innes Avenue to the north and Crisp Avenue to the south. Based on the directional distribution of trips, approximately 49 percent of the AM peak hour, and 46 percent of the PM peak hour, vehicle trips generated by the Hunters Point Shipyard component of the Project would travel to and from Hunters Point Shipyard via Innes Avenue; the remaining 51 percent of the AM peak hour, and 54 percent of the PM peak hour vehicle trips would use Crisp Avenue.

Response to Comment 117-5

The number of vehicle trips at the study intersections is included in the Transportation Study, included as Draft EIR Appendix D. Refer to Figures 31A through 31D of Appendix D.

The very low existing traffic volumes on Innes Avenue and Hunters Point Boulevard (about 154 vehicles per hour during the AM peak hour and 170 vehicles per hour during the PM peak hour), wide right-of-way, and limited street-level uses along the majority of Hunters Point Boulevard between Innes Avenue and Evans Avenue facilitate speeding at this location. Along Innes Avenue and Hunters Point Boulevard the Project would provide two 10-foot-wide travel lanes, two 11-foot-wide travel lanes, a 5-foot-wide bicycle lane on the south side of the street, a 6-foot-wide bicycle lane on the north side of the street, and on-street parking on the north side of the street. The restriping to accommodate the multiple lanes would define the right-of-way for vehicles, bicycles, and parked-vehicles. The narrowing and delineation of travel lanes would provide the potential for reducing travel speeds. In addition, the increase in traffic volumes associated with development at Hunters Point Shipyard would also serve to reduce the potential for speeding. No additional mitigation measures are required.

Refer to Master Response 19 (Proposed BAAQMD Guidelines) for an updated analysis of cumulative impacts associated with TAC and $PM_{2.5}$ based on the most recent guidance from the BAAQMD

As noted on Draft EIR page III.I-31, 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. As further noted on Draft EIR pages III.I-42 through -44, the greatest Project-related traffic noise increase (5.7 dBA L_{dn}) would occur along Jamestown Avenue, north of Harney Way. Additionally, two other roadway segments would experience substantial cumulative traffic noise level increases: Carroll Avenue, east of 3rd Street (4.3 dBA L_{dn}), and Gilman Avenue, east of 3rd Street (4.0 dBA L_{dn}). As shown in Table III.I-14 (Modeled Traffic Noise Levels along Major Project Site Access Roads), Draft EIR page III.I-42, these increments are large enough to exceed the adopted threshold for a substantial permanent increase in traffic noise in residential areas. Figure III.I-6 (Project-Related Roadway Noise Level Increases), Draft EIR page III.I-43, illustrates the roadways where noise levels would exceed the adopted threshold for a permanent increase in traffic noise. There would be no Project-related increase in traffic noise along Innes, as noted in Table III.I-14. The Draft EIR, beginning on page III.J-42, discusses potential mitigation for these noise impacts and states why they would be infeasible.

The impact analyses contained in the Draft EIR Section III.H (Air Quality), Section III.I (Noise), and Section III.D (Transportation and Circulation) do not identify any significant impacts that would warrant the provision of the referenced potential multi-modal bridge over India Basin along the Hudson Avenue right-of-way. Project improvements for Innes Avenue would alleviate existing potential traffic-related hazards along Innes Avenue–Hunters Point Boulevard, and no additional street improvements would be required.

Response to Comment 117-6

It is unclear what document containing transit mode split the commenter is referring to. The travel demand methodology is presented on Draft EIR pages III.D-56 to -59 and is further detailed in the Transportation Study (included as Appendix D of the EIR). As indicated, the 4D method was used to estimate the travel demand by mode. Information from the San Francisco County Transportation Authority's SF-CHAMP travel demand model was used as inputs into the 4D analysis to yield the trip generation by mode presented on Table III.D-4 (Project Person and Vehicle Trips by Mode), Draft EIR page III.D-58.

Response to Comment 117-7

The removal of parking spaces on the south side of Innes Avenue would not result in significant impacts, and, therefore, mitigation measures would not be required. Refer also to Response to Comment 35-4 regarding loss of parking on Innes Avenue.

Response to Comment 117-8

The impact analysis does not assume one car per household. It is unclear what assumption the commenter is referring to with respect to "one car per household." The travel demand model did not restrict auto ownership. The commenter may be referring to the D4D residential parking standards, which would allow for up to one parking space per residential unit. The D4D would not restrict auto ownership.

Response to Comment 117-9

Refer to Response to Comment 35-1 regarding phasing of development, including neighborhood serving retail.

Response to Comment 117-10

Impact TR-58 presents a discussion of emergency access issues, and Project impacts on emergency access were determined to be less than significant. Innes Avenue is expected to be more than 60 feet wide. In cased of an accident or other blockage, it is unlikely that the entire width of the street would be blocked such that emergency vehicle access to the Hunters Point Shipyard area via Innes Avenue would be blocked. However, if such an event were to occur, there are multiple routes through which vehicles and emergency vehicles could reach the Hunters Point Shipyard, including Crisp Avenue and Palou Avenue, and Arelious Walker Avenue via the Yosemite Slough bridge.

Response to Comment 117-11

It is not anticipated that there would be any safety impacts associated with removing parking on the south side of Innes Avenue. The proposed cross-section of Innes Avenue for the north side includes a 10-foot-

wide sidewalk, a 9-foot-wide parking lane, and a 6-foot-wide bicycle lane, while on the south side there would be an 8-foot-wide sidewalk and a 5-foot-wide bicycle lane, prior to the travel lanes. Therefore, there would be between 13 and 25 feet between the edge of the property line and the travel lanes (which is sufficient distance for a dog on a 6-foot leash to not get decapitated). Children riding their bicycles on Innes Avenue would benefit from the provision of bicycle lanes.

Response to Comment 117-12

The Project does not propose to remove the medians on Evans Avenue.

Response to Comment 117-13

It is unclear which recently installed bulbouts the commenter is referring to. The Project does not propose to remove any existing bulbouts.

Response to Comment 117-14

The Project would not restrict the use of people's backyards, their ability to access their homes, or capacity to open their windows. The Project would not represent a general "taking" of streets and property as the commenter asserts. This comment represents opinion and is not a direct comment on the content or adequacy of the Draft EIR. With respect to eminent domain, refer to Response to Comment 43-4 for a discussion of potential property acquisitions associated with roadway improvements identified for the Project.

Response to Comment 117-15

The reliability of telecommunications services (including internet access) is outside the scope of the CEQA process and neither the City nor CEQA has established thresholds of significance for telecommunications services. These types of services are demand-based, i.e., service providers respond to increased demand by upgrading and adding their systems. As noted on Draft EIR page III.Q-59, telephone, television, and internet services could be provided by any one of a number of service providers in the City of San Francisco. The service providers would provide any needed upgrades to their distribution systems, including new switching and routing equipment, to accommodate the demand of the Project. There are no known capacity issues associated with existing telecommunications service in the City. Further, no evidence is provided by the commenter to substantiate that there are problems associated with existing telecommunications service in the City, and there is no reason to believe that there would be any accessibility concerns arising as a result of the Project. The subdivision process would include submittal of detailed infrastructure plans to the Department of Public Works identifying how they would meet the infrastructure needs of the Project. Implementation of these plans would be a condition of subdivision approval. The subdivision process would ensure that adequate infrastructure is provided to accommodate the demands of the Project such that the capacity of the service providers to provide such utilities would not be exceeded.

Response to Comment 117-16

Refer to Response to Comment 35-6 for a discussion of safety issues with regard to high-voltage overhead power lines. All utilities for the Project would be undergrounded. The aboveground utility poles along Innes would not be undergrounded as a result of this Project. Refer also to Response to Comment 96-6.

Response to Comment 117-17

Refer to Responses to Comments 35-5 and 96-9 for a discussion of the water distribution system. Also refer to Responses to Comments 28-1, 35-1 through 35-8, and 41-1 through 41-3. Refer to Response to Comments 34-1 through 34-7 with regard to comments by San Francisco Architectural Heritage.

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Responses to Oral Comments

Following are oral comments, followed by their responses, received at three public meetings: the Agency meeting on December 17, 2009; the San Francisco Planning Commission meeting on December 17, 2009; and the Agency meeting on January 5, 2010.

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Transcript SFRA1: San Francisco Redevelopment Agency (12/17/09)

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Transcript SFRA1: San Francisco Redevelopment Agency (12/15/09)

Response to Comment SFRA1-1

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-2

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-3

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-4

The comment is acknowledged. No response is required.

Response to Comment SFRA1-5

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-6

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-7

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-8

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-9

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-10

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-11

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-12

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-13

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-14

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-15

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-16

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-17

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-18

Chapter II (Project Description), page II-14, identifies "Community Services: Community serving uses are proposed at sites on both Candlestick Point (50,000 gsf) and HPS Phase II (50,000 gsf). Proposed uses include a fire station on 0.5 acre at HPS Phase II and 6,000 square feet for police facilities. In addition, uses may include, but are not necessarily limited to, healthcare, day-care, senior centers, library, recreation centers, and community centers. Facilities may be provided that cumulatively exceed 100,000 square feet. If so, the Project contemplates an equal reduction in retail and/or research and development and/or office use." Thus,

land earmarked for a new fire station would be located within the Project site. Also as identified in Section III.O Public Services, "construction of a new SFFD facility on land designated for community-serving uses on the Project site would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. Construction of 100,000 gsf of community facilities, which could include a new SFFD facility, has been included as a component of the Project" (Draft EIR page III.O-22).

Response to Comment SFRA1-19

With specific regard to transportation impacts, Draft EIR pages III.D-67 through III.D-154 presents the transportation impacts associated with the Project and identifies mitigation measures to reduce or eliminate significant impacts; however, in some cases there will be significant and unavoidable traffic impacts. Master Response 18 (Transit Mitigation Measures) provides a detailed discussion of mitigation measures intended to reduce transit delays and the extent to which these mitigation measures would reduce the Project's transit impacts to less than significant levels.

While this commenter specifically addresses traffic impacts, comments have been made expressing concern as to how the Project can be approved with significant impacts that cannot be mitigated to a less-than-significant level. The purpose of CEQA is to disclose to decision-makers the environmental effects of a project before a decision is made whether to approve the project. In order to approve the Project, CEQA requires decision-makers to make certain findings. When a project EIR identifies significant impacts that cannot be mitigated, the findings must include a statement of overriding considerations, which must be based on substantial evidence, and must explain why the decision-makers conclude that the benefits of the Project outweigh the significant impacts of the project. Section 15093(a) and (b) of the CEQA Guidelines provide as follows:

> CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.
>
> When the lead agency approves a project which will result in the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

The Lead Agencies have made a good faith effort to disclose all significant and unavoidable as well as potentially significant impacts as a result of the proposed Project. These impacts include those that would occur intermittently, as with stadium and arena events, those that would occur only during construction, and those that would occur during operation of the Project. As required by CEQA, this EIR is intended to present a concise analysis of impacts in sufficient detail to allow the decision-makers to recognize and understand the nature of the significant impacts. All significant impacts of the proposed Project, including those on air quality, cultural resources, noise, and traffic, have been disclosed in the Draft EIR.

In addition to adopting a statement of overriding considerations if the EIR identified unavoidable significant impacts, CEQA also requires the adoption of other findings, including a requirement to adopt all feasible mitigation measures and alternatives that will reduce or avoid significant effects and a mitigation

monitoring program to ensure the implementation and enforcement of mitigation measures. Subsection 21081.6(b) specifically requires that the findings demonstrate that mitigation measures are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or by incorporating the mitigation measures into the plan, policy, regulation, or project design.

Response to Comment SFRA1-20

As summarized on Draft EIR pages III.H-20 to -22 and documented in the Air Quality Analysis in Appendix H of the Draft EIR, potential off-site sensitive populations were identified for evaluation in this Human Health Risk Assessment (HHRA) based on guidance from the District (BAAQMD 2005) and Cal/EPA (2003). Off-site sensitive receptors identified for the HHRA included K–12 schools within one kilometer of the Project. For each of these sensitive receptors, potential exposure to a schoolchild was evaluated.

The identified sensitive receptors were crosschecked with the seventeen schools and day care centers identified by the Navy (as included in Comment 88-1 [Porter Sumchai]) in their Historical Radiological Assessment as being located within a 1-mile radius of Hunters Point Shipyard. Based on this comparison, an additional two schools and a daycare center were identified as not explicitly evaluated using schoolchild exposure assumptions. These locations were, however, evaluated using more conservative residential exposure assumptions and were all well below the thresholds of significance.

Response to Comment SFRA1-21

The commenter suggests that peregrine falcons will be impacted by the Project in violation of the endangered species act. Refer to Section III.N (Biological Resources), Impact BI-6b, as well as accompanying mitigation measure MM BI-6b. The crane on which peregrine falcons nest at HPS will not be removed by the Project, and implementation of MM BI-6b will avoid Project impacts to these birds.

Response to Comment SFRA1-22

The comment does not identify air quality violations that are claimed to be underestimated. Therefore, the comment is noted, but no response can be formulated. The Draft EIR identifies all potential air quality violations.

Response to Comment SFRA1-23

Section III.K.2 (Setting) on pages III.K-8 through III.K-28 of the Draft EIR addresses HPS contaminants, including those listed in this comment. Refer also to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup).

Response to Comment SFRA1-24

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-25

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-26

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-27

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-28

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-29

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-30

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-31

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-32

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-33

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-34

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-35

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. However, with respect to eminent domain, refer to Response to Comment 43-4 for a discussion of potential property acquisitions associated with roadway improvements identified for the Project.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-36

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-37

It is acknowledged that the Shipyard is a Superfund site. Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community.

Response to Comment SFRA1-38

As noted on pages III.K-9 through III.K-26 of Section III.K (Hazards and Hazardous Materials) in the Draft EIR, remediation of hazardous materials releases identified in HPS Phase II is taking place through a regulatory process that the Navy is required to implement under CERCLA irrespective of whether or not the HPS Phase II component of the Project is implemented. These ongoing remediation activities are not part of the Project. Thus, the goal of the Draft EIR is not to assess the adequacy or impacts of the Navy's remediation actions and the Draft EIR does not propose capping the Shipyard. The relevant environmental regulatory agencies would require performance of these remedial activities regardless of whether this Project or any other development proposals were proceeding. Refer to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), Master Response 13 (Post-Transfer Shipyard Cleanup), and Master Response 15 (Proposition P and the Precautionary Principle) regarding site cleanup.

Response to Comment SFRA1-39

Refer to Master Response 6 (Seismic Hazards) for a discussion of how the site may be affected by earthquakes.

Response to Comment SFRA1-40

With respect to energy conservation measures, as stated on pages II-49 through II-50 of the Draft EIR:

> The Project would comply with all applicable provisions of the City's Green Building Ordinance, which is contained in Chapter 13c of the San Francisco Building Code, and would provide recycling, composting, and trash facilities as required by the City's specifications. The Project has set an energy efficiency performance target of 15 percent below the energy efficiency standards articulated in Title 24, Part 6 of the 2008 *California Code of Regulations* (CCR). Lennar Urban would include measures such as high performance glazing, efficient lighting, daylighting, shading, envelope optimization, reflective roofs, and natural ventilation in the Project design. ENERGY STAR appliances are proposed for all new residential units. In addition, Lennar Urban could also implement renewable energy strategies, such as the use of photovoltaic cells to provide electricity; the use of solar thermal energy to provide space cooling with the use of absorption systems; and/or water for space heating and domestic water systems.
>
> Lennar Urban has also voluntarily committed to constructing all Project buildings to the LEED® for Neighborhood Development Gold standard based on the Pilot Version of the rating system released in June 2007.[29] Following the 2007 LEED® ND Pilot Program rating system, preliminary analysis indicates the Project could achieve approximately 63 points, which is in the LEED® ND Gold range, through strategies including but not limited to the following:
>
> - Compact, infill development (including 90 percent of the new buildings fronting on public streets or open space)
> - Enhanced habitat values
> - Brownfield remediation and urban reuse
> - Close proximity to transit and bicycle networks (75 percent of all development would be within ¼-mile walk to a transit stop and Class I, II, and III bikeways provide connections throughout the site and to the greater Bayview community)
> - Urban design that promotes walking and discourages driving
> - Diversity of land uses and housing types
> - Affordable housing that supports a community of mixed ages and income
> - Community participation in the community planning and design
> - Compliance with the San Francisco Green Building Ordinance
> - ENERGY STAR compliance to be documented by a Home Energy Rating System (HERS)
> - Unbundled parking
> - Drought tolerant plant species and the use of efficient irrigation systems such as drip irrigation, moisture sensors, and weather data-based controllers
> - Tree-lined streets throughout the development and streetscape improvements extending from the Project Site to Third Avenue along Gilman and Palou
> - Access to public space and recreational amenities through the creation of parks and playfields
> - Efficient use of water and the potential use of recycled water for non-potable water uses such as irrigation, toilets, vehicle washing
> - Progressive stormwater management to retain and treat stormwater on site and/or in adjacent areas

In addition, and as stated on page III.Q-16 of the Draft EIR:

> Implementation of the Project would generate a total demand of approximately 1.67 mgd (per Table III.Q 4). This demand is based on an estimate of a historical benchmark demand, adjusted to account for current California Building Codes and the requirements of the San Francisco Green

> Building Ordinance, which would require the installation of ultra-low flow fixtures, use of high-efficiency building equipment, efficient landscape irrigation techniques, and provision of water-efficient plant materials.

The Project would meet the requirements of the City's Green Building Ordinance, which would result in a decrease by 20 percent of the Project's total water demand compared to a similar sized project that would not meet the requirements of the City's Green Building Ordinance.

Response to Comment SFRA1-41

It is acknowledged that the Shipyard is a Superfund site. Refer to Master Response 9 (Status of the CERCLA Process), Master Response 13 (Post-Transfer Shipyard Cleanup), and Master Response 15 (Proposition P and the Precautionary Principle) regarding site cleanup. Refer to Master Response 7 (Liquefaction) for a discussion of how the Project may be affected by liquefaction.

Response to Comment SFRA1-42

Refer to Response to Comment 22-3 for a discussion of the affordable housing being provided in the Project.

Response to Comment SFRA1-43

Refer to Master Response 6 (Seismic Hazards) for a discussion of how the Project may be affected by earthquakes. Refer to Master Response 7 (Liquefaction) for a discussion of how the Project may be affected by liquefaction.

Response to Comment SFRA1-44

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-45

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-46

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-47

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-48

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-49

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-50

The Draft EIR includes discussion of the Project's proposed improvements to bicycle circulation on page III.D-50. The Draft EIR also includes discussion of the Project's impacts to bicycle circulation (refer to Impacts TR-31, TR-32, TR-40, TR-48, and TR-53).

Response to Comment SFRA1-51

Refer to Master Response 5 (Health of the Bayview Hunters Point Community) for a discussion of health outcomes in the Bayview community.

Response to Comment SFRA1-52

Refer to Master Response 14 (Unrestricted Use Alternative) for a discussion of the relationship between the remediation program and the project and Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principle relate to the remediation program and the Project.

Response to Comment SFRA1-53

Regarding the concern that toxins may remain beneath a cap at HPS, note that a cover or cap is a physical barrier that eliminates the pathway between these chemicals and exposure to humans. Long-term monitoring and controls are in-place to ensure that the cap remains an effective barrier in the future. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of toxics that will remain at HPS and the protective mitigation measures in place to address these. The closing comments stating possible health effects of PCBs are acknowledged.

Response to Comment SFRA1-54

Refer to Master Response 7 (Liquefaction) and Master Response 11 (Parcel E-2 Landfill) for discussion about hazardous waste and cap and cover concerns.

Response to Comment SFRA1-55

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-56

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-57

Refer to Master Response 14 (Unrestricted Use Alternative) for a discussion of the relationship between the remediation program and the project and Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principal relate to the remediation program and the project.

Response to Comment SFRA1-58

This comment regarding the methods used by the Navy or the Agency for remediation activities on HPS Phase II is not a direct comment on the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

With respect to the generation of local jobs, economic issues are not considered by CEQA to be environmental impacts; therefore the EIR is not required to, and does not address, economic issues. Economic issues are important to City, the community and the Project Applicant, and those issues will be considered by the City decision makers through the Project review and approval process, outside of the EIR and CEQA process.

Response to Comment SFRA1-59

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) regarding site cleanup.

Response to Comment SFRA1-60

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of the issues surrounding Proposition P and its role at the site. This comment contains opinion that is not a direct comment on the environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-61

This comment primarily contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project. However, with respect to an extension of the public comment period, refer to Responses to Comments 80-1, 84-11, and

96-1 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. Also, refer to Master Response 11 (Parcel E-2 Landfill) and Section III.K (Hazards and Hazardous Materials) for a discussion of the various ways to address the landfill on the Hunters Point portion of the Project site.

Response to Comment SFRA1-62

The comment is acknowledged. No response is required.

Response to Comment SFRA1-63

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-64

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-65

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-66

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-67

The Draft EIR includes a discussion of transportation-related impacts that would occur if no stadium were provided. Further, refer to the Project's Transportation Plan (attached), which describes how proposed roadway cross sections would change if no stadium were provided.

Response to Comment SFRA1-68

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-69

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-70

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-71

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-72

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-73

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-74

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-75

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-76

As shown in Section III.R (Energy) in Table III.R-2 (Existing Project Site Electricity Demand) on page III.R-4 of the Draft EIR, the existing stadium consumes approximately 5,100 MWh of electricity annually Development of the new stadium for the Project would be required to comply with Title 24, the *City of San Francisco General Plan*, and the City's Green Building Ordinance. Therefore, the new stadium would be more efficient than the existing stadium, as shown in Table III.R-8 (Project Electricity Demand from Building Envelopes [MWh]) on page III.R-19 of the Draft EIR, the new stadium is anticipated to consume approximately 4,080 MWh annually. The new stadium would be required to meet the criteria set forth in the Green Building Ordinance and, therefore, would use less energy than the existing stadium and impacts would be less than significant with regard to wasteful or inefficient energy usage.

Response to Comment SFRA1-77

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA1-78

The Yosemite Slough portion of CPSRA was not included in the formal Project area because it is not in the Agency's Redevelopment Plan area. Moreover, other than the proposed bridge, the Project does not propose any actions within the slough itself. The Draft EIR does, however, consider impacts to the slough's resources. For example, refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]); Responses to Comments 31-14, 47-34, 47-36, 47-58, 47-75; and Responses to Comments 47-5, 47-20, and 47-26 through 47-30 for discussions of the impacts to Yosemite Slough biology, aesthetics, and recreation, respectively.

Response to Comment SFRA1-79

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]). Refer also to Response to Comments 47-39 through 47-41 for greater detail regarding potential noise impacts within the CPSRA with construction and operation of the project.

Response to Comment SFRA1-80

The commenter's opinion that the Draft EIR's assessment of impacts to biological resources and mitigation measures are inadequate is noted.

Response to Comment SFRA1-81

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA1-82

Section III.D (Transportation and Circulation) of the Draft EIR describes the transportation-related impacts associated with the Project, including improvements proposed by the Project and the impacts associated with Project-generated vehicle traffic. For a detailed discussion of mitigation measures intended to reduce transit impacts by implementing specific physical changes to the roadway network, refer to Master Response 18 (Transit Mitigation Measures).

Response to Comment SFRA1-83

Refer to Section III.K.2 (Setting) of the Draft EIR and Master Response 6 (Seismic Hazards), Master Response 7 (Liquefaction), Master Response 9 (Status of the CERCLA Process), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of how caps and covers may be affected by liquefaction and the extent that toxins will be removed.

Response to Comment SFRA1-84

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-85

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-86

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-87

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment SFRA1-88

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA1-89

As stated in Table II-2 on page II-8 of the Draft EIR, the Project will include 10,500 residential units. In addition, as stated on page II-84 of the Draft EIR (as revised in this document, refer to Section F [Draft EIR Revisions]):

> The Project would bring economic benefits to the City including an expanded economic base and additional sources of employment, as well as needed housing for all income levels. The Project would generate up to 10,730 employment positions. Approximately 3,476 new employees would be associated with Candlestick Point, and primarily with the regional retail uses. Approximately 7,254 new employees

> would be associated with HPS Phase II, and primarily with the R&D uses. The 350 jobs associated with the new 49ers stadium are mostly relocated from Candlestick Point to HPS Phase II.
>
> In addition, construction employees would also be needed to construct the Project. The number of construction employees would vary depending upon the phase of construction, but would range from ~~60~~83 workers at the commencement of construction activities to approximately ~~500~~617 workers during ~~2016~~2015, the most labor-intensive phases of construction. …

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SRFA1-90

The rebuilding of Alice Griffith Public Housing would take place in the first phase of development of the Project. The Draft EIR analyzes the environmental effects of replacement of 256 housing units at Alice Griffith.

Response to Comment SFRA1-91

The reconstruction of Alice Griffith Public Housing is part of the Project analyzed in the Draft EIR. It is an integral element of the Project. The rebuilding of the Alice Griffith Public Housing can proceed once the EIR process is final and decision-makers elect to approve the Project.

Response to Comment SFRA1-92

The EIR must be certified before any other component of the Project can proceed. Job training and other programs related to occupancy of the Project would necessarily occur after EIR certification and decision-makers elect to approve the Project. As noted on page III.C-21 of the EIR, redevelopment of the Alice Griffith site would proceed in phases and would not displace existing residents. The initial phases would develop currently vacant portions of the Alice Griffith site, and existing residents would then occupy replacement public housing units before existing structures would be demolished in subsequent phases.

Response to Comment SFRA1-93

Refer to Response to Comment 43-4 regarding transportation improvements and property acquisition. Most of the transportation improvements required for the Project would occur in the public right-of-way; however, there are streets both within and outside of the Project site that would require additional right-of-way. In order to complete the recommended transportation improvements, additional right-of-way would need to be acquired along several identified roadways. The power of eminent domain is contained in the existing Bayview-Hunters Point (BVHP) Redevelopment Plan and in the Hunters Point Shipyard Redevelopment Plan. There is an existing prohibition on the use of eminent domain for residential property in the BVHP Redevelopment Plan. Under state law, eminent domain for residential properties can proceed only to eliminate blight. Most of the Project site is under public ownership. There are five blocks with privately owned parcels in Candlestick Point that are disclosed in the EIR. If the developer is unable to acquire these properties, they would be allowed to participate in the Project via an Owner Participation Agreement or continue their existing, nonconforming use.

Response to Comment SFRA1-94

Chapter II (Project Description), page II-14, identifies "Community Services: Community serving uses are proposed at sites on both Candlestick Point (50,000 gsf) and HPS Phase II (50,000 gsf). Proposed uses include a fire station on 0.5 acre at HPS Phase II and 6,000 square feet for police facilities. In addition, uses may include, but are not necessarily limited to, healthcare, day-care, senior centers, library, recreation centers, and community centers. Facilities may be provided that cumulatively exceed 100,000 square feet. If so, the Project contemplates an equal reduction in retail and/or research and development and/or office use." Thus, land earmarked for a new fire station would be located within the Project site. Also as identified in Section III.O Public Services, "construction of a new SFFD facility on land designated for community-serving uses on the Project site would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. Construction of 100,000 gsf of community facilities, which could include a new SFFD facility, has been included as a component of the Project" (Draft EIR page III.O-22).

Response to Comment SFRA1-95

There would be room for both a police station and a fire station in the community facilities designation, as the need arises.

Response to Comment SFRA1-96

The nesting peregrine falcons identified on the site are located in the Regunning Crane, which would be untouched by the Project. Refer to Section III.N (Biological Resources) for a full discussion of the Project's impacts on the peregrine falcons, as well as on other sensitive species on and near the Project site.

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Note that the transcript pages contain numbering on the right margin that indicates page numbering within the transcript itself; separately, there are the bracketed and numbered comments.

Response to Comment SFPC-1

Refer to Responses to Comments 39-1 through 39-7 with regard to comments from the Historic Preservation Commission.

Response to Comment SFPC-2

The comment is acknowledged. No response is required.

Response to Comment SFPC-3

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. The comment will be forwarded to the decision makers for their consideration prior to approval or denial of the Project.

Response to Comment SFPC-4

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer also to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the impacts of the Yosemite Slough bridge on wildlife. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the purpose and benefits of the proposed bridge over the slough.

Response to Comment SFPC-5

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-6

This comment contains general introductory remarks about the history of the commenter's family and HPS that are not a direct comment on the environmental issues or the content or adequacy of the Draft EIR. No response is required. The commenter's belief that the project will result in environmental cleanup is acknowledged.

Response to Comment SFPC-7

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR. Refer to Response to Comment 96-1 for a discussion of the other opportunities for providing public comment prior to publication of the Draft EIR. Refer to Response to Comment 85-5 for a discussion of the extensive

planning process for the Project. Lastly, refer to Section III.H (Air Quality) of the Draft EIR for a discussion of potential impacts related to air quality.

Response to Comment SFPC-8

Refer to Master Response 8 (Sea Level Rise) regarding flood protection and Master Response 6 (Seismic Hazards) regarding seismic hazards.

Response to Comment SFPC-9

The transportation impact analysis described in the Draft EIR does account for the additional population that would be associated with the new homes. The impact analysis is based on the increased travel demand associated with the Project, which includes 10,500 new residential dwelling units, 885,000 square feet of new retail, 150,000 square feet of new office, 100,000 square feet of new community services uses, a 220-room hotel, 336 acres of new public parks, a new NFL stadium, a new arena, and a 300-slip marina.

Response to Comment SFPC-10

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-11

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFPC-12

Refer to Responses to Comments 48-3 and 96-2 for discussions pertaining to the selection and analysis of alternatives, and modifying Alternative 3 to provide more housing, respectively.

Response to Comment SFPC-13

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-14

Refer to Response to Comment 5-2 for revised Figure III.B-1, page III.B-3, of the Draft EIR which has been revised to switch the label colors between Residential and Commercial/Industrial. The text in this section is correct regarding these land uses.

Response to Comment SFPC-15

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving though Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16

(Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) regarding cleanup of HPS to residential standards. Refer to Response to Comment 48-3, which states that infeasible alternatives need not be considered (CEQA Guidelines Section 15126.6) including, in this case, alternatives requiring remediation of the Project site to below levels required by the existing regulatory regime, as inferred by the commenter.

Response to Comment SFPC-16

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-17

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-18

Section III.D (Transportation and Circulation) pages III.D-31 through III.D-154 of the Draft EIR describes the transportation-related impacts associated with the Project, including improvements proposed by the Project and the impacts associated with Project-generated vehicle traffic.

Response to Comment SFPC-19

Refer to Chapter III, Section III.H for the evaluation of Air Quality Impacts evaluated in the Draft EIR.

Response to Comment SFPC-20

Section III.D (Transportation and Circulation) pages III.D-31 through III.D-154 of the Draft EIR describes the transportation-related impacts associated with the Project, including improvements proposed by the Project and the impacts associated with Project-generated vehicle traffic.

Refer to Master Response 5 (Health of Bayview Hunters Point Community) about public health issues in the HPS and Bayview neighborhood.

Response to Comment SFPC-21

Refer to Master Response 5 (Health of Bayview Hunters Point Community) about public health issues in the HPS and Bayview neighborhood and Master Response 7 (Liquefaction) for a discussion of buildings in liquefiable areas. Site-specific final design geotechnical studies will be performed to determine what engineering and construction measures need to be implemented to mitigate any poor soil conditions, including collapse potential, if present.

The portion of this comment about healthy schoolchildren contains opinion that is not a direct comment on the environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFPC-22

The comment that the EIR is very important and requires a high level of attention is noted.

Response to Comment SFPC-23

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community. Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the Navy cleanup. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of chemicals that would remain following cleanup. The remainder of this comment lists general information about various chemicals and their carcinogenic properties, and is not a direct comment on the environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-24

Refer to Master Response 7 (Liquefaction), Master Response 4 (Sea Level Rise), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) for discussion about the interrelationships among potential liquefaction, sea level rise, and toxics. Refer to Impacts HZ-1a and HZ-2a and mitigation measures MM HZ-1b and MM HZ-2a.1 for further details.

Response to Comment SFPC-25

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community. This comment also contains closing remarks that are not a direct comment on the environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-26

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community. Refer to Master Response 7 (Liquefaction) for a discussion of construction of buildings and how toxics may be affected in liquefiable areas. Refer to Master Response 6 (Seismic Hazards) for a discussion of construction of buildings and how toxics may be affected in seismically active areas.

Response to Comment SFPC-27

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-28

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-29

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment SFPC-30

The commenter expresses concern over wetlands in the Yosemite Slough area and the importance of wetlands in supporting fish nurseries. Section III.N provides an analysis (in Impacts BI-4a, BI-4b, and BI-4c) of the potential impacts to wetlands and other jurisdictional waters (including those in the Yosemite Slough area), and identifies mitigation measures proposed to avoid or minimize those impacts to less-than-significant levels.

With respect to the protection of fisheries within the Bay, fishery resources are managed through the regulation of EFH. As stated on page III.N-36 of the Draft EIR:

> The tidal aquatic habitats adjacent to the Project site are considered EFH by NMFS for a species assemblage that includes anchovies, sardines, rockfish, sharks, sole, and flounder.

Section III.N (Biological Resources) provides an analysis (in Impacts BI-12a, BI-12b, and BI-12c) of the potential impacts to EFH, and identifies mitigation measures proposed to avoid or minimize those impacts to less-than-significant levels.

Response to Comment SFPC-31

Soil will be imported from the Bay Area and sources within reasonable transportation distance of the Project site. This transportation could be by truck, by barge, or by other method. The Construction Traffic Management Program specified by mitigation measure MM TR-1 would establish approved haul routes. California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), has identified procedures to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. In addition, Amendments to San Francisco Health Code Article 31, to include all of Hunters Point Shipyard, will require the preparation of a Soil Importation Plan that describes the procedures to be used to ensure that imported soil does not exceed established thresholds. For sea level rise refer to Master Response 8 (Sea Level Rise).

Response to Comment SFPC-32

The comment is acknowledged. No response is required.

Response to Comment SFPC-33

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-34

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-35

Refer to Master Response 7 (Liquefaction) for a comprehensive discussion of liquefaction hazards. Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

In reference to Appendix Q1 of the Draft EIR (Water Supply Assessment for the Project), the commenter indicates that many people do not understand the definition of an aquifer. The term "aquifer" is used in the discussion of San Francisco's groundwater basins. Page 1-10 of Appendix Q1 of the Draft EIR states that the City and County of San Francisco are located over seven groundwater basins and that the basins are open to the Pacific Ocean or San Francisco Bay. The seven groundwater basins in San Francisco are illustrated in the figure below (note that the Westside Basin and the North Westside Basin are considered one basin).

The groundwater basins contain aquifers. An aquifer is a geologic formation consisting of saturated rock or sediment that can store groundwater and also move significant quantities of groundwater to wells and/or springs. As requested by the commenter, a figure has been prepared to illustrate the seven distinct aquifers in San Francisco, showing that all of them connect to the Pacific Ocean and to the Bay (refer to Figure C&R-18 [Groundwater Basins in San Francisco and Northern Peninsula]).

Response to Comment SFPC-36

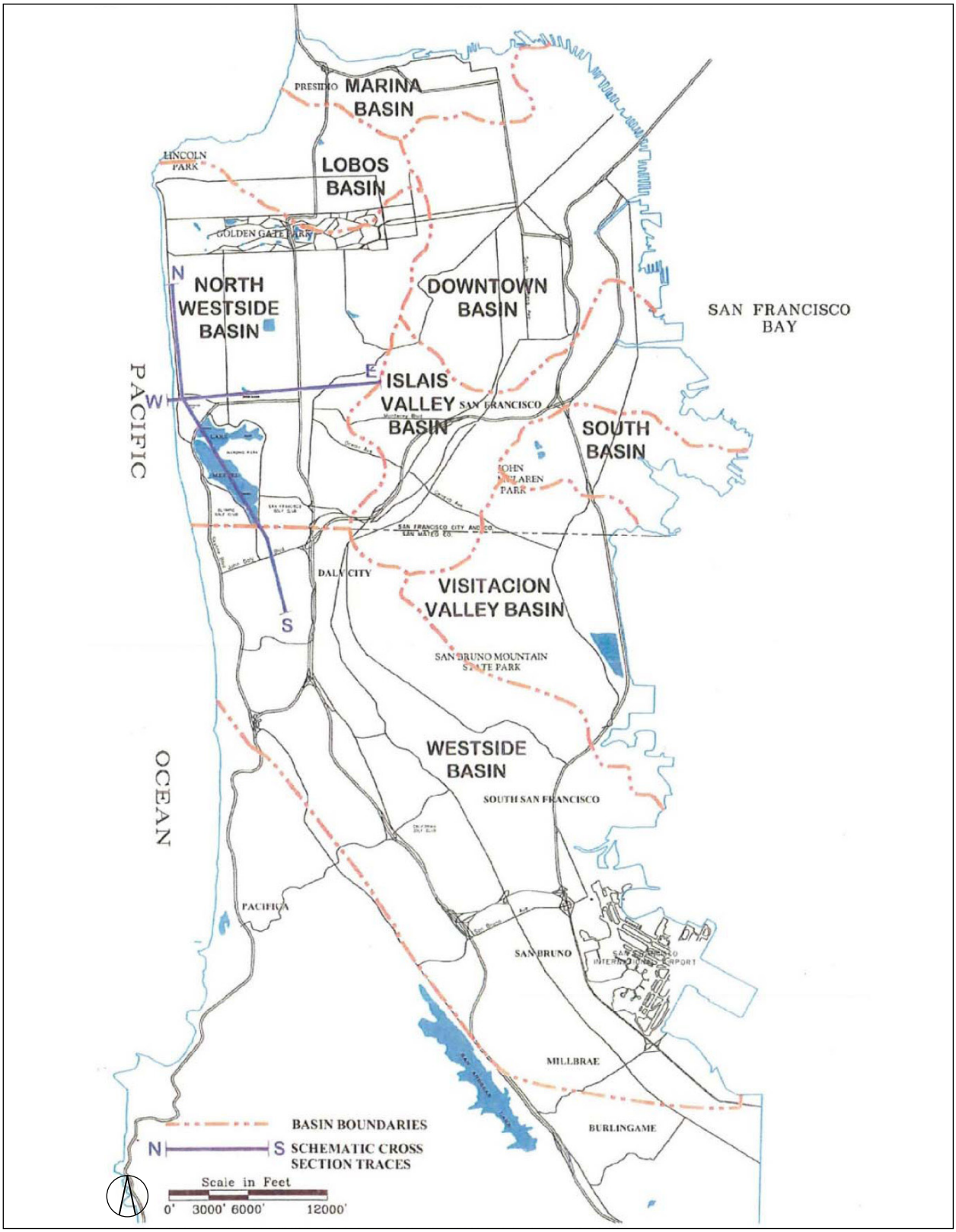
This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-37

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-38

Refer to Response to Comment 47-61 for a discussion of the process being undertaken by the Navy with respect to complying with the requirements of the NEPA and other federal agency processes to meet NEPA requirements.



SOURCE: San Francisco Public Utilities Commission, 2005, North Westside Groundwater Basin Management Plan, Final Draft, April; PBS&J, 2010.

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FIGURE C&R-18

Candlestick Point — Hunters Point Shipyard Phase II EIR

GROUND WATER BASINS IN SAN FRANCISCO AND NORTHERN PENINSULA

Response to Comment SFPC-39

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials on the Shipyard. Refer to Master Response 13 (Post-transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials after parcel transfer. Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principle apply to the Shipyard cleanup.

Response to Comment SFPC-40

The Draft EIR is not "pre-committing to a certain plan." Instead, as stated on page I-7 of the Draft EIR:

> As stated in Section 15121(a) of the CEQA Guidelines, an EIR is an "informational document" intended to inform the Board of Supervisors, Agency Commission, Planning Commission, other public agencies with discretionary authority over aspects of the Project, the general public, the local community, and other organizations, entities, and interested persons of the scope of the Project, significant environmental effects of the Project, possible measures to avoid or minimize the significant effects, and a reasonable range of feasible alternatives to the Project. The Agency and the City must consider the information in this EIR and make certain findings with respect to each significant effect identified in this EIR. The Agency and the City will use the information in the EIR, along with other information available through the public review processes, to determine whether to approve, modify, or disapprove the Project, or a Project alternative, and to specify applicable environmental mitigation measures as part of the Project approvals.

Ultimately, the Project may be approved by agencies with discretionary authority over the Project. Any discretionary actions on the Project can only occur if the EIR is certified by the Lead Agencies, in this case the City/County of San Francisco and the Agency, as being completed in compliance with CEQA and the CEQA Guidelines.

The EIR does represent an independent evaluation of the environmental impacts of the Project. The Lead Agencies have principal responsibility for carrying out or approving a project and preparing the appropriate CEQA review document for the Project, even if a third-party consultant is used. Ultimately, the document is authored by the lead agencies and not the Applicant.

An EIS is separately being prepared by the Navy (as the Lead Agency under the *National Environmental Policy Act*) for the Hunters Point portion of the Project site. Refer to Response to Comment 47-61 for a full discussion of why separate CEQA and NEPA documents are being prepared.

With respect to Proposition G, it was a voter-sponsored initiative, and not an initiative put on the ballot by the City or the Agency, that was not subject to CEQA. Further, Proposition G, Section 5, recognized that any development proposal for the area would be subject to extensive public review, including environmental review under CEQA, before receiving any formal approvals.

Response to Comment SFPC-41

Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of monitoring and sampling that would occur during soil-disturbing activities. Refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues) for a discussion of the notice that would be given to property owners, residents, and neighbors on environmental restrictions and other cleanup issues.

Response to Comment SFPC-42

Refer to Response to Comment 50-14 regarding the use of a portion of the Project site for a stadium.

Response to Comment SFPC-43

The Draft EIR evaluated existing and future public service levels (including fire protection) in Section III.O Public Services. With regard to fire protection services, "construction of a new SFFD facility on land designated for community-serving uses on the Project site would allow the SFFD to maintain acceptable response times for fire protection and emergency medical services. Construction of 100,000 gsf of community facilities, which could include a new SFFD facility, has been included as a component of the Project" (Draft EIR page III.O-22). Therefore, a new fire department facility is proposed as part of the Project and would be constructed to address impacts from implementation of the Project.

Response to Comment SFPC-44

Impact TR-34 on Draft EIR pages III.D-119 and III.D-120 presents the assessment of impacts related to increased traffic volumes on area roadways on pedestrian circulation and safety. Impact TR-31 on Draft EIR page III.D-117 presents the impact assessment on bicycle circulation. There are a number of factors that contribute to increased pedestrian-vehicle and bicycle-vehicle collisions, and the number of collisions at an intersection is a function of the traffic volumes, travel speeds, intersection configuration, traffic control, surrounding land uses, location, and the number of pedestrians and bicyclists. The Project would not result in a substantial change in the street network, and would include street improvements that would enhance pedestrian and bicycle travel through the area. Overall, pedestrian and bicycle access and the environment would improve within and in the vicinity of the Project site, and Project impacts would be less than significant.

Response to Comment SFPC-45

The comment is acknowledged. No response is required.

Response to Comment SFPC-46

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of the asbestos monitoring and control measures implemented during soil-disturbing activities. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-47

The comment is acknowledged. No response is required.

Response to Comment SFPC-48

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment SFPC-49

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFPC-50

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment SFPC-51

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of the asbestos monitoring and control measures implemented during soil-disturbing activities. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-52

The Project would be required to incorporate energy saving programs in accordance with state and local policy's that would reduce the use of energy and water. These measures include compliance with Title 24, the *City of San Francisco General Plan*, and the City's Green Building Ordinance. Compliance with Title 24 standards and implementation of energy-efficiency measures would result in 15 percent less electricity use than projects that comply with minimum Title 24 requirements only. In addition, the Project would be required to comply with the City's Green Building Ordinance. Individual buildings would incorporate various green building specifications to meet the Green Building Ordinance and, in some cases, seek LEED® certification, or an equivalent certification for these buildings. To reduce peak demand on existing electricity infrastructure and to further State and local renewable energy policies, the Applicant would implement renewable energy strategies, such as the use of photovoltaic cells to provide electricity; the use of solar thermal energy to provide space cooling with the use of absorption systems; and/or water for space heating and domestic water systems.

The City's threshold also considers whether the Project's energy consumption would be wasteful. The efficiency measures proposed under the Project would result in building envelope consumption of at least 15 percent less electricity than a project that would not implement such measures. Further electricity savings would be anticipated as a result of the Project's compliance with the Green Building Ordinance, installation of ENERGY STAR® appliances, and the Project's voluntary implementation of LEED® ND standards. However, because the Project Applicant's commitment to implement energy reductions and voluntary green building practices (beyond the measures required in the City's Green Building Ordinance) is preliminary and

not based on actual building designs, mitigation is necessary to reduce potential electricity use impacts to a less-than-significant level. Mitigation measure MM GC-2, which requires the Project Applicant to exceed the 2008 Title 24 energy-efficiency standards for homes and businesses by at least 15 percent, mitigation measure MM GC-3, which would require installation of ENERGY STAR® appliances for builder-supplied appliances, and mitigation measure MM GC-4, which would require installation of energy-efficient lighting, would reduce electricity consumption impacts to less than significant.

Response to Comment SFPC-53

The commenter does not provide evidence to support the comment that the transportation analysis in the Draft EIR is faulty. The comment is noted and no response necessary.

Response to Comment SFPC-54

This comment contains anecdotal and general information and is not a direct comment on the environmental issues or the content or adequacy of The Draft EIR. No response is required.

Response to Comment SFPC-55

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-56

Refer to Response to Comment 43-4 for a discussion of potential property acquisitions associated with roadway improvements identified for the Project.

Response to Comment SFPC-57

The reference in the Draft EIR to the 54-Felton operating on Palou Avenue was a typographical error. The statement should have referred to the 44-O'Shaughnessy. Refer to Response to Comment 65-20 for revisions to text.

Response to Comment SFPC-58

As described in the Draft EIR in Impact TR-22 (pages III.D-106 through III.D-109), and also mentioned in Response to Comment 52-6, current plans call for the extension of overhead trolley wires along Palou Avenue into the Hunters Point Shipyard Transit Center. The current plans for extension of transit service into the Project site call for the 23-Monterey to be extended in the near-term because it would not require construction of overhead wires and would offer similar service to Third Street, where riders could transfer to the 24-Divisadero. The extension of the 24-Divisadero into the project site would occur later in the development process.

Response to Comment SFPC-59

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup, including radiologically impacted materials, and the removal versus capping evaluation process. Under CCR Title 27, Section 21090, all closed landfills are required to have an engineered landfill cap if landfill materials are left onsite. The landfill cap is intended to maintain a protective seal and keep moisture and rain from penetrating the landfill waste and prevent exposure of the public and the environment to the disposed waste. If the Navy proposes and USEPA concurs that an engineered cap may be placed on top of the landfill in order to prevent unsafe exposures from chemicals allowed by the regulators to be left on site, operation and maintenance plans will be developed and be required to be carried out to monitor for and repair potential breaches should they occur. Any breach of cover would be required to be repaired so that no long-term health risks would occur. Parcel E-2 is planned for open space use and would not include construction of large water mains. However, emergency response plans will be carried out following events such as a water main break to investigate for potential problems such as leakage into homes. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-60

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-61

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-62

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-63

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-64

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-65

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-66

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-67

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-68

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-69

Refer to Master Response 9 (Status of the CERCLA Process), Master Response 10 (Pile Driving though Contaminated Soil), Master Response 11 (Parcel E-2 Landfill), Master Response 12 (Naturally Occurring Asbestos), Master Response 13 (Post-Transfer Shipyard Cleanup), Master Response 14 (Unrestricted Use Alternative), Master Response 15 (Proposition P and the Precautionary Principle), Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Issues), and Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) regarding hazardous materials on the Shipyard, Proposition P, and a full cleanup alternative for the Shipyard. The remainder of the comment contains opinion, and no further response is required.

Response to Comment SFPC-70

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-71

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-72

Comment noted. No response is required.

Response to Comment SFPC-73

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-74

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-75

Refer to Master Response 8 (Sea Level Rise) for a discussion of sea level rise effects on movement or exposure to hazardous materials and mitigation measures. Also provided in Master Response 8 is a discussion of how Candlestick Point and Hunters Point Shipyard will be protected into the future from flooding.

Refer to Master Response 15 (Proposition P and the Precautionary Principle) and Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the project site cleanup of hazardous materials.

Refer to Master Response 7 (Liquefaction) for a discussion of the potential hazards related to liquefaction.

Response to Comment SFPC-76

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-77

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment SFPC-78

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of the asbestos monitoring and control measures implemented during soil-disturbing activities. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-79

Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how Proposition P and the Precautionary Principle apply to the Shipyard cleanup.

Response to Comment SFPC-80

With regard to the comment that Double Rock is contaminated, Double Rock is part of the Candlestick Point site, and as explained in Section III.K.2 on pages III.K-5 through III.K-8 of the Draft EIR, there are

no known areas of contamination requiring remediation on the Candlestick Point site. Refer to Response to Comment SFPC-129 for a discussion of the characterization and potential hazards at Candlestick Point.

Response to Comment SFPC-81

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough [Biological Resources]) for a discussion of the impacts of the Yosemite Slough bridge on wildlife.

Response to Comment SFPC-82

Refer to Master Response 3 (Impacts of the Project on the Yosemite Slough [Biological Resources]) for a discussion of the impacts of the Yosemite Slough bridge on wildlife. Refer also to Responses to Comments 61-7, 73-6, and 81-8 for a discussion of the water quality of the Yosemite Slough as a result of construction and/or operation of the Yosemite Slough bridge.

Response to Comment SFPC-83

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community.

Response to Comment SFPC-84

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-85

This comment contains introductory or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFPC-86

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-87

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-88

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-89

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-90

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-91

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-92

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-93

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-94

Refer to Master Response 7 (Liquefaction), Master Response 8 (Sea Level Rise), Master Response 11 (Parcel E-2 Landfill), and Master Response 13 (Post-Transfer Shipyard Cleanup) for discussion about the interrelationships among potential liquefaction, sea level rise, and toxic soils. Refer to Master Response 2 (Potential Native American Burial Sites) for a discussion about historic Ohlone sites.

Response to Comment SFPC-95

Refer to Master Response 12 (Naturally Occurring Asbestos) for a discussion of the problems that occurred in Phase I regarding dust control and how these problems have been addressed, and also for a discussion of the mitigation measures applicable to naturally occurring asbestos for Phase II. Refer to Master Response 17 (Enforcement of Environmental Restrictions and Mitigation Measures) for a discussion of oversight and enforcement.

Response to Comment SFPC-96

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-97

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFPC-98

This comment is not a comment on the technical adequacy of the environmental analysis of the Project. This is a policy issue that will be identified herein for review by decision makers during the Project approval process.

Response to Comment SFPC-99

The comment is acknowledged. No response is required.

Response to Comment SFPC-100

This comment contains opinion and anecdotal information that are not direct comments on the environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFPC-101

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-102

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment SFPC-103

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of how the City of San Francisco's Precautionary Principle applies to the Project.

Response to Comment SFPC-104

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SB 18.

Response to Comment SFPC-105

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-106

The Historical Radiological Assessment (HRA), discussed in Section III.K.2 beginning on page III.K-27 of the Draft EIR, addressed the potential for experimental animal bodies containing radiological contamination in Section 6.36 ("Animal Studies"), on pages 6-34. According to the HRA:

> Carcasses of animals that were not radioactively contaminated were disposed of as waste, usually through a vendor who specialized in animal disposal, although there is evidence that they were also discarded in the on-site landfill. An incinerator was constructed for use by NRDL for disposal of animal remains and wastes. … The carcasses that had been dosed with radioactive material were considered radioactive waste and their disposal was carefully controlled. In the early days, they were drummed and buried at sea with other radioactive waste. When sea disposal was no longer an option, the radioactive carcasses were disposed of at a licensed off-site facility with other radioactive waste.

The primary purpose of the HRA was to investigate the radiological contamination of the area and designate sites as "impacted" or "non-impacted." The overall conclusion was that low levels of radioactive contamination existed at certain cites within HPS, but there was no imminent threat or substantial risk to tenants, the environment of HPS, or the local community (Section III.K.2, page III.K-27). In Impact HZ-6b, the Draft EIR acknowledges that soil movement of soil containing hazardous material could result in impacts from human exposure from dust. This impact is rendered less than significant with mitigation through the legally enforceable environmental restrictions required to be in place before any Project development occurs (refer to Impact HZ-6b, page III.K-68). As the Draft EIR explains, such restrictions will incorporate dust control measures, and will be approved by the FFA Signatories as being sufficient under CERCLA and other applicable laws to ensure protection of human health and the environment both during and after the development activities (Section III.K.4, pages III.K-50 and III.K-68). Additionally, regulatory agency approved work plans developed for directing this work will include measures for controlling site access, monitoring workers, screening materials for radionuclides, and handling radiologically impacted material appropriately, if present. Refer to Impacts HZ-1b, HZ-2a.2, HZ-8, HZ-10, HZ-12, and HZ-15 and mitigation measures MM HZ-1b, MM HZ-2a.2, and MM HZ-10b for further details.

Response to Comment SFPC-107

Refer to Master Response 5 (Health of Bayview Hunters Point Community) for a discussion of the Shipyard and the factors that contribute to health disparities in the community. Refer to Master Response 6 (Seismic Hazards) for a construction of buildings and how toxics may be affected in seismically active areas. Refer to Master Response 7 (Liquefaction) for a discussion of the hazards of liquefaction. Refer to Master Response 9 (Status of the CERCLA Process) Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the current status of the Navy's progress on the cleanup of hazardous materials. Refer to Master Response 11 (Parcel E-2 Landfill) for a discussion of the landfill investigation and cleanup. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of the cleanup of hazardous materials following parcel transfer.

Response to Comment SFPC-108

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-109

Refer to Responses to Comments 1-1 and 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFPC-110

The Draft EIR was distributed through the State Clearinghouse to the California Air Resources Board, Department of Boating & Waterways, California Highway Patrol, Caltrans District 4, Department of Conservation, Department of Education, California Fish & Game Region 3, Forestry & Fire Protection, Housing & Community Development, Integrated Waste Management Board, Native American Heritage Commission, Office of Emergency Services, Office of Historic Preservation, California Parks & Recreation, Public Utilities Commission, Regional Water Quality Control Board (Region 2), State Lands Commission, the SWRCB, the Department of Toxic Substances Control, and the Department of Water Resources. Local agencies and commissions such as the S.F. Bay Conservation and Development Commission, BAAQMD, the City of Brisbane, and San Mateo County also received copies of the Draft EIR. All agencies and commissions who commented on the Draft EIR are listed in Section D (List of Persons Commenting) of this Comments and Responses document.

Response to Comment SFPC-111

Refer to Responses to Comments 66-15 and 66-16 for a discussion of the currently existing cap and landfill gas collection system for Parcel E-2 and cleanup alternatives. Refer to Master Response 9 (Status of the CERCLA Process) and Master Response 12 (Parcel E-2 Landfill) for a discussion of cleanup alternatives.

Response to Comment SFPC-112

The grade elevation of 3'6" is proposed to deal with sea level rise, not hazardous materials. For a discussion of whether sea level rise could potentially affect dispersion of hazardous materials existing on site, refer to Master Response 8 (Sea Level Rise). The Navy may, prior to transfer and as part of its remedial program, raise the existing grade by placing soil covers or engineered caps in some locations. Once the Navy's remedial program is complete, the Project development calls for further raising the grade, as necessary, to assure that all structures are at a grade elevation of 3'6" above current grade to address sea level rise.

Response to Comment SFPC-113

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the Navy remediation. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of remediation activities that would take place after transfer of the Shipyard parcels to the Agency and/or City. Refer to Master Response 14 (Unrestricted Use Alternative) for a discussion of cleanup of the entire site to unrestricted use standards.

Response to Comment SFPC-114

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the Navy remediation. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of remediation activities

that would take place after transfer of the Shipyard parcels to the Agency and/or City. Refer to Master Response 14 (Unrestricted Use Alternative) for a discussion of cleanup of the entire site to unrestricted use standards.

Response to Comment SFPC-115

Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of the relationship of Proposition P and the Precautionary Principle to the Project.

Response to Comment SFPC-116

Text on Draft EIR page I-5 has been revised to include a discussion of Proposition P and how it relates to the Project:

> Proposition P (approved by the voters of San Francisco on November 7, 2000) called upon the Navy to remediate HPS to the highest levels practical to ensure flexible reuse of the property. The Board of Supervisors subsequently passed Resolution 634-01, adopting Proposition P as official City policy and urging the Navy and USEPA to take actions to implement Proposition P. The Resolution (1) recognizes that the unrestricted cleanup standard called for in Proposition P identifies a cleanup level acceptable to the community; (2) urges the Navy and FFA regulatory agencies not to rely on barriers to protect future occupants and the public from exposure to pollution, unless other remedies are technically infeasible, and (3) urges the Navy to clean up the Shipyard in a manner fully consistent with the Reuse Plan and with remedies that do not make implementation of the Reuse Plan economically infeasible.
>
> Proposition P states a desired result that the Navy and regulators achieve in carrying out the cleanup of the Shipyard. Proposition P and the subsequent Board resolution are not directly applicable to the Project because the Navy cleanup, and decisions made by the regulators about the cleanup, is not part of the Project, Adoption and implementation of the Project would not be inconsistent with, and would not change, the City's stated desire that the Navy clean up HPS in a manner that allows flexible reuse, does not rely on barriers to protect the public from exposure unless other remedies are technically infeasible, is consistent with the Reuse Plan and does not render the Reuse Plan economically infeasible to implement. Proposition P is a general statement of policy and addresses the type of clean-up remedy that the Navy should select and the regulators should approve for HPS. The ROD for a parcel sets forth the selected remedy. Under the early transfers envisioned at the Shipyard, all radiological cleanup will be completed and RODs issued. The Navy already has issued RODs for Parcels B, D-1, UC-1, UC-2, and G. Further, the Navy already has conducted substantial remediation. Thus, by the time the Navy offers parcels being considered for early transfer to the Agency (with concurrence of USEPA and the Governor of California) the remedy already will have been selected and significant remediation completed. In the case of the first early transfer being considered—for Parcels B and G, the Navy also will have prepared (and the regulators will have approved) the remedial design documents.

Response to Comment SFPC-117

Refer to Responses to Comments 8-1, 27-1, 27-2, 38-1, 38-2, 40-1, 52-8, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8, 62-1, 62-2, 62-3, 63-1, 73-10, 73-11, 73-15, 74-1, 74-4, 78-1, 84-12, 89-1, 89-3, 104-1, SFPC-29, SFPC-48, SFPC-50, SFPC-77, SFPC-104, and SFRA2-2 with regard to the Muwekma Ohlone people and the consultation process, as well as Master Response 1 (SB 18) and Master Response 2 (Potential Native American Burial Sites) for a discussion of Native American issues.

Response to Comment SFPC-118

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the Navy remediation. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of remediation activities that would take place after transfer of the Shipyard parcels to the Agency and/or City. Refer to Master Response 14 (Unrestricted Use Alternative) for a discussion of cleanup of the entire site to unrestricted use standards. Refer to Master Response 15 (Proposition P and the Precautionary Principle) for a discussion of compatibility of the Project with the policy statement of Proposition P.

Response to Comment SFPC-119

Refer to Master Response 9 (Status of the CERCLA Process) for a discussion of the remediation that is the responsibility of the Navy. Refer to Master Response 13 (Post-Transfer Shipyard Cleanup) for a discussion of remediation activities that would take place after transfer of the Shipyard parcels to the Agency and/or City.

Response to Comment SFPC-120

Refer to Responses to Comments 82-24 through 84-33 and 82-60 for a discussion of game-day traffic and transit. Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for a discussion of the purpose and benefits of the proposed bridge over the slough. Section III.D (Transportation and Circulation) provides a comprehensive analysis of the existing and future conditions in the Bayview Hunters Point neighborhood with and without the Project. Refer to Master Response 18 (Traffic Mitigation Measures) for a comprehensive discussion of proposed traffic-related improvements to improve traffic throughout Bayview Hunters Point. While light rail is not currently proposed as part of the Project, the bridge has been designed to be able to accommodate future light rail; in the event that a light rail system is proposed in the future, its potential environmental impacts would be studied under CEQA and otherwise approved by the appropriate public agencies.

Response to Comment SFPC-121

Light rail is not currently proposed as part of the Project; however, the bridge has been designed to be able to accommodate future light rail; in the event that a light rail system is proposed in the future, its potential environmental impacts would be studied under CEQA and otherwise approved by the appropriate public agencies.

Response to Comment SFPC-122

Refer to Response to Comment 17-1 regarding what would be required to open the bridge to all traffic.

Response to Comment SFPC-123

The October 2009 Historic Resources Evaluation report prepared by Circa for the Project has been added to this document as Appendix J2 (CIRCA, Historic Resources Survey, October 2009).

Response to Comment SFPC-124

Active Bay Area faults are depicted on Figure III.L-2 (Regional Fault Map), Draft EIR page III.L-5, and in Table III.L-3 (Active Bay Area Faults), Draft EIR page III.L-15. Active faults capable of producing strong groundshaking exist near the Project site. Most notable of these faults are the San Andreas, San Gregorio, and Hayward Faults. There are no active fault traces beneath the Project site. The design-level geotechnical investigations to be performed must include site-specific seismic analyses to evaluate the peak ground accelerations for design of Project components, as required by Chapter 16 (Structural Design) and Chapter 18 (Soils and Foundations) of the SFBC. Based on the seismic analyses, structure designs would be modified or strengthened and constructed to the highest feasible seismic safety standards, consistent with the requirements of the SFBC.

Response to Comment SFPC-125

A comprehensive discussion of impacts of the Project on biological resources is contained in Draft EIR Section III.N (Biological Resources). Numerous mitigation measures would be implemented to protect biological resources. Refer to Master Response 3 (Impacts of the Project on the Yosemite Slough [Biological Resources]) for a specific discussion of the impacts of the proposed bridge on biological resources in the Yosemite Slough.

Response to Comment SFPC-126

Refer to Responses to Comments 47-42 for a discussion of the mitigation measures to address fugitive dust. The control measures applied in the Draft EIR relating to fugitive dust are appropriate and are consistent with the *San Francisco Health Code* and BAAQMD CEQA Guidelines. The mitigations are not optional and are required by the City of San Francisco, as discussed on Draft EIR page III.H-16. The analysis in the Draft EIR was not based on any air sampling data, whether correct or incorrect, from HPS Phase I.

Refer also to Master Response 12 (Naturally Occurring Asbestos).

Response to Comment SFPC-127

Refer to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) and Responses to Comments 47-4 and 82-30, which describes the estimate of BRT travel times around Yosemite Slough. Refer to Responses to Comments 82-24 through 82-68 regarding analysis of Alternative 2. Refer to Response to Comment 43-2 regarding the change in the BTIP project's environmental review schedule.

Response to Comment SFPC-128

The commenter's concerns regarding biological assets on Candlestick Point and HPS are noted.

Response to Comment SFPC-129

As stated in the Draft EIR, based on previous studies and publicly available information, there are no known hazardous materials release sites requiring remediation at Candlestick Point (Section III.K, pages III.K-5 through III.K-8). However, the Draft EIR recognizes the possibility hazards could nevertheless

exist, and Impacts HZ-1a and HZ-2a and the corresponding mitigation measures outline the processes for investigation, mitigation, and contingency planning for unknown contaminants.

The Draft EIR's characterization of the area in Candlestick Point is in accord with environmental investigations that took place in 1998, 2006, and 2009 (as detailed in Section III.K, pages III.K-6 through III.K-8), as well as the public databases of DTSC and SWRCB (refer to page III.K-8). The 1998 investigation, conducted by Geomatrix Consultants, Inc., involved extensive soil and groundwater sampling throughout much of the Project area. A human health risk evaluation concluded the chemicals detected did not pose a significant carcinogenic or non-carcinogenic risk. MACTEC conducted the 2006 and 2009 investigations as a Phase I Environmental Site Assessment for Candlestick Point, during which no releases or areas of recognized environmental conditions were detected. Consistent with these studies, there are currently no known unremediated or active hazardous materials release sites at Candlestick point appearing on either the DTSC's EnviroStor online database, or the SWRCB's Geotracker online database (refer to Section III.K, page III.K-8).

Impacts HZ-1a and HZ-1b acknowledge the potential for exposure to previously unknown hazardous material from development activity in areas with high concentrations of Bay fill (in particular, areas bayward of the 1851 high tide line) and throughout Candlestick Point (Section III.K, pages III.K-53 through III.K-54, III.K-58). The corresponding mitigation measures provide mechanisms to improve knowledge of potential hazards, mitigate where necessary, and develop contingency plans for unexpected hazards. In compliance with the requirements of San Francisco Health Code Article 22A, mitigation measure MM HZ-1a requires the Project Applicant further assess current on-site conditions before development and prepare a mitigation plan if the investigation indicates the presence of a hazardous materials release. Additionally, mitigation measures MM HZ-2a.1 and 2a.2 provide for the creation of contingency plans and site-specific health and safety plans to address the possible encounter with unexpected hazards. Those plans will be implemented as conditions for any applicable site development permits. Refer to Impacts HZ-1a and HZ-2a and mitigation measures MM HZ-1a, MM HZ-2a.1, and MM HZ-2a.2 for further details.

Response to Comment SFPC-130

The commenter suggests that the habitat requirements and food chain of the peregrine falcons using HPS were not well described in the Draft EIR. This species forages in and over a wide variety of habitats, including urban areas and bay/shoreline habitats. This species' ability to live and breed in large cities or on remote cliffs indicates that its habitat requirements are not particularly narrow, and it is known to feed on a wide variety of avian prey. The crane on which peregrine falcons nest on HPS will be retained by the Project, and ample foraging habitat and prey will continue to be present on the site after Project development.

Response to Comment SFPC-131

Refer to Response to Comment 48-3 for a discussion of alternatives considered and rejected for the EIR.

Response to Comment SFPC-132

Refer to Response to Comment 47-42 regarding dust mitigation measures (mitigation measure MM HZ-15). Refer also to Impact AQ-2c, which is provided on Draft EIR page III.H-26, for a discussion of DPM effects at Alice Griffith Public Housing.

Response to Comment SFPC-133

Refer to Master Response 7 (Liquefaction) for discussion about liquefaction.

Response to Comment SFPC-134

Refer to Master Response 11 (Parcel E-2 Landfill) and Master Response 13 (Post-Transfer Shipyard Cleanup) for discussion about landfill sites.

Response to Comment SFPC-135

Refer to Response to Comment 48-3 for a discussion of alternatives considered and rejected for the EIR.

Response to Comment SFPC-136

Refer to Master Response 3 (Impacts of the Project on Yosemite Slough Bridge [Biological Resources]), Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge), Master Response 18 (Traffic Mitigation Measures), and Responses to Comments 15-1, 21-1, 22-2, 44-2, 47-4, 47-7, 47-13, 47-14, 47-31, 47-53, 47-58, 47-69, 47-73, 47-103, 47-104, 47-110, 47-111, 51-2, 54-1, 59-1, 59-3, 61-2, 64-3, 65-5, 65-11, 81-4, 81-5, 82-28, 82-29, 82-31, 82-32, 82-33, 82-34, 82-50, 82-56, 82-57, 86-12, 90-3, 103-15, SFRA1-19, SFRA1-82, SFPC-110, and SFRA2-22, among others, for a comprehensive discussion of the traffic impacts of the Project.

Response to Comment SFPC-137

As noted on page 5 of the Traffic Impact Analysis (Draft EIR Appendix D), the existing Candlestick Park stadium typically hosts up to 12 games per year, including eight regular season games, two pre-season games, and, for teams that qualify for playoffs, two postseason games. Professional football games on the west coast are typically scheduled for 1:00 P.M. on Sundays, from September through early December. The post-season runs into January and games can be played on either Saturday or Sunday. At the conclusion of the college football season in late November, a few NFL games are played on Saturdays, as are some pre-season games. Successful teams typically play at least one Monday night (6:00 P.M.) game, and the 49ers have had at least one such home game in each of the past several seasons. Occasionally (no more than once per year), Sunday games are held at 5:00 P.M. In rare circumstances, football games are played on Monday or Thursday nights; however, since this typically occurs no more than twice per season at most, the analysis of the football stadium impacts was conducted for more typical Sunday afternoon conditions. The traffic, air quality, and noise impact analyses were based on 49er game day travel demand estimates for 12 sellout games, when all 69,000 seats are sold. For secondary events at the stadium, a maximum of 20 total occurrences per year with 37,500 spectators was analyzed, which reflects events such as a rock concert. Assuming an approximate weekday evening start time of about 7:00 P.M., the weekday PM peak hour (5:00 to 6:00 P.M.) was analyzed for pre-event conditions to address impacts associated with possible secondary events on evening commute traffic conditions.

Response to Comment SFPC-138

It is acknowledged that the Candlestick Park stadium opened in April 1960.

Response to Comment SFPC-139

Comment noted. With respect to the intersection of Arelious Walker Drive and Jamestown Avenue, the intersection would be reconfigured as a four-legged intersection and would be controlled by a new signal to facilitate traffic flow, as illustrated by a Figure C&R-7 (Location of New Traffic Signals) and further described in Response to Comment 43-20.

During non-game days, Tables III.D-10 through III.D-12 of the Draft EIR (which reflect AM conditions, PM conditions, and Sunday conditions, respectively, for both 2030 No Project and With Project conditions) indicates that this intersection would operate at an acceptable level of service using the significance criteria provided on pages III.D-31 and III.D-32 of the Draft EIR.

During game days, this signals would be either manually controlled from within the Stadium's Transportation Management System or by an on-site Traffic Control Officer to allow for efficient egress of game attendees from the stadium.

Response to Comment SFPC-140

The parking analysis in the Draft EIR provided a conservative estimate of parking that would be available with the Project. As noted on Draft EIR page III.D-1, the parking analysis focused on three subareas where the stadium game day parking would occur including the on-site and off-site lots, as well as residential streets adjacent in Little Hollywood, India Basin and Bayview/Candlestick Point. The available privately owned off-street parking facilities serve the employees and visitors to the businesses adjacent to them and are not available for general public parking (refer to Draft EIR page III.D-21).

Response to Comment SFPC-141

Barbecuing would be allowed on the multi-use fields.

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Transcript SFRA2: San Francisco Redevelopment Agency (1/5/10)

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Transcript SFRA2: San Francisco Redevelopment Agency (1/5/10)

Response to Comment SFRA2-1

Section III.D (Transportation and Circulation) of the Draft EIR describes the transportation-related impacts associated with the Project, including improvements proposed by the Project and the impacts associated with Project-generated vehicle traffic.

Section III.S (Greenhouse Gas Emissions) of the Draft EIR describes the effects of new greenhouse gas emissions generated by the Project and measures proposed by the Project to both reduce greenhouse gas emissions as well as account for potential sea level rise, as referenced by the commenter.

Response to Comment SFRA2-2

Refer to Master Response 1 (SB 18) for a discussion of consultation with the Native American community under SSB 18.

Response to Comment SFRA2-3

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA2-4

Refer to Master Response 8 (Sea Level Rise) and Responses to Comments 36-2, 57-1, and 58-3 for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment SFRA2-5

Section III.D (Transportation and Circulation) of the Draft EIR describes the transportation-related impacts associated with the Project, including improvements proposed by the Project and the impacts associated with Project-generated vehicle traffic.

The transportation impact analysis described in the Draft EIR does account for the additional population that would be associated with the new homes. The impact analysis is based on the increased travel demand associated with the Project, which includes 10,500 new residential dwelling units, 885,000 square feet of new retail, 150,000 square feet of new office, 100,000 square feet of new community services uses, a 220-room hotel, 336 acres of new public parks, a new NFL stadium, a new arena, and a 300-slip marina.

Response to Comment SFRA2-6

Refer to Response to Comment SFRA1-76 for a discussion of project compliance with Title 24, the *City of San Francisco General Plan*, and the City's Green Building Ordinance, all of which relate to energy

conservation. Project-related impacts would be less than significant with regard to the wasteful or inefficient use of energy, as demonstrated in Impacts ME-1 and Impact ME-2, provided in Section III.R (Energy) of the Draft EIR.

In terms of water conservation, page 2-8 of the Water Supply Assessment, which is provided in Appendix Q1 of the Draft EIR, states that:

> The SFPUC has also increased its water conservation programs in an effort to achieve new water savings by 2018. The SFPUC's conservation program is based on the Demand Study that identified water savings and implementation costs associated with a number of water conservation and efficiency measures. The Demand Study evaluated the costs and benefits of implementing 48 different conservation measures using an end-use model. The results indicated that local conservation programs implemented through 2030 could cumulatively reduce Retail purchases from the SFPUC RWS by 4.5 mgd in year 2030. These new conservation programs include high-efficiency toilet replacement in low-income communities, plumbing retrofits in compliance with the 1992 California plumbing code and water efficient irrigation systems in municipal parks. Through its expanded conservation program, the SFPUC anticipates reducing gross per capita consumption from 91.5 gpcd to 87.4 gpcd by 2018 for an average daily savings of approximately 4.0 mgd.

Refer also to Response to Comment 65-24 for a discussion of the use of a recycled water facility to serve the Project, which provides another potential mechanism for water conservation.

Response to Comment SFRA2-7

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Response to Comment SFRA2-8

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-9

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-10

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-11

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-12

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer also to Master Response 4 (Purpose and Benefits of the Yosemite Slough Bridge) for greater details regarding the transit benefits of the Yosemite Slough Bridge.

Response to Comment SFRA2-13

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-14

The comment is acknowledged. No response is required.

Response to Comment SFRA2-15

The comment is acknowledged. No response is required.

Response to Comment SFRA2-16

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-17

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-18

The comment is acknowledged. As stated in Chapter 1 (Introduction) on page I-11 of the Draft EIR:

> If the Agency and City were to approve the Project, despite significant impacts identified in the Final EIR that cannot be mitigated, if any, the Agency and City must state in writing the reasons for its actions, under CEQA Guidelines, Section 15093. Those findings, called a Statement of Overriding Considerations, must be supported by substantial evidence in the record, and are used to explain the specific reasons why the benefits of a Project make its unavoidable environmental effects acceptable.

Refer to Master Response 6 (Seismic Hazards).

Response to Comment SFRA2-19

The Project will not change any GHG emissions associated with the landfill at the shipyard, therefore, there are no incremental emissions associated with this source. Furthermore, as discussed in Section III.K (Hazards and Hazardous Materials) of the Draft EIR, the landfill is part of an area created from the 1940s to the 1960s by filling in the Bay margin with a variety of material, including soil, crushed bedrock, dredged sediments, and debris. From 1958 to 1974, the landfill received liquid chemical waste, asbestos, domestic wastes and

refuse, dredge spoil materials, sandblast grit, solvent wastes, and low-level radioactive wastes from shipboard radium dials, including electronic equipment. Accordingly, only a small fraction of the material deposited in the landfill has the potential to be methanogenic. Since potentially methanogenic materials were deposited there between 35 and 50 years ago the potential for further methanogenisis is low.

Refer to Comment 88-1 which includes two letters from the Department of Health and Human Services, ATSDR, to Dr. Sumchai (dated February 11, 2009, and December 11, 2009) and a letter from Department of Health and Human Services, ATSDR, to Dr. Bhatia of the San Francisco City and County Department of Public Health dated September 20, 2007. With respect to the referenced statements from the September 20, 2007, letter and the December 11, 2009, letter, refer to the following conclusion in the December 11, 2009, letter: "it is not possible to accurately quantify the risk because the currently available tools and limited data have so many inherent uncertainties."

Refer also to Master Response 12 (Naturally Occurring Asbestos).

Response to Comment SFRA2-20

The energy demand required by the Project was disclosed in the Draft EIR in Table III.R-7 and Table III.R-8. In fact, an entire section of the Draft EIR [Section III.R (Energy)] was devoted to addressing potential impacts related to energy, including electricity, natural gas, petroleum, and greenhouse gases.

The embodied energy associated with building materials is addressed in the Draft EIR. This analysis is presented in Appendix S of the Draft EIR (ENVIRON Climate Change Technical Report Candlestick Point Hunters Point Shipyard Phase II, October 22, 2009). Refer specifically to page 49 of this report and its Appendix C (Life Cycle Greenhouse Gas Emissions from Building Materials). An estimate of "life-cycle" GHG emissions (i.e., GHG emissions from the processes used to manufacture and transport materials used in the buildings and infrastructure) is presented in this section. This estimate is to be used for comparison purposes only and is not included in the final inventory as these emissions would be attributable to other industry sectors under AB 32. For instance, the concrete industry is required by law to report emissions and undergo certain early action emission reduction measures under AB 32. Furthermore, for a life-cycle analysis for building materials, somewhat arbitrary boundaries must be drawn to define the processes considered in the life-cycle analysis. For instance, in the case of building materials, the boundary could include the energy to make the materials, the energy used to make the machine that made the materials, and the energy used to make the machine that made the machine that made the materials.

Various agencies have commented on the inclusion of these embodied energy life-cycle analyses of building materials in CEQA analysis. Recognizing the uncertainties associated with a life-cycle analysis, the California Air Pollution Control Officers Association (CAPCOA) released a white paper (CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, 2008) which states: "The full life-cycle of GHG emissions from construction activities is not accounted for in the modeling tools available, and the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level."

The Attorney General of California has commented that CEQA requires indirect effects to be analyzed where they can be reasonably estimated (see Letter to Dave Warner San Joaquin Valley Air Pollution

Control District, Draft Document Entitled "Characterization of Greenhouse Gas Emissions," February 17, 2009). This includes emissions from the project's energy use and life-cycle emissions associated with raw materials used to build the project. However, the Attorney General also notes "CEQA does not require independent research to trace back to its source every single material used in construction, but there is no reason that existing, readily available information about lifecycle emissions should not be included in the CEQA analysis." Furthermore, CEQA Guidelines Section 15064(d)(3) states, "An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." The analysis presented in Appendix S of the Draft EIR is consistent with the use of readily available information about lifecycle emissions to the extent that is reasonably foreseeable and is included in the Draft EIR.

Response to Comment SFRA2-21

This comment contains introductory, closing, or general background information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. No response is required.

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA2-22

The Draft EIR describes the extent to which Project-generated traffic may cause delays to existing and proposed transit routes serving the Project and traveling through the Bayview neighborhood in Impacts TR-22 through TR-30. However, the Draft EIR also identifies mitigation measures MM TR-21 through MM TR-27, which propose constructing transit preferential treatments, including transit only lanes and transit priority signals to reduce the impacts to transit travel times, although not necessarily to less than significant levels in each case. The Project impacts would be to all riders of these lines, including riders traveling to and from the existing Bayview neighborhood. Similarly, the benefits of the mitigation measures at improving transit travel times would be shared by all riders in the study area, including riders from the existing Bayview neighborhood. Refer to Master Response 18 (Transit Mitigation Measure) for greater discussion on these mitigation measures.

On game days, Palou Avenue, between Crisp Avenue and Third Street, would be closed to through-traffic, except for transit vehicles and emergency access vehicles. However, residents would still have access to their homes as the closure would be to through-traffic only. These conditions would likely only be in place for approximately 2 hours prior to and 2 hours after games on football game days only

Response to Comment SFRA2-23

Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA2-24

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-25

Pages III.B-15 to III.B-16 of Section III.B (Land Use and Plans) contains an analysis of the consistency of the Project with the Bay Area Seaport Plan. The Seaport Plan assigns a "Port" use designation to an area within HPS Phase II. Bay Plan policies accompanying the Port use designation at Hunters Point state that 55 acres designated south of Manseau Street "should remain designated for port priority use and future development of two breakbulk berths."[125,126] Findings of the Seaport Plan note that the area most likely for marine terminal development includes Drydock 4, South Pier, the Re-gunning Pier, and the waterfront area along South Basin. However, the Port contracted CBRE Consulting and Martin Associates to update a 2001 study "Maritime Cargo Market and Warehouse Analysis."[127] The report identifies the Port of San Francisco as the only breakbulk facility in the Bay Area, annual cargo peaked in 2006 with 250,000 tons, and declined to 150,000 tons of cargo in 2007. Breakbulk at Pier 80 is primarily imported steel which is sensitive to the world economy. The report suggests that Pier 80 marketing efforts diversify from breakbulk into wind turbine components, autos, and fruit. The analysis suggests that the demand for breakbulk facilities is not greater than its current or projected availability. This indicates that policies for breakbulk cargo port priority uses for HPS Phase II may no longer reflect the current economic climate and realistic land use options.

The Project proposes a mixture of land uses on the HPS Phase II site that include a wide range of residential, retail, office, research and development, civic and community, and parks and recreational open space uses. A stadium and marina facilities are also proposed. However, port uses are not proposed for the Project. Findings of the Seaport Plan note that the area most likely for marine terminal development includes Drydock 4, South Pier, the Re-gunning Pier, and the waterfront area along South Basin. The Project's proposed marina is within this general location.

The Project is inconsistent with two policies that designate the Project site as having 55 acres remaining for port priority use and future development of two breakbulk berths. However, the Project would not inconsistent with policies designed to reduce or avoid environmental impacts. Implementation of the Project would require an amendment to the Seaport Plan that references the Project site as a component of the entitlement action. Following amendment of the Seaport Plan, the Project would be consistent with the Seaport Plan.

Refer to Response to Comment 48-3, which discusses selection of the alternatives analyzed in the EIR.

Response to Comment SFRA2-26

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-27

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

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[125] *San Francisco Bay Area Seaport Plan*, p. 42, 1996.
[126] Break-bulk cargo is a shipping term for any loose material that must be loaded individually, not in shipping containers or in bulk as with oil or grain.
[127] CBRE Consulting and Martin Associates. "Maritime Cargo Market and Warehouse Analysis" February 2009.

Response to Comment SFRA2-28

Refer to Master Response 8 (Sea Level Rise) for a discussion of recent sea level rise predictions due to climate change and timelines for these changes to occur. Estimates of projected sea level rise used by BCDC[128] and IPCC[129], as reported in the Project EIR, were largely derived from sea level monitoring conducted by NASA and NOAA. Based on the most recent reports by NOAA,[130] mean global sea level monitored between 1993 and 2009 resulted in an average 3.0 mm (0.1 inch) per year increase (Figure 1). This estimate is similar to that reported by NASA,[131] and was attributed to melting ice (glaciers and ice sheets) and the thermal expansion of the ocean as it absorbs excess energy. A general concern by the public has been the fluctuation in the calculated trend value reported by NASA and NOAA, which has ranged from 3 to 3.4 mm/yr for approximately the same time period.[132] However, the NOAA Laboratory for Satellite Altimetry website[133] clearly states that long-term trends are a result of monitoring global mean sea level every 10 days with a measurement uncertainty of 3 to 4 mm.

As discussed in Section III.S (Greenhouse Gas Emissions) of the EIR, tipping elements bring about "abrupt changes that could push natural systems past thresholds beyond which they could not recover."[134] NASA reported that tipping elements are more common at regional scales than at global scales. To illustrate this, NASA used the concept of sea level rise in association with the shrinkage of ice sheets as an example of a tipping element. The ice sheets contain approximately 5 to 6 meters (16 to 20 feet) worth of sea level in the Antarctic Ice Sheet and 6 to 7 meters (20 to 23 feet) in the West Antarctic Ice Sheet, which are both vulnerable to widespread melting due to additional warming.

One of the most recent reports on the status of Greenland and Antarctic ice sheets was by Pritchard et al., which utilized new methods (i.e., the Geoscience Laser Altimeter System, launched in 2002 on board NASA's ICESat) for determining dynamic changes.[135] The authors observed that although there is considerable variation among the ice sheets as a whole, in general there is a net loss in ice mass, especially along the margins. This conclusion was echoed in recent estimates of Antarctic ice sheet mass reported by Chen et al., which stated that the Antarctic ice sheets are losing mass primarily in coastal regions.[136] To illustrate this point, Chen et al. provided current mass change data from Gravity Recovery and Climate Experiment (GRACE), which are especially concentrated along West Antarctica. Overall, it was estimated

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[128] BCDC (San Francisco Bay Conservation and Development Commission). 2009. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline, Draft Staff Report. April 7, 2009.
[129] IPCC (Intergovernmental Panel on Climate Change). 2007. Climate Change 2007: The Physical Basis—Summary for Policymakers. http://www.ipcc.ch/SPM2feb07.pdf.
[130] National Oceanographic Atmospheric Administration (NOAA). 2010. Sea Level Rise. Laboratory for Satellite Altimetry. Accessed on January 12, 2010. http://ibis.grdl.noaa.gov/SAT/SeaLevelRise/.
[131] http://climate.nasa.gov/.
[132] Spooner, R. 2009. NASA: Sea Level Update. Climate Audit weblog by Steve McIntyre. Accessed on January 13, 2010. http://climateaudit.org/2009/08/21/nasa-sea-level-update/.
[133] National Oceanographic Atmospheric Administration (NOAA). 2010. Sea Level Rise. Laboratory for Satellite Altimetry. Accessed on January 12, 2010. http://ibis.grdl.noaa.gov/SAT/SeaLevelRise/.
[134] CNRA (California Natural Resources Agency). 2009. 2009 California Climate Adaptation Strategy. Discussion Draft. A report to the Governor of the State of California in response to Executive Order S-13-2008.
[135] Pritchard, H.D., Arthern, R.J., Vaghan, D.G., and Edwards, L.A. 2009. Extensive dynamic thinning on the margins of the Greenland and Antarctic ice sheets. Nature. 461: 971-975. doi.10.1038/nature08471.
[136] Chen, J.L., C.R. Wilson, D. Blankenship, and B.D. Tapley. 2009. Accelerated Antarctic ice loss from satellite gravity measurements. Nature Geoscience. 2: 859-862.

that losses associated with Greenland and Antarctic ice sheet melt may be contributing approximately 1.8 mm/yr (0.07 inch/yr) to sea level rise.[137]

It was noted by both studies that the margins are likely receding at a faster rate due to ocean-driven thinning, which Hansen described as a positive feedback process that accelerates disintegration because the ocean acts as a conduit for excess global-scale heating.[138] Similarly, the 'albedo flip' is another feedback process where darker wet ice absorbs more solar energy and the melt water burrows through the ice sheet to lubricate its base and speed the discharge of icebergs to the ocean[139]. Even though both of these feedback processes can result in significant changes to projected sea level models, they are not always included due to the added complexity.

The IPCC report[140] stated that their modeling did not incorporate Greenland and West Antarctic ice sheet shrinkage owing to the fact that they did not fully understand the "rapid dynamical changes in ice flow." The Copenhagen Diagnosis,[141] a group comprised primarily of previous IPCC lead authors, also confirmed that future sea level rise is highly uncertain, specifically due to unknowns associated with how the Greenland and Antarctic ice sheets will respond. However, if ice sheet melt is added to the IPCC[142] values provided in the EIR, then the range of sea level rise would be closer to 13 to 29 inches compared to 7 to 23 inches for the twenty-first century. (Note that this estimation assumes that ice sheet melt will be linear for the next 90 years.) Evidence summarized by Allison et al. claimed that Greenland and Antarctica could raise sea levels more than 1 m (39 inches) and up to 2 m at the highest projected extent above the values predicted by the IPCC models, which are even closer to the levels reported by the BCDC[143] for the San Francisco region. Given the range in uncertainty between global and regional modeling, and the uncertainty of how the arctic ice sheets will respond in this century, it is reasonable to assume that the models reported in the EIR reflect the best science associated with our current understanding of projected sea level rise.

As indicated in Master Response 8, the sea level rise predictions used as a basis for this Project's planning are within the range of estimates reported recently in the literature for changes occurring by the end of this century. This timeframe encompasses the foreseeable life of the Project. Climate change impacts such as sea level rise do not occur over short time frames. Ice sheet collapse which accounts for a major uncertainty with respect to sea level rise would occur over several decades[144] or centuries.[145] Given the uncertainty

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137 Pritchard, H.D., Arthern, R.J., Vaghan, D.G., and Edwards, L.A. 2009. Extensive dynamic thinning on the margins of the Greenland and Antarctic ice sheets. Nature. 461: 971-975. doi.10.1038/nature08471
138 Hansen, J.E. 2007. Scientific reticence and sea level rise. Environmental Research Letters. 2: 1-6.
139 Ibid.
140 IPCC (Intergovernmental Panel on Climate Change). 2007. Climate Change 2007: The Physical Basis—Summary for Policymakers. http://www.ipcc.ch/SPM2feb07.pdf.
141 Allison, I., N.L. Bindoff, R.A. Bindschadler, P.M. Cox, N. de Noblet, M.H. England, J.E. Francis, N. Gruber, A.M. Haywood, D.J. Karoly, G. Kaser, C. Le Quéré, T.M. Lenton, M.E. Mann, B.I. McNeil, A.J. Pitman, S. Rahmstorf, E. Rignot, H.J. Schellnhuber, S.H. Schneider, S.C. Sherwood, R.C.J. Somerville, K. Steffen, E.J. Steig, M. Visbeck, and A.J. Weaver. 2009. The Copenhagen Diagnosis, 2009: Updating the World on the Latest Climate Science. The University of New South Wales Climate Change Research Centre (CCRC). Sydney, Australia. 60pp.
142 IPCC (Intergovernmental Panel on Climate Change). 2007. Climate Change 2007: The Physical Basis—Summary for Policymakers. http://www.ipcc.ch/SPM2feb07.pdf.
143 BCDC (San Francisco Bay Conservation and Development Commission). 2009. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline, Draft Staff Report. April 7, 2009.
144 Hansen, J.E. 2007. Scientific reticence and sea level rise. Environmental Research Letters. 2: 1-6.
145 Refer to page 17 of BCDC (San Francisco Bay Conservation and Development Commission). 2009. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline, Draft Staff Report. April 7, 2009.

associated with sea level rise predictions at this time, the strategy proposed for this Project which involves adjusting the grade for a reasonable level of rise and relying on adaptive management strategies to accommodate higher levels is consistent with recommendations by the California Natural Resources Agency (CNRA) which states "adaptation is the only way to deal with the impacts of sea-level rise that is anticipated under either emissions scenario during the twenty-first century."[146]

Using both Project design and mitigation measures, the Project represents a significant reduction in GHG emissions from a no action taken scenario to building a development. The Project has four mitigation measures specifically to address GHG emissions and climate change impacts (refer to page III.S-36). Furthermore, mitigation measures in other sections of the EIR will reduce GHG emissions and climate change impacts. In addition to specific mitigation measures, the land use mixes and basic land plan design proposed in the Project Description are fundamental aspects of the Project and include certain features assumed in the GHG emissions inventory that will reduce GHG emissions and climate change impacts.

Response to Comment SFRA2-29

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-30

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-31

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA2-32

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR. Refer to Response to Comment 1-1 and Response to Comment 85-5 for a discussion of the adequacy of the public comment period, including the many opportunities for providing comments on the Draft EIR.

Response to Comment SFRA2-33

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

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[146] CNRA (California Natural Resources Agency). 2009. 2009 California Climate Adaptation Strategy. Discussion Draft. A report to the Governor of the State of California in response to Executive Order S-13-2008.

Response to Comment SFRA2-34

Refer to Master Response 9 (Status of the CERCLA Process) for an outline of the "Superfund" cleanup process and status of HPS parcels in that process as well as Master Response 13 (Post-Transfer Shipyard Cleanup). Also refer to Master Response 16 (Notification Regarding Environmental Restrictions and Other Cleanup Notices).

Response to Comment SFRA2-35

This comment contains opinion, anecdotal, or general information and is not a direct comment on environmental issues or the content or adequacy of the Draft EIR.

Response to Comment SFRA2-36

Refer to Master Response 6 (Seismic Hazards) for a discussion of construction of buildings and how toxics may be affected in liquefiable or seismically active areas. Refer to Master Response 8 (Sea Level Rise) for a comprehensive discussion of the sea level rise documents reviewed, the levels of sea level rise taken into account for various Project components, and the plan to provide flood protection if higher levels of sea level rise occur.

Response to Comment SRFA2-37

For a comprehensive discussion of sea level rise, refer to Section III.M (Hydrology and Water Quality), Draft EIR pages III.M-14 through -16. Further clarification and review of recently released data are provided in Master Response 8 (Sea Level Rise).

Response to Comment SFRA2-38

Section III.D (Transportation and Circulation) of the Draft EIR provided extensive background information on existing conditions in the Bayview Hunters Point neighborhood. With regard to violence and crime associated with the existing and future transit systems, that issue is not specifically addressed as an environmental impact in the Draft EIR. Public safety on public transit would addressed by the San Francisco Police Department in consultation with the SFMTA. Refer to Master Response 18 (Traffic Mitigation Measures) for a comprehensive discussion of transportation improvements that would occur throughout the Bayview Hunters Point neighborhood.

Response to Comment SFRA2-39

Refer to Responses to Comments 8-1, 27-1, 27-2, 38-1, 38-2, 40-1, 52-8, 56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8, 62-1, 62-2, 62-3, 63-1, 73-10, 73-11, 73-15, 74-1, 74-4, 78-1, 84-12, 89-1, 89-3, 104-1, SFPC-29, SFPC-48, SFPC-50, SFPC-77, SFPC-104, and SFRA2-2 with regard to the Muwekma Ohlone people and the consultation process, as well as Master Response 1 (SB 18) and Master Response 2 (Potential Native American Burial Sites) for a discussion of Native American issues.

F. DRAFT EIR REVISIONS

All of the proposed changes to the Draft EIR that will be made either in response to comments or as staff-initiated text changes are set forth in full in this section. Single-underlined text is used to represent language added or modified in the Draft EIR; ~~strikethrough~~ is used to represent language deleted from the EIR. Revised Draft EIR figures are indicated with the word "[Revised]" next to the title, and new Draft EIR figures are indicated with the word "[New]" next to the title.

If the Lead Agencies certify the EIR, all of the text changes, whether made in response to comments received or as initiated by Staff, will be made to the Draft EIR, which will then represent the Final EIR.

Subsequent to circulation of the Draft EIR, the Applicant, City, and Agency have made minor modifications and/or refinements to the Project, two of the Variants, and one of the Alternatives to provide additional flexibility for Project implementation and to respond to changing construction technologies, community priorities, site-specific urban design goals, and real estate market demands while meeting the Project objectives. Section B (Modifications since Publication of the Draft EIR) provides a summary of the modifications that are analyzed in this section. The Project refinements do not affect the overall maximum development envelope, including total amount of development or building heights or footprints, compared to the analysis in the Draft EIR. For example, minor revisions have been made that redistribute some housing units from one location on Candlestick Point to another on Candlestick Point, but the total amount of units to be developed does not change. Likewise, impacts from modifications to Project Variants (Variant 2A and Variant 3's Tower Variant D) are within the range of impacts identified in the Draft EIR for the Project and its variants. As substantiated by the analysis provided in this section, none of the proposed modifications results in a new significant environmental impact or a substantial increase in the severity of impacts. Further, there are no new feasible mitigation measures or feasible alternatives the Project Applicant declines to adopt. Each of the modifications is analyzed in this section.

The text changes include administrative corrections to clarify information in the Draft EIR initiated by City or Agency staff, as well as the additional analysis of the proposed modifications to the Project, Variants, and Alternatives. Where new tables are being inserted or a number of changes to Draft EIR tables have been made, the new text is not shown in underline for readability. This approach also applies to the analysis for Variant 2A and Subalternative 4A, which represent new text to be added to the EIR. For new tables in Variant 2A and Subalternative 4A that directly correlate with tables in Variant 2 and Alternative 4, the tables keep the same numbering with an "a" attached. The text changes also include Appendices and revisions to EIR figures.

F.1 Changes to Executive Summary

Pages ES-4 to ES-6, Table ES-1 (Major Project Approvals) has been revised

[NOTE: This table has been revised in response to comments and as requested by staff to include additional information on Project approvals.]

Table ES-1 Major Project Approvals [Revised]

…

Redevelopment Agency Commission

…

- ~~Approves~~ Reports to the Board of Supervisors on the amendments to Redevelopment Plans

…

- Approves land transfer agreements with Port Commission, State Lands Commission, and California Department of Parks and Recreation (CDPR)

…

…

Bay Conservation and Development Commission

- Approves amendments of the Bay Plan and Seaport Plan
- Approves permits for activities within BCDC's jurisdiction, including the proposed Yosemite Slough bridge
- Reviews 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

…

US Army Corps of Engineers

- Approves permit for fill related to the Yosemite Slough bridge, shoreline improvements, and other activities~~.~~
- Consults with USFWS or NMFS regarding federally listed species prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to Section 7 of federal ESA
- Consults with NMFS regarding pile-driving and harbor seal and California sea lion prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to *Marine Mammal Protection Act*
- Consults with NMFS regarding modifying designated EFH prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to the *Magnuson-Stevens Act*

…

Page ES-8, the following new text and tables have been added immediately preceding "Alternatives." Although this text is new, for readability, it is not underlined.

PROJECT VARIANTS

Six variants of the Project were formulated by the Agency, the City, and Lennar Urban. These variants include the following:

- Variant 1: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—R&D Variant
- Variant 2: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing Variant
- Variant 2A: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing/R&D Variant

- Variant 3 (Tower Variants A, B, C, and D): Four Candlestick Point tower variants would have the same land use program and overall description as with the Project, but would have different locations and heights for residential towers at Candlestick Point
- Variant 4: A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy
- Variant 5: Shared stadium where both the San Francisco 49ers and Oakland Raiders would play at the stadium at HPS Phase II

Three variants (Variants 1, 2, and 2A) address the scenario of the San Francisco 49ers moving to the City of Santa Clara or elsewhere with no football stadium constructed at HPS Phase II. Each of those three variants includes a different land use program at the HPS Phase II site. Variant 1 (R&D Variant) would include increases in R&D space at the stadium location. Variant 2 (Housing Variant) would relocate 1,350 residential units from Candlestick Point to the stadium site. Variant 2A (Housing/R&D Variant) would relocate 1,650 housing units from Candlestick Point to the stadium site, and, in addition, includes an additional 500,000 sf of R&D compared to the Project (for a total of 3,000,000 sf of R&D); 500,000 sf of the total R&D for Variant 2A would be constructed on the stadium site along with the residential uses.

The Candlestick Point Tower Variant (Variant 3) would have the same land use program and overall description as the Project, but would have different locations, heights, and massing of residential towers at Candlestick Point (expressed as four options for this variant: Candlestick Point Tower Variant (Variant 3 [Tower Variants A, B, C, and D]).

A Utilities Variant (Variant 4) would include an automated solid waste collection system, decentralized wastewater treatment, and district energy. A 49ers/Raiders Shared Stadium Variant (Variant 5) would include the scenario of a shared stadium, where both the 49ers and Oakland Raiders would play at a new stadium at HPS Phase II.

None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description) of this EIR. The variants are analyzed at a project level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures), Section III.A through Section III.S of this EIR. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table ES-1a (Comparison of Variants to the Project). Table ES-1b (Impact Comparison of Project Variants) summarizes the effects of the Variants compared to the Project.

[NOTE: New Table ES-1a and Table ES-1b have been inserted in the Executive Summary of the EIR to provide a summarized comparison of the variants to the Project.]

Table ES-1a Comparison of Variants to the Project [New]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
						Same overall development plan as Project, but with minor shifts in building locations to accommodate 570,000 gsf for the proposed utility systems (with 330,000 gsf located below ground).	Same development plan as Project
Land Use Plan							
Residential (units)—Candlestick Point	7,850	7,850	6,500	6,225[a]	7,850	7,850	7,850
Residential (units)—Hunters Point Phase II	2,650	2,650	4,000	4,275[a]	2,650	2,650	2,650
					Same number of residential units, but different placement of towers		
Office	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Research & Development (gsf)	2,500,000	5,000,000	2,500,000	3,000,000	2,500,000	2,500,000	2,500,000
Regional Retail	635,000	635,000	635,000	635,000	635,000	635,000	635,000
Neighborhood Retail	250,000	250,000	250,000	250,000	250,000	250,000	~~125~~250,000
			Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description)	Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description]			
Tower Floor Plates	10,000 sf	10,000 sf	10,000 sf	10,000 sf	12,500 sf	N/A	N/A
Football Stadium (seats)	69,000 Stadium built by 2017	0	0	0	69,000 Stadium built by 2017	69,000 Stadium built by 2017	69,000 Shared stadium with 49ers and Oakland Raiders Stadium site built by 2017
Yosemite Slough Bridge	Auto/BRT/Ped	BRT/Ped	BRT/Ped	BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped

Table ES-1a Comparison of Variants to the Project [New]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
Parks, Open Space, and Recreation Uses							
Total Parks, Open Space, and Recreational Uses	336.4	327.0	349.4	326.6	336.4	336.4	337.5
New Parks	148.1	160.5	158	159	148.1	148.1	148.6
Sports Fields and Active Recreation	91.6	69.8	96.7	70.9	91.6	91.6	91.6
State Parklands (acres)	96.7	96.7	96.7	96.7	96.7	96.7	96.7

SOURCE: Lennar Urban, 2010.

a. The bridge would be open to automobiles only on game days.

Table ES-1b Impact Comparison of Project Variants to Project [New]

		Impacts								
					Variant 3: Candlestick Point Tower Variants					
	Topic	Variant 1: R&D Variant (No Stadium, Additional R&D)	Variant 2: Housing Variant (No Stadium, Housing)	Variant 2A: Housing Variant with R&D (No Stadium)	Tower Variant A	Tower Variant B	Tower Variant C	Tower Variant D	Variant 4: Utilities Variant (Additional On-Site Infrastructure)	Variant 5: 49ers/Raiders Shared Stadium
III.B	Land Use and Plans	=	=	=	=	=	=	=	=	=
III.C	Population, Housing, and Employment	=	=	=	=	=	=	=	=	=
III.D	Transportation and Circulation	>	<	>	=	=	=	=	=	=
III.E	Aesthetics	=	<	<	>	>	>	>	=	=
III.F	Shadows	<	<	<	>	=	<	<	=	=
III.G	Wind	<	<	<	=	=	=	=	=	=
III.H	Air Quality	=	=	=	=	=	=	=	=	=
III.I	Noise	>	<	=	=	=	=	=	=	=
III.J	Cultural Resources and Paleontological Resources	=	=	=	=	=	=	=	=	=
III.K	Hazards and Hazardous Materials	=	=	=	=	=	=	=	=	=
III.L	Geology and Soils	=	=	=	=	=	=	=	=	=
III.M	Hydrology and Water Quality	>	<	=	=	=	=	=	<	=
III.N	Biological Resources	=	=	=	=	=	=	=	=	=
III.O	Public Services	>	<	=	=	=	=	=	=	=
III.P	Recreation	=	=	=	=	=	=	=	=	=
III.Q	Utilities	=	=	=	=	=	=	=	<	=
III.R	Energy	=	=	=	=	=	=	=	=	=
III.S	Greenhouse Gas Emissions	>	=	=	=	=	=	=	=	=

SOURCE: PBS&J,2010.

NOTE: Each topic is compared to the Project and for each impact area, impacts are equal to (=), greater than (>), or less than (<) the Project impacts.

Page ES-9, first bullet

- **Alternative 4: Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge**— … This alternative includes preservation of ~~three~~ five potentially historic structures at HPS Phase II. This alternative does not include construction of a bridge over Yosemite Slough.

  This alternative was selected to include historic preservation of the five eligible structures on HPS and to provide a reduced development alternative to the Project. This alternative would reduce the area subject to development and would avoid significant impacts to historic resources at HPS Phase II. …

Page ES-9, after the discussion of Alternative 4 and before the discussion of Alternative 5

> **Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation**—This subalternative to Alternative 4 retains all of the historic buildings, but includes the same land use plan as described for the Project rather than a reduced development plan as under Alternative 4. This subalternative would preserve the same five historically eligible structures (Buildings 208, 211, 224, 231, and 253) as Alternative 4. The Project's land use plan would be implemented under this subalternative in terms of total square footage of land uses and district locations. However, unlike the Project, Buildings 211, 224, 231, and 253 would be retained and not demolished. The displaced R&D that, under the Project, would be built at the location of Buildings 211, 224, 231, and 253 would be distributed throughout the remainder of the HPS Phase II development and total floor area for R&D would remain the same as the Project, at 2,500,000 sf. However, the building heights in the R&D District on HPS Phase II would increase to accommodate the displaced square footage. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of Interior's Standards to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. Building 224, the air raid shelter, would be rehabilitated to provide museum space. Subalternative 4A would also retain existing grades, allowing railroad spurs and other historic elements to remain. A wave protection berm is proposed to accommodate a 36-inch sea level rise. The Bay Trail would run on top of the berm, which would be designed to include seat steps. All other components of Subalternative 4A would remain the same as under the Project.

Page ES-10, the following new tables are inserted prior to "Summary of Impacts." Although these tables are new, for readability, they are not underlined.

[NOTE: These tables are included in the Executive Summary of the EIR to include land use plan information for Subalternative 4A (Table ES-1c) and to provide a summarized comparison of the significant and unavoidable impacts of the Project compared to each of the alternatives.]

Table ES-1c (Summary of Project Alternatives) provides an overview of how the land uses of the Alternatives compare to the land uses of the Project. Table ES-1d (Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives) provides a summary comparison of the significant and unavoidable impacts of the Project compared to each of the Alternatives.

Table ES-1c Summary of Project Alternatives [New]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build with Historic Preservation*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Candlestick Point							
Residential (units)	7,850	0	7,850	1,210	5,495	7,850	6,500
Retail (gsf):							
Regional Retail	635,000	0	635,000	0	444,500	635,000	635,000
Neighborhood Retail	125,000	0	125,000	0	87,500	125,000	125,000
Retail Subtotal (gsf)	*760,000*	*0*	*760,000*	*0*	*532,000*	*760,000*	*760,000*
Community Services (gsf)	50,000	0	50,000	0	50,000	50,000	50,000
Hotel (gsf)[a]	150,000	0	150,000	0	105,000	150,000	150,000
Office (gsf)	150,000	0	150,000	0	105,000	150,000	150,000
10,000-seat Arena (gsf)	75,000	0	75,000	0	75,000	75,000	75,000
Football Stadium (seats)	0	70,000	0	70,000	0	0	70,000
HPS Phase II							
Residential (units)	2,650	1,800[b]	2,650	4,000	1,855	2,650	4,000
Neighborhood Retail (gsf)	125,000	570,000	125,000	125,000	87,500	125,000	125,000
Research & Development (gsf)	2,500,000	1,087,000	2,500,000	2,500,000	1,750,000	2,500,000	2,500,000
Artists' Studios (gsf):							
1:1 Studio Renovation and Replacement (gsf)[c]	225,000	225,000	225,000	225,000	225,000	225,000	225,000
New Artist Center (gsf)	30,000	0	30,000	30,000	30,000	30,000	30,000
Artist Studio Subtotal (gsf)	*255,000*	*225,000*	*255,000*	*255,000*	*255,000*	*255,000*	*255,000*
Community Services (gsf)	50,000	0	50,000	50,000	50,000	50,000	50,000
Football Stadium (seats)	69,000	0	69,000	0	0	69,000	0
Mixed-Use	0	580,000	0	0	0	0	0
Cultural and Education	0	330,600	0	0	0	0	0
Marina (slips)	300	0	300	300	0	300	300

Table ES-1c Summary of Project Alternatives [New]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build with Historic Preservation*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Other Elements							
Yosemite Slough bridge	Bridge	No bridge	No bridge	BRT/Pedestrian bridge	No bridge	Bridge	No bridge
Shoreline Improvements	Yes	No	Yes	Yes	Yes	Yes	Yes
State Parks Agreement/ total acres of State Parkland	Yes/96.7	No/120.2	Yes/96.7	Yes/117.2[d]	Yes/96.7	Yes/96.7	No/120.2

SOURCE: Lennar Urban, PBS&J, 2009.

a. Hotel uses include 220 rooms at the proposed Regional Retail Center.
b. 1,800 housing units on the entire Shipyard including the Phase I site.
c. Existing artist studios would be replaced at a one-to-one ratio under all alternatives.
d. Limited exchange of 3.03 acres to construct BRT/pedestrian only Yosemite Slough bridge and Alice Griffith Public Housing

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
Impact TR-1 The Project would result in construction-related transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-2 Implementation of the Project would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Project travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Project and the Project's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-3 The Project would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Project vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-4 At the intersection of Tunnel/Blanken, the Project would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-5 Project contributions at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions were determined to be significant, and no feasible mitigation measures have been identified.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-6 Project contributions 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, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-6 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-8 Project contributions at the intersections of Bayshore/Geneva, which would operate at LOS F under 2030 No Project conditions, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-8 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-10 The Project would result in significant Project traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-11 The Project would contribute to significant cumulative traffic impacts at four freeway segments. No feasible mitigation is available.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-12 The Project would result in significant impacts at four freeway on-ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-13 The Project would contribute to significant cumulative traffic impacts at 12 freeway ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-14 The Project would result in significant impacts related to freeway diverge queue storage at the Harney/US-101 Northbound Off-ramp. Mitigation measure MM TR-6 has been identified to avoid this impact, but its implementation is uncertain. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-15 The Project would contribute to significant cumulative traffic impacts related to freeway diverge queue storage at some off-ramp locations. Mitigation measure MM TR-6 has been identified to avoid this impact at the US-101 Northbound off-ramp to Harney Way, and US-101 Southbound Off-ramp to Harney Way/Geneva Avenue. However, implementation is uncertain. For the other ramps, no feasible mitigations have been identified. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-21 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. Implementation of mitigation measures MM TR-21.1 and MM TR-21.2 could reduce impacts to transit operations. However, since feasibility of MM TR-21.1 is uncertain, and since MM TR-21.2, without MM TR-21.1, would reduce, but not completely avoid, impacts on the 9-San Bruno, Project impacts and Project contributions to cumulative impacts on the 9-San Bruno would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-22 The Project would increase congestion and contribute 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. Implementation of mitigation measure MM TR-22.1 and MM TR-22.2 would reduce impacts to transit operations. However, since feasibility of MM TR-22.1 is uncertain, and since MM TR-22.2, without MM TR-22A, would reduce, but not completely avoid, impacts on the 23-Monterey, 24-Divisadero, and 44-O'Shaughnessy, Project impacts and Project contributions to cumulative impacts on the these lines would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-23 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. Implementation of mitigation measures MM TR-23.1 and MM TR-23.2 would reduce impacts to transit operations. However, since feasibility of MM TR-23.1 is uncertain, and since MM TR-23.2, without MM TR-23.1, would reduce, but not completely avoid, impacts on the 29-Sunset, Project impacts and Project contributions to cumulative impacts on the 29-Sunset would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-24 The Project would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street. Implementation of mitigation measures MM TR-24.1 and MM TR-24.2 would reduce impacts to transit operations. However, since feasibility of MM TR-24.1 is uncertain, and since MM TR-24.2, without MM TR-24.1, would reduce, but not completely avoid, impacts on the 48-Quintara-24th Street, Project impacts and Project contributions to cumulative impacts on the 48-Quintara-24th Street would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-25 The Project would increase congestion at intersections in the study area, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the 54-Felton. Implementation of mitigation measure MM TR-25 would reduce, but not avoid impacts.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-26 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. Implementation of mitigation measures MM TR-26.1 and MM TR-26.2 would reduce impacts to transit operations. However, since feasibility of MM TR-26.1 is uncertain, and since MM TR-26.2, without MM TR-26.1, would reduce, but not completely avoid, impacts on the T-Third, Project impacts and Project contributions to cumulative impacts on the T-Third would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-27 The Project would increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. Implementation of mitigation measures MM TR-27.1 and MM TR-27.2 would reduce impacts to transit operations. However, since feasibility of MM TR-27.1 is uncertain, and since MM TR-27.2, without MM TR-27.1, would reduce, but not completely avoid, impacts on the 28L-19th Avenue/Geneva Limited, Project impacts and Project contributions to cumulative impacts on the 28L-19th Avenue/Geneva Limited would remain significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-28 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 has been identified.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-30 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.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-32 The Project's proposed transit preferential treatments and significant increases in traffic volumes on Palou Avenue would result in impacts on bicycle travel on Bicycle Routes #70 and #170 between Griffith Street and Third Street. The effectiveness of mitigation is uncertain. Therefore, the impact would remain significant.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-38 For as many as 12 times a year 49ers games at the proposed stadium would result in significant impacts on study area roadways and intersections. Implementation of mitigation measure MM TR-38 would lessen game-day impacts; however, traffic impacts would remain significant.					
Significance of Alternative Compared to Project	<	=	<	<	<
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Impact TR-39 The existing game day service and Project transit improvements would not be adequate to accommodate projected transit demand. Implementation of mitigation measure MM TR-39 would reduce game-day impacts on transit capacity; however, traffic impacts on transit operations would remain significant.					
Significance of Alternative Compared to Project	<	=	<	<	<
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Impact TR-46 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. Implementation of mitigation measure MM TR-46 would reduce but not avoid impacts.					
Significance of Alternative Compared to Project	<	=	<	<	<
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Impact TR-47 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.					
Significance of Alternative Compared to Project	<	=	<	<	<
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Impact TR-51 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 was operating acceptably under Project conditions without an arena event. Mitigation measure MM TR-51 would reduce but not avoid impacts.					
Significance of Alternative Compared to Project	<	=	<	<	=
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/SU

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-52 Sell-out weekday evening events at the arena could impact existing and proposed transit service. However, traffic congestion would impact transit operations. Implementation of mitigation measure MM TR-23.1 would reduce impacts to less than significant. Due to the uncertainty of this mitigation the impact would remain significant.					
Significance of Alternative Compared to Project	<	=	<	<	=
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/SU
AIR QUALITY					
Impact AQ-4 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 in the year 2029.					
Significance of Alternative Compared to Project	<	=	<	<	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
Impact NO-2 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 activity on adjacent parcels is complete. Although the Project's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Project	=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-3 Construction activities associated with the Project would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-6 Operation of the Project would generate increased local traffic volumes that could cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-7 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.					
Significance of Alternative Compared to Project	<	=	<	<	<
Level of Significance after Mitigation (Project/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI

Table ES-1d Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
CULTURAL RESOURCES					
Impact CP-1 Construction activities associated with the Project could result in a substantial adverse change in the significance of a historical resource.					
Significance of Alternative Compared to Project	=	=	=	<	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/LTS	SU/SU

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page ES-12, Table ES-2 (Summary of Environmental Effects and Mitigation Measures) has been revised

[NOTE: This table has been revised to reflect changes and refinements in mitigation measures made both in response to comments and as requested by City/Agency staff for correction or clarification.]

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
…			
		SECTION III.D (TRANSPORTATION AND CIRCULATION)	
Impact TR-1 Construction of the Project would result in transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity.	**PS**	**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. 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 ~~II~~2, Phase ~~III~~3, and Phase ~~IV~~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 guidance for a project of this size and characteristics. ■ 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	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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.	
…			
Impact TR-6 Implementation of the Project could contribute 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.	**PS**	**MM TR-6** *Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.* 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 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 Interchange Project.	**SU/MM**
Impact TR-8 Implementation of the Project could contribute traffic to the intersections of Bayshore/Geneva, which would operate at LOS F under 2030 No Project.	**PS**	**MM TR-8** *Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts.* 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. 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 Geneva Avenue Extension Project.	**SU/MM**
…			
Impact TR-16 Implementation of the Project would increase traffic volumes ~~and~~, but would not ~~contribute~~ make a considerable contribution to cumulative traffic volumes on Harney Way.	**PS**	**MM TR-16** *Widen Harney Way as shown in Figure 5 in the Transportation Study.* Prior to issuance of the grading permit for Development Phase ~~II~~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	**LTS/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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.	
…			
Impact TR-21 Implementation of the Project could 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.	**PS**	**MM TR-21.1** *Maintain the proposed headways of the 9-San Bruno.* To address Project impacts to the 9-San Bruno, prior to issuance of a grading permit for Development Phase ~~I~~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 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. ■ 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. ■ 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). ■ At the intersection of San Bruno/Silver install signal priority treatments on westbound Silver Avenue, where buses waiting to turn left from 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. 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.	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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.* 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.	
Impact TR-22 Implementation of 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.	**PS**	**MM TR-22.1** *Maintain the proposed headways of the 23-Monterey, 24-Divisidero, and the 44-O'Shaughnessy.* To address Project impacts to the 23-Monterey, 24-Divisidero and the 44-O'Shaughnessy, prior to issuance of a grading permit for Development Phase ~~I~~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-Divisidero, and the 44-O'Shaughnessy. ■ 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 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.	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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 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. **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 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. 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.	
Impact TR-23 Implementation of 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.	**PS**	**MM TR-23.1** *Maintain the proposed headways of the 29-Sunset.* To address Project impacts to the 29-Sunset, prior to issuance of a grading permit for Development Phase ~~I~~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 Gilman Avenue and Paul Avenue corridor, generally between Arelious Walker Drive and Bayshore Boulevard. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the 29-Sunset. ■ For the five-block segment of Gilman Avenue between Arelious Walker Drive and Third Street, prohibit on-street parking on westbound Gilman Avenue during the AM and PM peak periods to provide for three westbound travel lanes. During the peak periods convert one of the three westbound travel lanes to transit-only. During off-peak periods, parking would be allowed, and buses would travel in one of the two mixed-flow lanes. The peak period transit lanes would impact 90 parking spaces. ■ For the same five-block segment of Gilman Avenue between Arelious Walker Drive and Third Street, restripe the eastbound direction to 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	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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. ■ As an alternative to the two bulleted measures above, ~~narrow the existing sidewalks~~ convert one of the travel lanes in each direction on Gilman Avenue from Third Street to Griffith Street ~~(four blocks) from 15 feet to 12 feet in width. The resulting 12-foot-wide sidewalks would be consistent with the Better Streets Plan guidelines. The reduction in sidewalk width~~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 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 (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. 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. **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.* 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.	
Impact TR-24 Implementation of the Project would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street.	**PS**	**MM TR-24.1** *Maintain the proposed headways of the 48-Quintara-24th Street.* To address Project impacts to the 48-Quintara-24th Street, prior to issuance of a grading permit for Development Phase ~~I~~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 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-24th Street.	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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. 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. **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.* 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 headways on the 48-Quintara-24th 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.	
…			
Impact TR-26 Implementation of 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.	**PS**	**MM TR-26.1** *Maintain the proposed headways of the T-Third.* To address Project impacts to the T-Third, prior to issuance of a grading permit for Development Phase ~~I~~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. ■ Reconfigure the section of Third Street between Thomas Avenue and Kirkwood 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. Implementation of the ~~intersection~~ 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. **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.* 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	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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.	
…			
Impact TR-32 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.	**PS**	**MM TR-32** *Determine the feasibility of relocating Bicycle Routes #70 and #170.* Prior to issuance of the grading permit for Development Phase ~~I~~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.~~ Since the feasibility of the relocation of the routes is uncertain at this time, the Project impact on bicycle circulation on Palou Avenue would remain significant and unavoidable.~~	**SU/MM**
…			
Impact TR-39 Implementation of the Project with existing game day service and Project transit improvements would not be adequate to accommodate projected transit demand.	**PS**	**MM TR-39** *Transit Service during Game Days.* 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). 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. 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.	**SU/MM**
…			
Impact TR-46 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	**PS**	**MM TR-46** *Traffic Control Officers.* 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 by SFMTA. The stadium operator shall fully fund implementation of the secondary event (i.e., non-49ers football events) measures.	**SU/MM**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
nine additional intersections and one additional freeway off-ramp.			
Impact TR-47 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.	**PS**	**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). ■ 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 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). ■ 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. 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.	**SU/MM**
…			
Impact TR-49 With implementation of the Project, pedestrian circulation would not be impeded during ~~arena~~ secondary events at the stadium.	**LTS**	No mitigation is required.	**LTS**
…			

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
Impact TR-51 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 was operating acceptably under Project conditions without an arena event.	**PS**	**MM TR-51** *Transportation Management Plan (TMP).* 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 provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light-rail route. 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.	**SU/MM**
Impact TR-52 With implementation of the Project, sell-out weekday evening events at the arena could ~~be accommodated within the~~ impact existing and proposed transit service.	**PS**	MM TR-23.1 would apply to this impact. If Variants 1, 2, or 2A are implemented, MM TR-51 would also apply to this impact.	**SU/MM**
…			
		SECTION III.E (AESTHETICS)	
…			
Impact AE-7a Implementation of the Project at Candlestick Point would not 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.	**PS**	**MM AE-7a.1** *Lighting Direction/Fixtures and Screening Walls to Minimize Glare and Light Spill.* 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. **MM AE-7a.2** *Low-level/Unobtrusive Light Fixtures.* The Project Applicant shall ensure that landscape illumination and exterior sign lighting shall be accomplished with low-level, unobtrusive fixtures. **MM AE-7a.3** *Lighting Plan.* The ~~Project Applicant~~ Developer shall prepare a lighting plan for each sub-phase of the Project and submit it ~~for review and approval~~ to the ~~San Francisco Police Department and the~~ Agency prior to ~~the issuance~~ approval of ~~building permits~~ a sub-phase. Outdoor lighting shall maintain a minimum required illumination, as determined appropriate by the ~~San Francisco Police Department and the Planning Department,~~ 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	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		arrangement of exterior lighting such that it does not create glare, hazardous interference on adjacent streets, or properties or result in spill light that would adversely impact sensitive receptors in the project area. **MM AE-7a.4** *Non-reflective Exterior Surfaces to Minimize Glare Impacts.* 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.	
…			
		SECTION III.G (WIND)	
…			
Impact W-1a Implementation of the Project at Candlestick Point would not include tall structures that would result in ground-level-equivalent wind speed exceeding 26 mph for a single hour of the year in pedestrian corridors and public spaces.	**PS**	**MM W-1a** *Building Design Wind Analysis.* Prior to design approval of Project buildings,~~ if recommended by Agency staff~~ for high-rise structures above 100 feet, the Project Applicant shall retain a 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.	**LTS/M**
…			
		SECTION III.H (AIR QUALITY)	
…			
Impact AQ-2 Construction activities associated with the Project would not result in impacts to on-site and off-site populations from Project-generated emissions of DPM.	**PS**	**MM AQ-2.1** and **MM AQ-2.2** would apply to this impact	**LTS/M**
Impact AQ-2a Construction at Candlestick Point would not result in impacts to off-site	**PS**	**MM AQ~~-~~2.1** *Implement Emission Control Device Installation on Construction.* 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 USEPA Tier 2 standards outfitted with California	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
populations from Project-generated emissions of DPM.		ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~ the first two years of construction activities, increasing to 75% of the fleet in ~~2012~~the third year and 100% of the fleet starting in ~~2013~~the fourth year and for the duration of the Project.	
…			
Impact AQ-2c Construction activities associated with the Project would not result in impacts to the existing Alice Griffith Public Housing from Project-generated emissions of DPM.	**PS**	**MM AQ-2.1** would also apply to this impact. **MM AQ-2.2** *Implement Accelerated Emission Control Device Installation on Construction Equipment Used for Alice Griffith Parcels.* 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 though CP06) ~~would~~ utilize equipment which meets the USEPA Tier 4~~2~~ ~~engine~~ 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.	**LTS/M**
…			
Impact AQ-4 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 ~~in the year 2029~~.	**S**	No feasible mitigation is available.	**SU**
…			
Impact AQ-6 Implementation of HPS Phase II would not expose nearby receptors to an increase in local concentrations of toxic air contaminants due to the operation of Research and ~~Implementation~~ Development uses.	**PS**	**MM AQ-6.1** ~~In accordance with the approach used to evaluate this impact, the minimum plot size for facility with sources of TAC emissions in R&D areas will be no smaller than 1 acre.~~ 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 these 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. **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 not cause these thresholds to be exceeded at the nearest residential locations.	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
Impact AQ-7 Operation of the Project would not ~~exceed SFDPH thresholds or otherwise~~ affect the health of nearby receptors as a result of an increase in local concentrations of vehicle emissions (PM2.5) associated with vehicle use attributable to operation of the Project.	**LTS**	No mitigation is required.	**LTS**
…			
		SECTION III.I (NOISE AND VIBRATION)	
…			
Impact NO-7 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.	**S**	**MM NO-7.1** *Mitigation to Minimize Game/Concert-related Temporary Increases in Ambient Noise Levels at Nearby Residences.* 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: ■ After ~~certification of the EIR~~ 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 ■ 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: > 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	**SU/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s) ~~and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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 stadium noise intrusions **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 ~~Stadium Operator~~ 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}.	
…			
		SECTION III.J (CULTURAL RESOURCES AND PALEONTOLOGICAL RESOURCES)	
…			
Impact CP-1b Construction at HPS Phase II could result in a substantial adverse change in the significance of an historical resource.	**S**	**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 *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Draft Historic Resources Survey and Technical Report*, July 2009, prepared by Circa Historic Property Development. 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 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	**SU/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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 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 ~~Historic Preservation Commission~~ 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 ~~Historic Preservation Commission~~ SFRA, in consultation with the ERO.	
…			
		SECTION III.K (HAZARDS AND HAZARDOUS MATERIALS)	
…			
Impact HZ-1a Construction at Candlestick Point bayward of the historic high tide line would not 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.	**PS**	**MM HZ-1a** *Article 22A Site Mitigation Plans.* (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 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. 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 ~~comparable~~ equivalent to those set forth in Article 22A for construction and development activities conducted at Candlestick Point State Recreation Area.	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s) ~~and/or Project Requirements~~*	*Level of Significance After Mitigation*
Impact HZ-1b Construction at HPS Phase II would not 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.	**PS**	**MM HZ-1b** *Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents.* (Applies only to HPS Phase II) Prior to obtaining a grading, 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 LIFOCs, 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.	**LTS/M**
…			
Impact HZ-2a Construction at Candlestick Point would not 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.	**PS**	**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 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 identification of chemicals of concern,	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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.	
…			
Impact HZ-9 Construction at HPS Phase II would not expose construction workers, the public, or the environment to unacceptable levels of hazardous materials as a result of Yosemite Slough bridge construction.	**PS**	**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 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.	**LTS/M**
…			
Impact HZ-12 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" would not 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.	**PS**	**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.	**LTS/M**
…			

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
Impact HZ-15 Construction and grading activities associated with the Project would not disturb soil or rock that could be a source of naturally occurring asbestos in a manner that would present a human health hazard.	**PS**	**MM HZ-15** *Asbestos Dust Mitigation Plans and Dust Control Plans.* 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. 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: ■ 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: > 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 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 > 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 ■ 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: > 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	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		> Hydroseed or apply non-toxic soil stabilizers to disturbed surface areas and storage piles greater than ten cubic yards 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: ■ 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 porosity.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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 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.	
…			
		SECTION III.M (HYDROLOGY AND WATER QUALITY)	
…			
Impact HY–1a Construction at Candlestick Point would not cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements.	**PS**	**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: ■ 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 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,	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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. > 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 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. **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	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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. 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, 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. ■ Scheduling: > 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: > 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 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.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		> 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. ■ 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 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.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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 construction entrances and away from roadways, storm drains, and receiving waters. > 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: > Road paving, surfacing and asphalt removal activities. > Handling and disposal of concrete and cement. ■ BMP Inspection, Maintenance, and Repair: > 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: > 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, corrective actions, and visual observations of off-site discharges of sediment or other pollutants, as required by the SFRWQCB. > 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.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ Post-construction BMPs: > 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** *Groundwater Dewatering Plan.* Prior 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. 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: ■ 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 (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	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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 HZ-1a**, **MM HZ-2a.1**, **MM HZ-5a, MM HZ-15**, **MM BI-4a.1,** and **MM BI-4a-.2** would also apply to this impact.	
…			
Impact HY-12a Implementation of the Project at Candlestick Point would not 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.	**PS**	**MM HY-12a.1** *Finished Grade Elevations Above Base Flood Elevation.* The Project site shall be graded such that finished floor elevations are ~~6.5~~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. **MM HY-12a.2** *Shoreline Improvements for Future Sea-Level Rise.* Shoreline and public access 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~~ along the shoreline~~ 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 legislative 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.	**LTS/M**
…			
Impact HY-13b Implementation of the Project at HPS Phase II would not place structures within a 100-year flood hazard area or impede or redirect flood flows.	**PS**	**MM HY-12a.2** would also apply to this impact.~~**MM HY-13b** Floodplain Development Permit. To reduce the impacts of placing structures in a 100-year flood hazard area that could impede or redirect flows, the Project Applicant shall implement that following measures:~~ ~~■ The Project Applicant shall obtain a Floodplain Development Permit from the Office of the City Administrator in accordance with the City's floodplain management ordinance that includes a hydraulic evaluation to determine whether structures or structural elements would impede or redirect flood flows and mandates minimum design and construction standards. Design and construction methods shall comply with NFIP requirements for placing structures in Zone V.~~ ~~■ The Floodplain Development Permit shall include a "V-Zone Certification" in accordance with the NFIP. As part of the certification, a professional engineer or architect shall consider the NFIP "Free-of-Obstruction"~~	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		~~requirement, to ensure that floodwaters or waves would not be deflected into a building or adjacent structure.~~	
…			
Impact HY-14 Implementation of the Project would not 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.	**PS**	**MM HY-14** *Shoreline Improvements to Reduce Flood Risk.* To reduce the flood impacts of failure of existing shoreline~~ protection~~ 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. **MM HY-11a.2** would also apply to this impact.	**LTS/M**
…			
SECTION III.N (BIOLOGICAL RESOURCES)			
(Note: As mentioned in the introductory text, Project impacts for Impact BI-3a through Impact BI-21b are provided by Impact BI-22 through Impact BI-26)			
…			
Impact BI-4a Construction at Candlestick Point 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.	**PS**	**MM BI-4a.1** *Wetlands and Jurisdictional/Regulated 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.	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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 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 simultaneously (i.e., in the same mitigation areas) if the mitigation satisfies all these needs. 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. 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. 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): 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	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		3. Location of mitigation site(s) and description of existing site conditions 4. Mitigation design: ■ 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. 5. Monitoring plan (including final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc.) 6. Contingency plan for mitigation elements that do not meet performance or final success criteria. 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. 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) 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 ~~40~~95 percent of the vegetation in the preserve wetland.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ Year 5 after restored areas reach colonization 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 ~~65~~95 percent of the vegetation in the preserve wetlands. 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. 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 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 construction activities near the protected resource have been completed. The fencing shall be removed immediately following construction activities. ■ 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.	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		■ 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, 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. ■ 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. ■ Testing and disposal of any dredged sediment shall be conducted as required by the USACE and the Long-Term Management Strategy (LTMS)[2] ■ <u>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 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 Water Mitigation and Monitoring Plan as described above.</u> ■ For impacts to tidal habitats: > 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	

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
…			
Impact BI-5b Construction at HPS Phase II and construction of the Yosemite Slough bridge 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.	**PS**	**MM BI-5b.1** *Avoidance of Impacts to Eelgrass.* As the design of shoreline treatments progresses, and a specific Shoreline Treatment Plan is determined, the Plan shall minimize any in-water construction required for installation of any treatment measures near either of the two eelgrass locations noted above.~~ If in-water work is completely avoided within 750 feet of these areas, there would be no impact and no further mitigation would be required. If complete avoidance of work within 750 feet of these areas is not feasible, measure MM BI-5b.2 shall be implemented.~~ **MM BI-5b.2** *Eelgrass Survey.* ~~If avoidance of work within 750 feet of two known eelgrass locations is not feasible~~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, t~~T~~his 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. If the shoreline treatments can be adjusted so that no direct impacts to eelgrass beds would occur, no 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. **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. 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	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
		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. These funds shall be applied only to eelgrass restoration within the Bay. If on-site mitigation is selected as the appropriate option, the Project Applicant shall retain a qualified biologist familiar with eelgrass ecology (as approved by the City/Agency) to prepare and implement a detailed Eelgrass Mitigation Plan. Unless otherwise directed by NMFS, the Eelgrass Mitigation Plan shall follow the basic outline and contain all the components required of the Southern California Eelgrass Mitigation Policy (as revised in 2005), including: identification of the mitigation need, site, transplant methodology, mitigation extent (typically 3:1 on an acreage basis), monitoring protocols (including frequency, staffing, reviewing agencies, duration, etc.), and success criteria. A draft Eelgrass Mitigation Plan shall be submitted to NMFS, for its review and approval prior to implementation, with a copy to the City/Agency. Once the plan has been approved, it shall be implemented in the following appropriate season for transplantation. Restored eelgrass beds shall be monitored for success over a 5-year period. **MM BI-5b.4** *Eelgrass Water Quality BMPs.* To prevent sediment that could be suspended during construction from settling out onto eelgrass, for any 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	
…			
Impact BI-9b 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,	**PS**	**MM BI-9b** *Pile Driving Design and Minimization Measures.* To minimize impacts on fish and marine mammals, the Project Applicant shall be 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. Design Measures: 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.	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
policies, or regulations, or by the CDFG or USFWS.		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. Construction Measures: 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. ~~3~~4. If steel piles must be driven with an impact hammer, an air curtain shall be installed to 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. ~~4~~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. ~~5~~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.	
…			
Impact BI-11c Construction of the Yosemite Slough bridge would not have a substantial adverse effect on designated critical habitat for green sturgeon and Central California Coast steelhead ~~through permanent and temporary impacts to aquatic and mudflat foraging habitat~~ and would not result in impacts to individuals of these species, Chinook salmon, or longfin smelt through disturbance or loss of	**PS**	**MM BI 4a.1** and **MM BI 4a.2** would apply to this impact.	**LTS/M**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
aquatic and mudflat habitat as a result of construction of shoreline revetments.			
…			
		SECTION III.O (PUBLIC SERVICES)	
…			
Impact PS-2 Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable service ratios, response times, or other performance objectives for police protection.	**Varies**	Refer to Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise), Section III.J (Cultural Resources) Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality)~~ for the specific significance conclusions and mitigation measures for construction-related effects~~.	**Varies**
…			
Impact PS-4 Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable response times for fire protection and emergency medical services.	**Varies**	Refer to Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise), Section III.J (Cultural Resources) Section III.K (Hazards and Hazardous Materials), and Section III.M (Hydrology and Water Quality)~~ for the specific significance conclusions and mitigation measures for construction-related effects~~.	**Varies**
…			
		SECTION III.P (RECREATION)	
Impact RE-1 Construction of the parks, recreational uses, and open space proposed by the Project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR.	**Varies**	Refer to 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)~~ for the specific significance conclusions and mitigation measures for construction-related effects~~.	**Varies**

Table ES-2 Summary of Environmental Effects and ~~Project Requirements/~~Mitigation Measures [Revised]

Impact(s)	*Level of Significance Prior to Mitigation*	*Mitigation Measure(s)~~ and/or Project Requirements~~*	*Level of Significance After Mitigation*
…			
Impact RE-3 Implementation of the Project would decrease the size of CPSRA but would not, overall, have an adverse~~ly~~ ~~a~~effect on the recreational opportunities offered by that park, nor would it substantially adversely affect windsurfing opportunities at the Project site.	**LTS**	No mitigation is required.	**LTS**
…			
		SECTION III.Q (UTILITIES)	
…			
Impact UT-2 Implementation of the Project would not require or result in the construction of new or expanded water treatment facilities. The Project would require the expansion of an auxiliary water conveyance system to provide adequate water supply for firefighting to the Project site.	**PS**	**MM UT-2** *Auxiliary Water Supply System.* Prior to issuance of occupancy permits, as part of the Infrastructure Plan to be approved, the Project Applicant shall construct an Auxiliary Water Supply System (AWSS) loop within Candlestick Point to connect to the City's planned extension of the off-site system off-site on Gilman Street from Ingalls Street to Candlestick Point. The Project Applicant shall construct an additional AWSS loop on HPS Phase II to connect to the existing system at Earl Street and Innes Avenue and at Palou and Griffith Avenues, with looped service along Spear Avenue/Crisp Road.	**LTS/M**
…			

NI = No Impact
LTS = Less than Significant
LTS/M = Less than Significant with Mitigation
PS = Potentially Significant
S = Significant
SU = Significant and Unavoidable
SU/M = Significant and Unavoidable with Mitigation

Following page ES-125, new Table ES-2a (Mitigation Measure Applicability Matrix) is inserted. For readability, the entries are not underlined.

[NOTE: This table is inserted to provide additional information as to the applicability of all mitigation measures identified for the Project, Variants, and Alternatives.]

Table ES-2a Mitigation Measure Applicability Matrix [New]

Mitigation Measure	*Project*	*Variant 1*	*Variant 2*	*Variant 2A*	*Variant 3*	*Variant 4*	*Variant 5*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Subalternative 4A*	*Alternative 5*
MM TR-1	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-2	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-4	●	●	●	●	●	●	●	●	n/a	●	●	●
MM TR-6	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-7	●	●	●	●	●	●	●	●	●	n/a	n/a	●
MM TR-8	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-16	●	●	●	●	●	●	●	●	n/a	●	●	●
MM TR-17	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-21.1	●	●	●	●	●	●	●	●	n/a	●	●	●
MM TR-21.2	●	●	●	●	●	●	●	●	n/a	●	●	●
MM TR-22.1	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-22.2	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-23.1	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-23.2	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-24.1	●	●	●	●	●	●	●	●	n/a	n/a	n/a	●
MM TR-24.2	●	●	●	●	●	●	●	●	n/a	n/a	n/a	●
MM TR-25	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-26.1	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-26.2	●	●	●	●	●	●	●	●	●	●	●	●
MM TR-27.1	●	●	●	●	●	●	●	●	n/a	n/a	n/a	●
MM TR-27.2	●	●	●	●	●	●	●	●	n/a	n/a	n/a	●
MM TR-32	●	●	●	●	●	●	●	●	●	●	●	●

Table ES-2a Mitigation Measure Applicability Matrix [New]

Mitigation Measure	*Project*	*Variant 1*	*Variant 2*	*Variant 2A*	*Variant 3*	*Variant 4*	*Variant 5*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Subalternative 4A*	*Alternative 5*
MM TR-38	n/a	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM TR-39	n/a	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM TR-46	n/a	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM TR-47	n/a	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM TR-51	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-2	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-7a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-7a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-7a.3	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-7a.4	●	●	●	●	●	●	●	●	●	●	●	●
MM AE-7b.1	●	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM AE-7b.2	●	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM W-1a	●	●	●	●	●	●	●	●	●	●	●	●
MM AQ-2.1	●	●	●	●	●	●	●	●	●	●	●	●
MM AQ-2.2	●	●	●	●	●	●	●	●	●	●	●	●
MM AQ-6.1	●	●	●	●	●	●	●	●	●	●	●	●
MM AQ-6.2	●	●	●	●	●	●	●	●	●	●	●	●
MM NO-1a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM NO-1a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM NO-2a	●	●	●	●	●	●	●	●	●	●	●	●
MM NO-7.1	●	n/a	n/a	n/a	●	●	●	●	n/a	n/a	●	n/a
MM CP-1b.1	●	●	●	●	●	●	●	●	●	n/a	n/a	●
MM CP-1b.2	●	●	●	●	●	●	●	●	●	n/a	n/a	●
MM CP-2a	●	●	●	●	●	●	●	●	●	●	●	●
MM CP-3a	●	●	●	●	●	●	●	●	●	●	●	●

Table ES-2a Mitigation Measure Applicability Matrix [New]

Mitigation Measure	*Project*	*Variant 1*	*Variant 2*	*Variant 2A*	*Variant 3*	*Variant 4*	*Variant 5*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Subalternative 4A*	*Alternative 5*
MM HZ-1a	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-1b	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-2a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-2a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-5a	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-9	●	●	●	●	●	●	●	n/a	●	n/a	●	n/a
MM HZ-10b	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-12	●	●	●	●	●	●	●	●	●	●	●	●
MM HZ-15	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-2a	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-3	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-4a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-4a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-4a.3	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-5a	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-6a	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-10a	●	●	●	●	●	●	●	●	●	●	●	●
MM GE-11a	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-1a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-1a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-6a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-6a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-6b.1	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-6b.2	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-6b.3	●	●	●	●	●	●	●	●	●	n/a	●	●

Table ES-2a Mitigation Measure Applicability Matrix [New]

Mitigation Measure	*Project*	*Variant 1*	*Variant 2*	*Variant 2A*	*Variant 3*	*Variant 4*	*Variant 5*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Subalternative 4A*	*Alternative 5*
MM HY-12a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-12a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM HY-14	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-4a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-4a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-4c	●	●	●	●	●	●	●	n/a	●	n/a	●	n/a
MM BI-5b.1	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-5b.2	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-5b.3	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-5b.4	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-6a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-6a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-6b	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-7b	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-9b	●	●	●	●	●	●	●	●	●	n/a	●	●
MM BI-12a.1	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-12a.2	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-12b.1	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-12b.2	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-14a	●	●	●	●	●	●	●	●	●	●	●	●
MM BI-18b.1	●	●	●	●	●	●	●	●	●	n/a	●	●
MM BI-18b.2	●	●	●	●	●	●	●	●	●	n/a	●	●
MM BI-19b.1	●	●	●	●	●	●	●	●	●	n/a	●	●
MM BI-19b.2	●	●	●	●	●	●	●	●	●	n/a	●	●
MM BI-20a.1	●	●	●	●	●	●	●	●	●	●	●	●

Table ES-2a Mitigation Measure Applicability Matrix [New]

Mitigation Measure	*Project*	*Variant 1*	*Variant 2*	*Variant 2A*	*Variant 3*	*Variant 4*	*Variant 5*	*Alternative 2*	*Alternative 3*	*Alternative 4*	*Subalternative 4A*	*Alternative 5*
MM PS-1	●	●	●	●	●	●	●	●	●	●	●	●
MM RE-2	●	●	●	●	●	●	●	●	●	●	●	●
MM UT-2	●	●	●	●	●	●	●	●	●	●	●	●
MM UT-3a	●	●	●	●	●	●	●	●	●	●	●	●
MM UT-5a	●	●	●	●	●	●	●	●	●	●	●	●
MM UT-7a	●	●	●	●	●	●	●	●	●	●	●	●
MM GC-1	●	●	●	●	●	●	●	●	●	●	●	●
MM GC-2	●	●	●	●	●	●	●	●	●	●	●	●
MM GC-3	●	●	●	●	●	●	●	●	●	●	●	●
MM GC-4	●	●	●	●	●	●	●	●	●	●	●	●

SOURCE: PBS&J, 2010.
"●" indicates that the mitigation measure is applicable; "n/a" indicates that the mitigation measure is not applicable.

F.2 Changes to Chapter I (Introduction)

Page I-5, before "Proposition G"

Proposition P (approved by the voters of San Francisco on November 7, 2000) called upon the Navy to remediate HPS to the highest levels practical to ensure flexible reuse of the property. The Board of Supervisors subsequently passed Resolution 634-01, adopting Proposition P as official City policy and urging the Navy and USEPA to take actions to implement Proposition P. The Resolution (1) recognizes that the unrestricted cleanup standard called for in Proposition P identifies a cleanup level acceptable to the community; (2) urges the Navy and FFA regulatory agencies not to rely on barriers to protect future occupants and the public from exposure to pollution, unless other remedies are technically infeasible, and (3) urges the Navy to clean up the Shipyard in a manner fully consistent with the Reuse Plan and with remedies that do not make implementation of the Reuse Plan economically infeasible.

Proposition P states a desired result that the Navy and regulators achieve in carrying out the cleanup of the Shipyard. Proposition P and the subsequent Board resolution are not directly applicable to the Project because the Navy cleanup, and decisions made by the regulators about the cleanup, is not part of the Project, Adoption and implementation of the Project would not be inconsistent with, and would not change, the City's stated desire that the Navy clean up HPS in a manner that allows flexible reuse, does not rely on barriers to protect the public from exposure unless other remedies are technically infeasible, is consistent with the Reuse Plan and does not render the Reuse Plan economically infeasible to implement. Proposition P is a general statement of policy and addresses the type of clean-up remedy that the Navy should select and the regulators should approve for HPS. The ROD for a parcel sets forth the selected remedy. Under the early transfers envisioned at the Shipyard, all radiological cleanup will be completed and RODs issued. The Navy already has issued RODs for Parcels B, D-1, UC-1, UC-2, and G. Further, the Navy already has conducted substantial remediation. Thus, by the time the Navy offers parcels being considered for early transfer to the Agency (with concurrence of USEPA and the Governor of California) the remedy already will have been selected and significant remediation completed. In the case of the first early transfer being considered—for Parcels B and G, the Navy also will have prepared (and the regulators will have approved) the remedial design documents.

Page I-9, first full paragraph

The Agency and the City held two public scoping meetings for the EIR, on September 17, 2007, and September 25, 2007. The scoping meetings provided the public and affected governmental agencies with an opportunity to present environmental concerns regarding the Project. Agencies or interested persons that did not respond during the NOP public review period or the Scoping Meetings will have an opportunity to comment during the public review period for the EIR, as well as at scheduled hearings on the Project. The NOP~~,~~ and the NOP comment letters~~, and scoping meeting minutes~~ are included in Appendix A~~1~~.

Page I-10, second paragraph

Following publication of the Draft EIR, there ~~will be~~ was a public review and comment period to solicit public comment on the information presented in the Draft EIR. The public review period ~~is~~ was originally scheduled from November 12, 2009, through December 28, 2009. Additionally, the Agency Commission

and the Planning Commission ~~will hold~~ held public hearings on this Draft EIR. The first Agency Commission hearing ~~will be~~ was held on December 15, 2009, in Room 416. At the conclusion of that hearing, a second Agency Commission hearing was scheduled for January 5, 2010. In addition, the Agency Commission voted to extend the comment period to January 12, 2010. The Planning Commission hearing ~~will be~~ was held on December 17, 2009, in Room 400 and the Planning Commission concurred with the Agency Commission's decision to extend the comment period to January 12, 2010. Both hearing rooms are located in City Hall, Dr. Carlton B. Goodlett Place, beginning at 1:30 P.M. or later (call (415) 588-6422 the week of the hearing for a recorded message giving a more specific time).

Page I-12, fourth bullet

- **Chapter IV (Project Variants)**—This chapter describes ~~five~~ six variants to the Project. These variants are also evaluated at a project-level in this chapter as follows:
  - Variant 1: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Research and Development Variant
  - Variant 2: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing Variant
  - Variant 2A: San Francisco 49ers move outside the Project area (no football stadium constructed at HPS Phase II)—Housing/R&D Variant
  - Variant 3 (Tower Variants ~~3a~~A, ~~3b~~B, C, and ~~3c~~D): ~~Three~~ Four Candlestick Point tower variants would have the same land use program and overall description as with the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point
  - Variant 4: A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy
  - Variant 5: Shared stadium where both the San Francisco 49ers and Oakland Raiders would play at the stadium at HPS Phase II

Page I-12, last bullet

- **Chapter VI (Alternatives)**—This chapter analyzes alternatives to the Project, including the required No Project Alternative, compares their environmental effects to those of the Project, and identifies the environmentally superior alternative. Alternatives evaluated in this chapter include the following:
  - Alternative 1: No Project
  - Alternative 2: CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
  - Alternative 3: Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
  - Alternative 4: Reduced CP-HPS Phase II Development, Historic Preservation, No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge
    - Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation
  - Alternative 5: Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and Without the Yosemite Slough Bridge

F.3 Changes to Chapter II (Project Description)

Page II-1, in Table II-1 (Project Site Area), the note has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table II-1 Project Site Areas [Revised]

Development Area	*Acres*
Candlestick Point	281
Hunters Point Shipyard Phase II	421
Total	***702***

SOURCE: Lennar Urban, 2009.
Candlestick Point includes the approximately 120.2-acre Candlestick Point State Recreation Area.

Page II-2, Figure II-1 (Project Location) has been revised

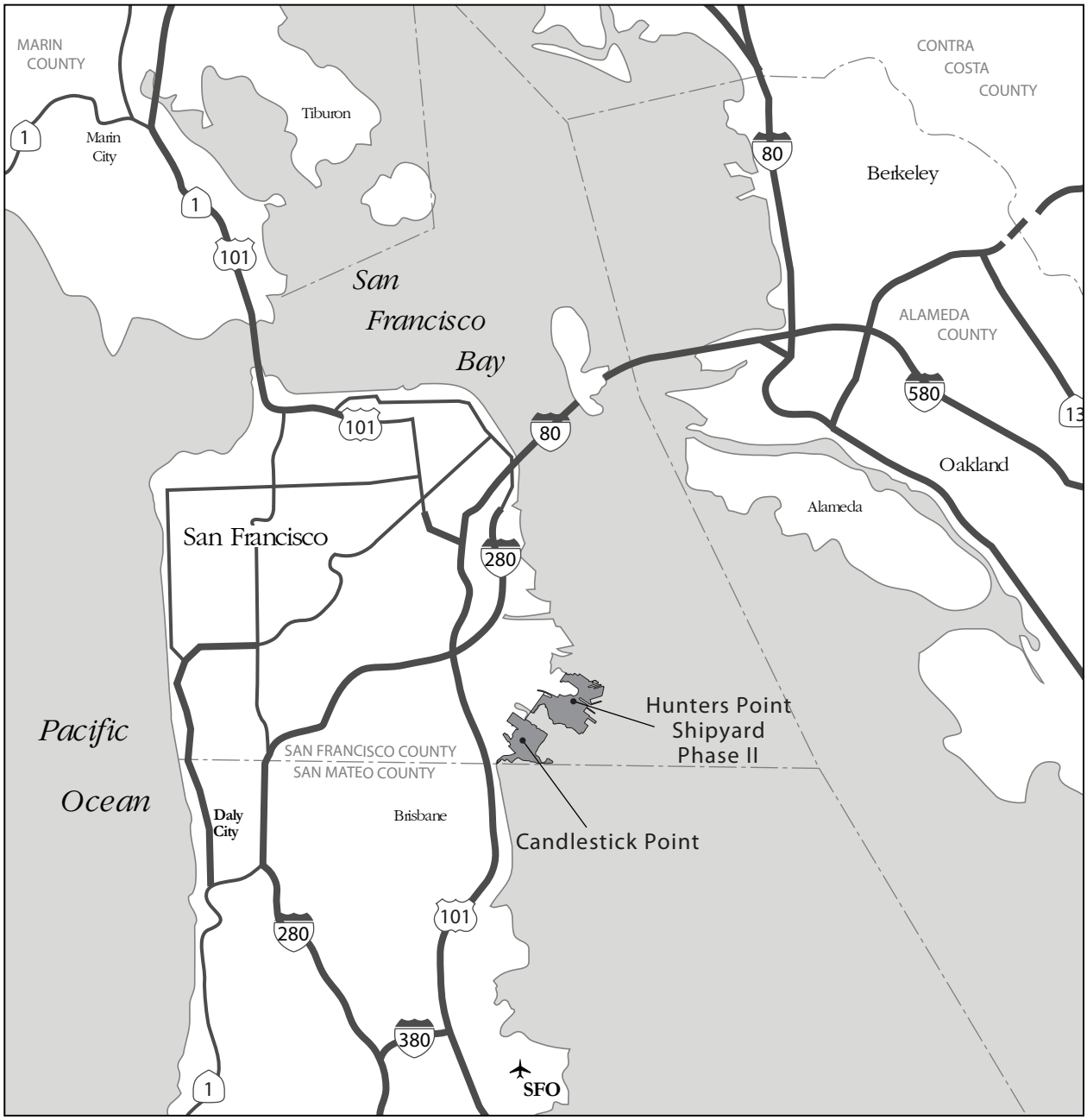
[NOTE: The figure has been revised to correct the Project Site boundaries to include Alice Griffith and Harney Way.]

Page II-3, Figure II-2 (Project Site and Context) has been revised

[NOTE: The figure has been revised to indicate the boundaries of the CPSRA and of Area C, and to clarify the boundaries of HPS Phase I.]

Page II-12, Figure II-5 (Proposed Maximum Building Heights) has been revised

[NOTE: The figure has been revised to identify major roadways.]



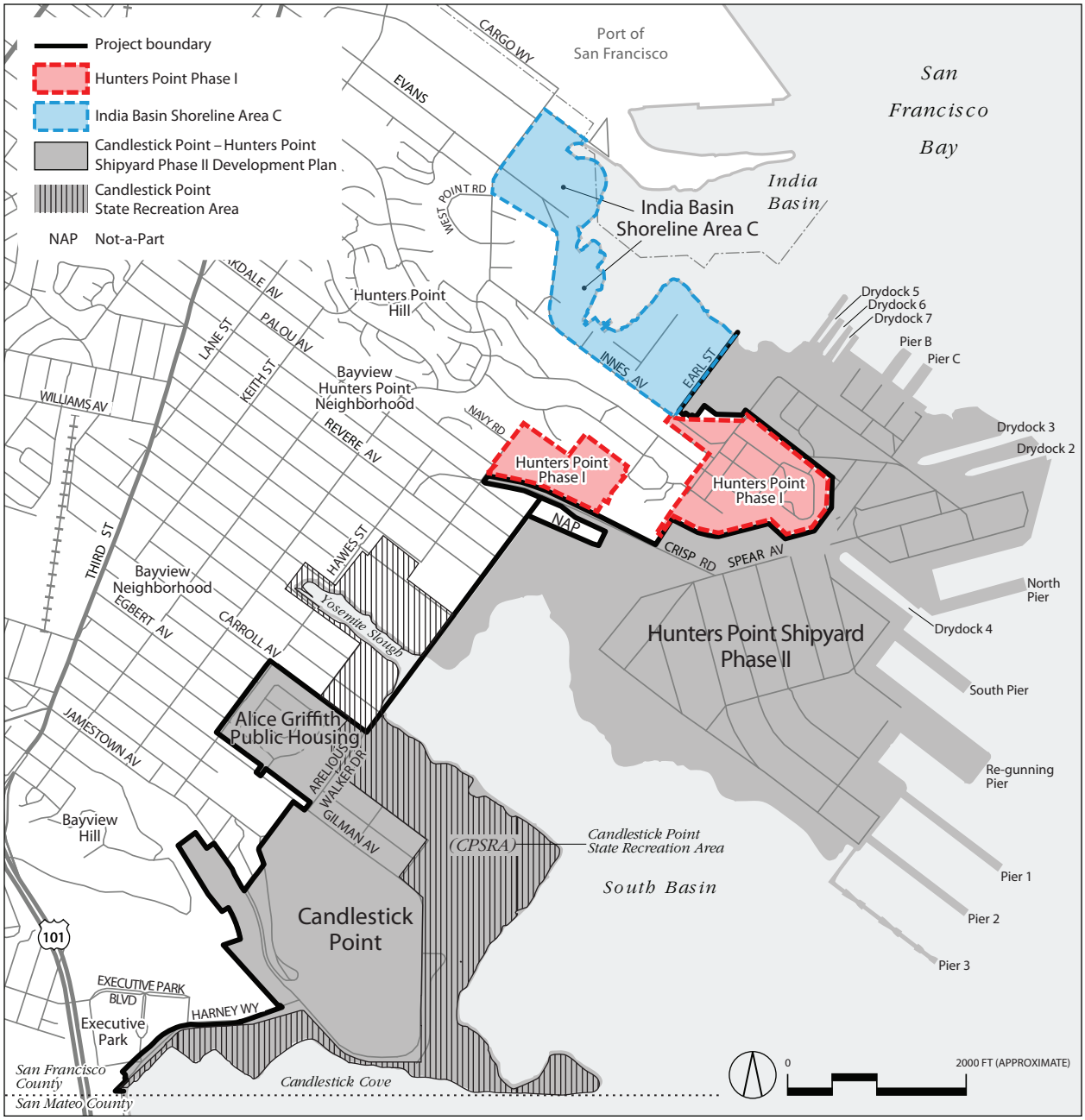
SOURCE: Clement Designs, 2008.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT LOCATION

FIGURE II-1

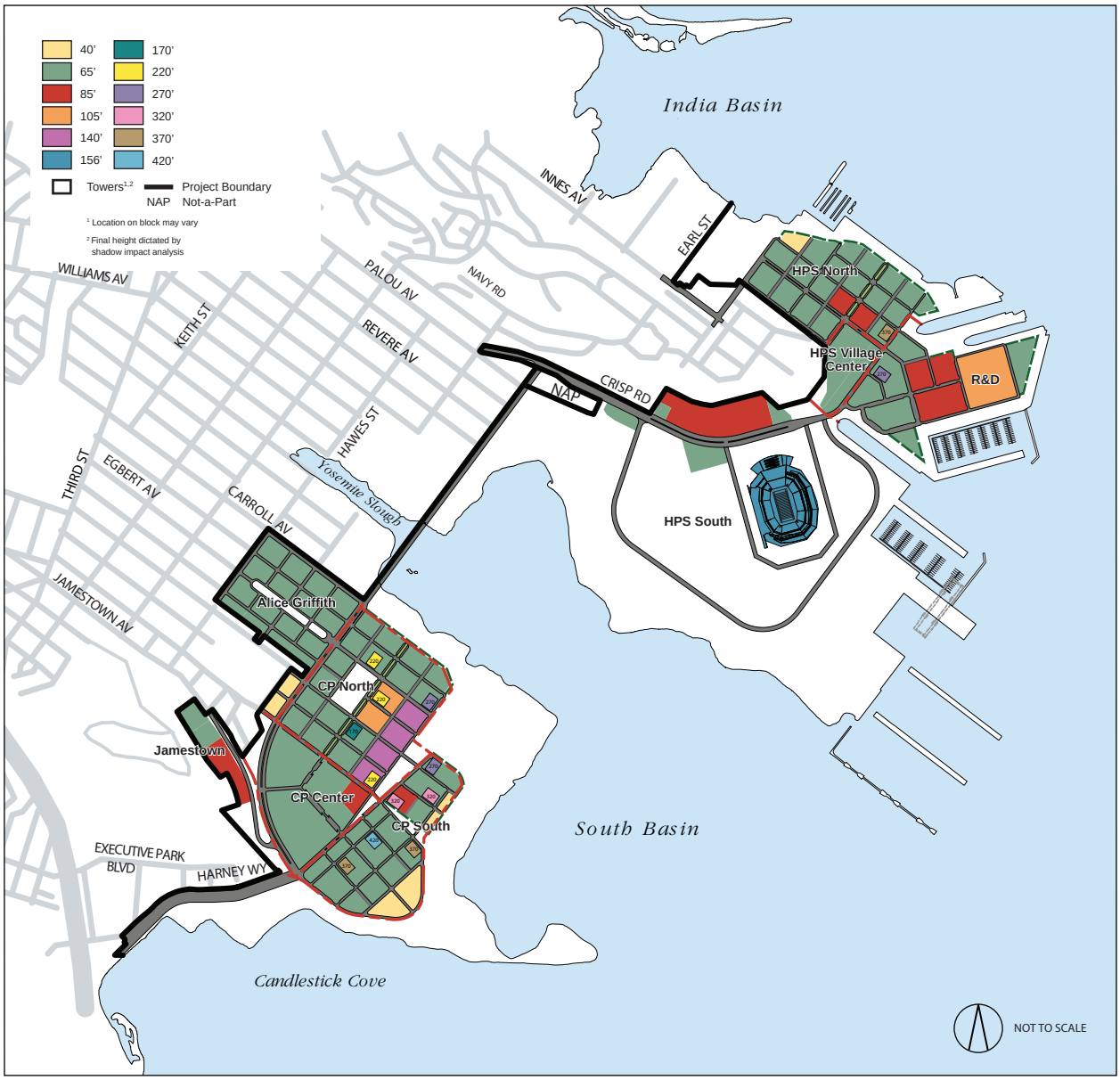


SOURCE: San Francisco Redevelopment Agency, Lennar Urban, 2009; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE II-2 Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT SITE AND CONTEXT



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED MAXIMUM BUILDING HEIGHTS

FIGURE II-5

Page II-13, second bullet

- **Regional Retail:** A regional retail center of up to 635,000 gross square feet (gsf) is proposed on Candlestick Point. Retailers could include a variety of general merchandise, apparel, furniture and home furnishings, food service and restaurants, and entertainment related businesses to serve the regional market. ~~Commercial~~ Community services may also be allowed on sites designated for regional retail uses.

Page II-14, third bullet

- **Artists' Studios/Arts Center:** Up to 225,000 gsf of artists' studios and accessory neighborhood retail is proposed on Hunters Point Shipyard and 30,000 gsf would be dedicated for the construction of an arts center.

Page II-17, fifth paragraph

Development on HPS Phase II would include demolition and replacement of studios for approximately 300 artists. In addition, all of the vacant, and some leased, Navy buildings would be demolished, with the exception of historic Drydocks Nos. 2 and 3 and Buildings 140, 204, 205, ~~and~~ 207, and 208, as discussed in Section III.J (Cultural and Paleontological Resources).

Page II-24, fifth paragraph

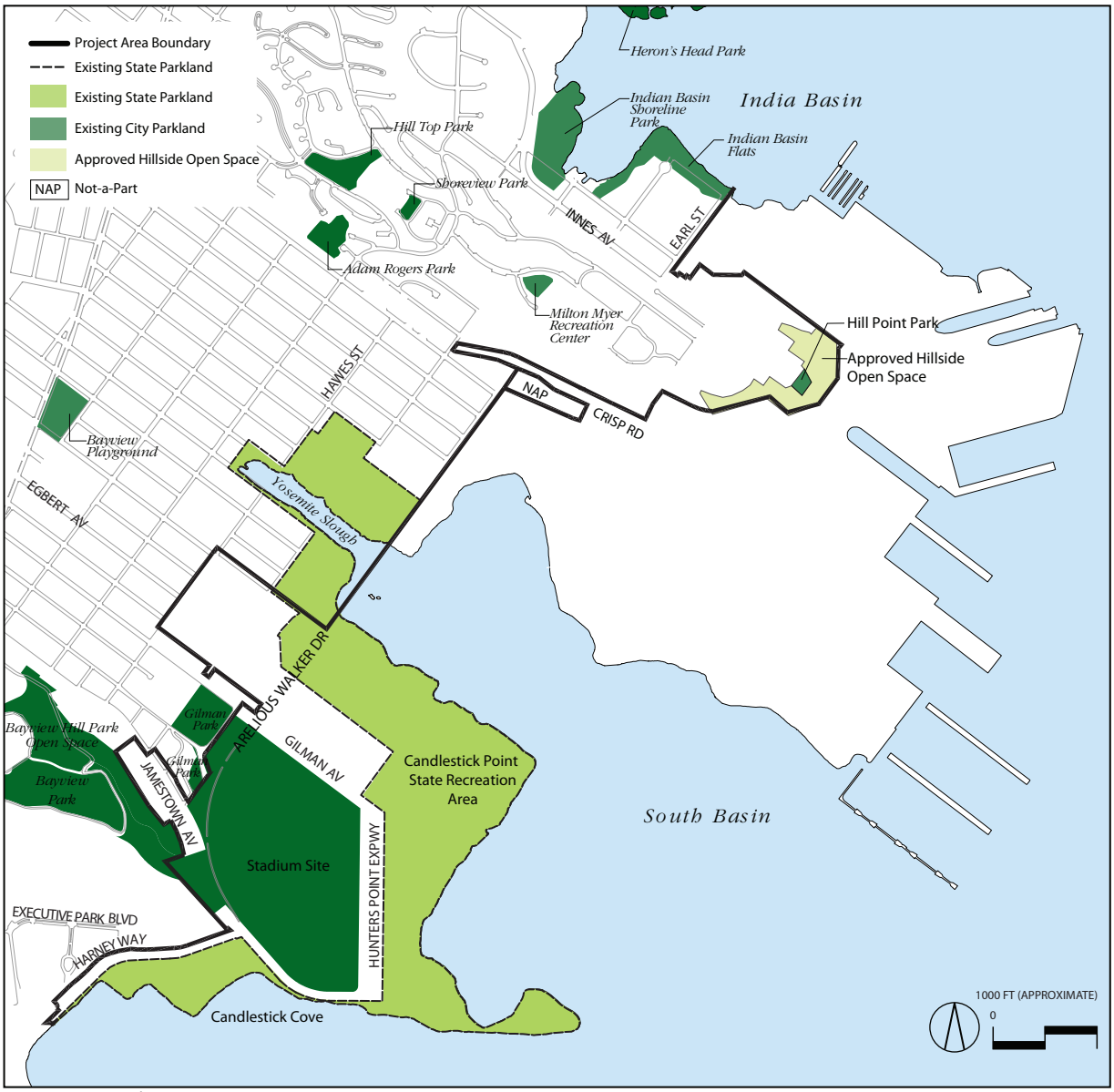
… Table II-7 (Candlestick Point Proposed State Parks Reconfiguration) presents the proposed acreage of the areas proposed to be added to or removed from the Park, as ~~required~~ identified by Senate Bill 792 (SB 792). …

Page II-26, Figure II-8 (Existing and Approved Parks and Open Space) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Open Space; and to expand the Gilman Park and Bayview Hill Park Open Space boundaries.]

Page II-27, Figure II-9 (Proposed Parks and Open Space) has been revised

[NOTE: The figure has been revised to show the Bay Trail in the preferred alignment along the Yosemite Slough shoreline. The figure has also been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.16.10 2056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE

FIGURE II-8

SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED PARKS AND OPEN SPACE

FIGURE II-9

Page II-28, first paragraph

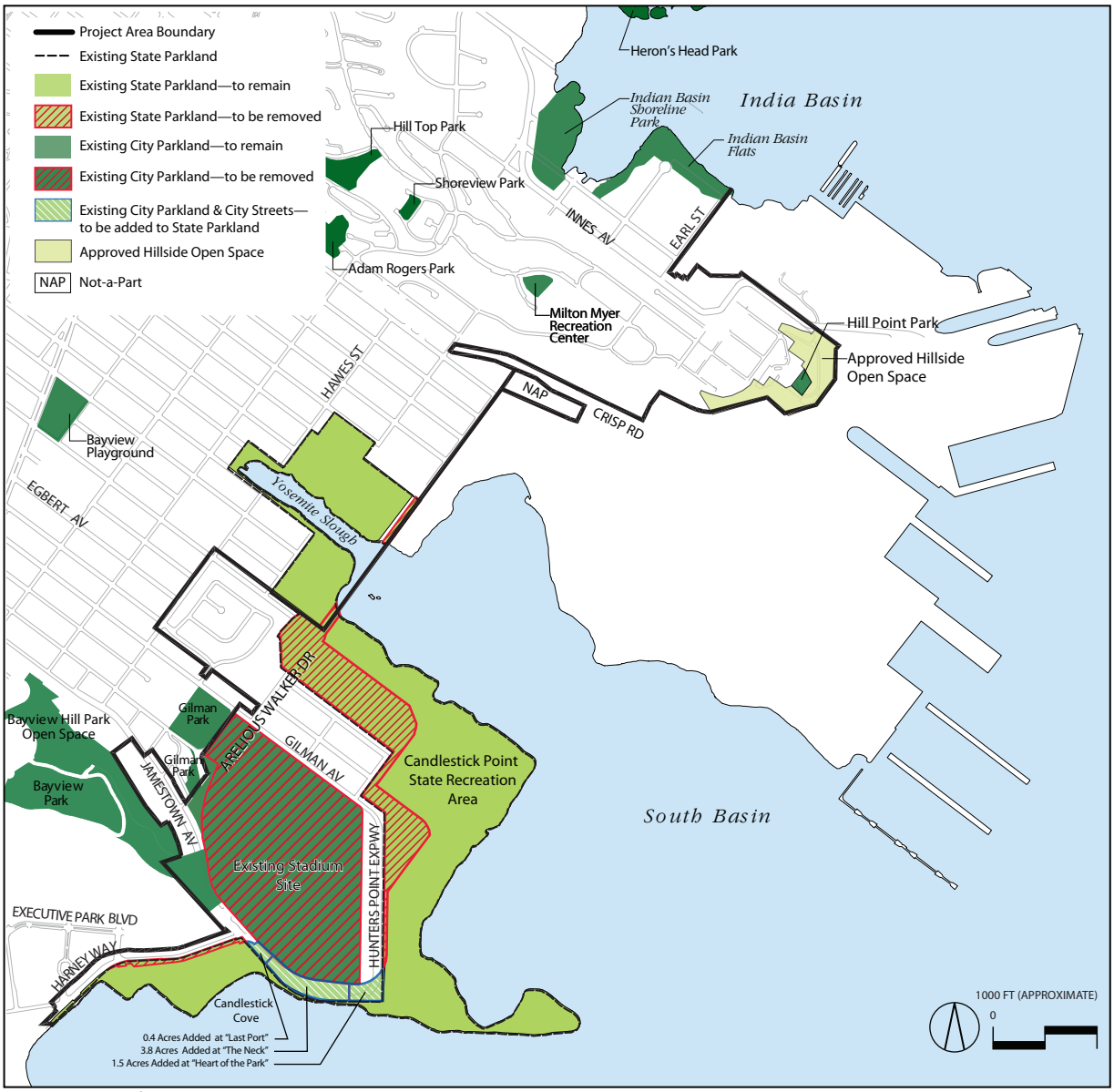
… Prior to construction of park improvements, the California Department of Parks and Recreation (CDPR) must undertake a ~~community~~ public planning process and complete an update to the general plan.

Page II-28, second paragraph

Consistent with the current CPSRA General Plan and the CDPR mission, after Project development, the CPSRA would primarily contain areas of passive uses and minimal formal landscaping. The portion of the park that is currently undeveloped or used for Candlestick Park stadium parking would be substantially improved as part of the Project to enhance overall park aesthetics and landscape ecology; reconnect visitors to the bay shoreline; and provide direct access to the bay for swimming, fishing, kayaking, and windsurfing. Proposed Project improvements include revegetation and landscaping, shoreline restoration and stabilization, infrastructure improvements (such as trails, pathways, and visitor facilities), a biofiltration pond to cleanse stormwater, the provision of habitat and opportunities for environmental education, 'Eco-Gardens,' and salt-marsh restoration. …

Page II-29, Figure II-10 (Proposed CPSRA Reconfiguration) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

PBS&J 04.21.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION

FIGURE II-10

Page II-31, second and third bullets

- Hillside Parks and Open Space within the Project site. The hillside parks and open space include the eastern 'tail' of Bayview Park and other hillside areas below Jamestown Road. ~~The steeper areas will be maintained in a more natural state., while the flatter portion of Bayview Hill may be further developed as a neighborhood-serving park space.~~ The steeper areas and the flatter portion of Bayview Hill would be maintained in a more natural state.
- Yosemite Slough. While not located within the Project site ~~except for the mouth of the Slough, where the proposed bridge would be located~~, the Yosemite Slough is located directly adjacent to the Project site and is planned for restoration by the California State Parks and the California State Parks Foundation. The restoration will focus on providing new wetland habitat and environmental education opportunities. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side.

Page II-33, third full paragraph

… The following ecological enhancement measure would be implemented in open space areas outside the CPSRA. At the CPSRA, ecological enhancements would be identified during the CDPR ~~community~~ public planning process and CPSRA general plan update described above and could include the enlisted measures or other measures …

Page II-37, Figure II-12 (Proposed Roadway Improvements) has been revised

[NOTE: The figure has been revised to clarify the two separate proposed projects at the new US-101 interchange. The labels have been revised from US-101/Harney Way Interchange Improvements to Candlestick Point Interchange Improvements/US-101 Auxiliary Lanes, and Geneva Avenue Extension has been changed to proposed Geneva Avenue Extension (pending City of Brisbane approval).]

SOURCE: Fehr & Peers; AECOM, 2010.

PBS&J 04.20.10 02056 | JCS | 10

FIGURE II-12

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED ROADWAY IMPROVEMENTS

Page II-38, Item 5

5. **Yosemite Slough Bridge.** A new Yosemite Slough bridge would extend Arelious Walker Drive from Candlestick Point to Hunters Point Shipyard. The 81-foot-wide, seven-lane bridge would cross the slough at its narrowest point and would primarily function for transit, bicycle, and pedestrian use. Figure II-12 illustrates the bridge location. The bridge and its approach streets would have two dedicated 11-foot-wide BRT lanes and a separate 12-foot-wide Class I bicycle and pedestrian facility, which would be open at all times. The bridge would also have a 40-foot-wide greenway, which would be converted to four peak direction auto travel lanes on 49ers game days only. Those four lanes would be open on game days to vehicle traffic in the peak direction of travel. The roadway would be planted with grass and would serve as an open space amenity on all non-game days. Two-foot-tall barriers would separate the BRT lanes from the bicycle/pedestrian plaza and the vehicle lanes. The greenway would be designed to function as a stormwater treatment control facility for the auto travel lanes. Runoff from the BRT lanes would also be routed to the greenway and/or to land-based stormwater treatment facilities, in accordance with the City's requirements for stormwater treatment.

Page II-39, first paragraph

The 81-foot-wide span across Yosemite Slough would be approximately 902 feet long with abutments on the north and south ends connecting the bridge to land. Eight piers, with two columns each, would support the bridge. The columns of the three southernmost piers would rest on bedrock. Ten sets of steel piles would be driven to support the columns of the five piers to the north. Section II.F.2 (Site Preparation) provides additional information regarding bridge construction. The bridge footings on either side of Yosemite Slough would require removal of portions of parkland from the CPSRA (red hatched areas). On the north side of the slough, this would result in 0.8 acre, and on the south side of the slough it would be part of 2.6 acres, that would be reconfigured. The bridge footings on the north side of the slough are located at the eastern edge of the park boundary. On the south end of the slough, the area removed for bridge footings would impinge approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA.

Page II-40, Figure II-13 (Proposed Transit Improvements) has been revised

[NOTE: The figure has been revised to delete Phase I Improvements from the legend, and rename Phase II Improvements to Bus Rapid Transit. The labels have been revised from Geneva Avenue Extension to proposed Geneva Avenue Extension (pending City of Brisbane approval).]

SOURCE: Fehr & Peers; AECOM, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED TRANSIT IMPROVEMENTS

FIGURE II-13

Page II-41, Item E

E. **Palou Avenue Transit Preferential Street.** One Muni line (24-Divisadero) would be extended along Palou Avenue to serve Hunters Point Shipyard Transit Center. Transit priority technology would be installed on Palou Avenue including installation of new traffic signals. This would improve transit travel times and reliability on the 24-Divisadero and also the 23-Monterey and ~~54-Felton~~ 44-O'Shaughnessy, which would continue to operate on Palou Avenue ~~but would not be extended into the Project~~.

Page II-50, first full paragraph

It is anticipated that the Project would be constructed over time beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period. Figure II-16 (Proposed Site Preparation Schedule) illustrates the site preparation sequence that precedes building construction. Figure II-17 (Proposed Building and Parks Construction Schedule) illustrates the building construction sequence.

Page II-50, third full paragraph

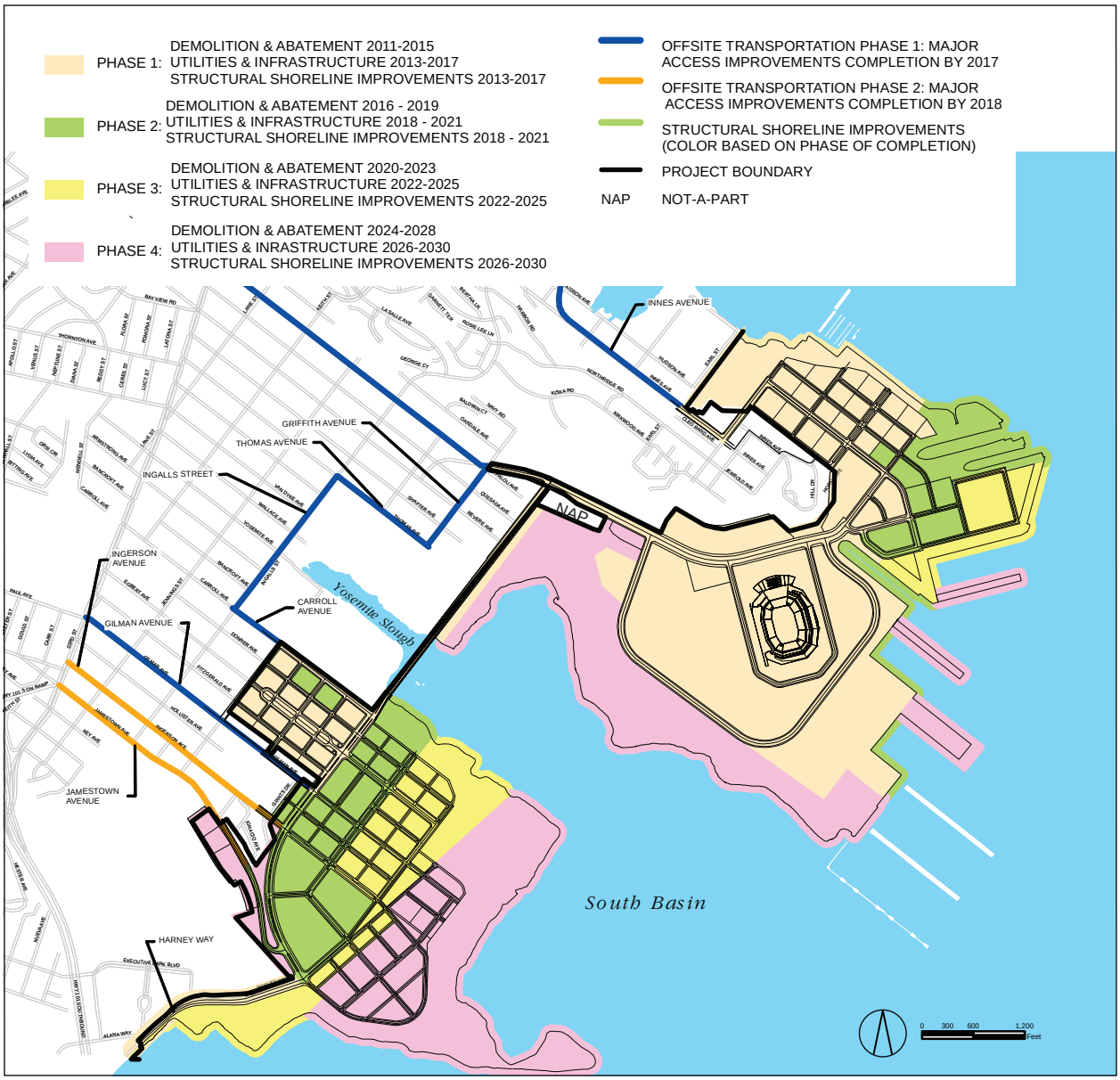
Demolition of existing structures within the Project site would occur from 2011 to ~~2024~~2028 ~~on Candlestick Point and from 2010 through 2016 on HPS Phase II~~. As the majority of development would occur on HPS Phase II during the first phase by ~~2017~~2019, most demolition would initially occur in that area of the Project site. …

Page II-51, Figure II-16 (Proposed Site Preparation Schedule) has been revised

[NOTE: The figure has been revised to indicate that site preparation activities will commence 1 to 2 years later than originally planned.]

Page II-52, Figure II-17 (Proposed Building and Parks Construction Schedule) has been revised

*[NOTE: The figure has been revised to indicate that building construction activities will commence 1 to 2 years later than originally planned. The note * Dates Subject to Change has been added.]*



SOURCE: MACTEC, 2010.

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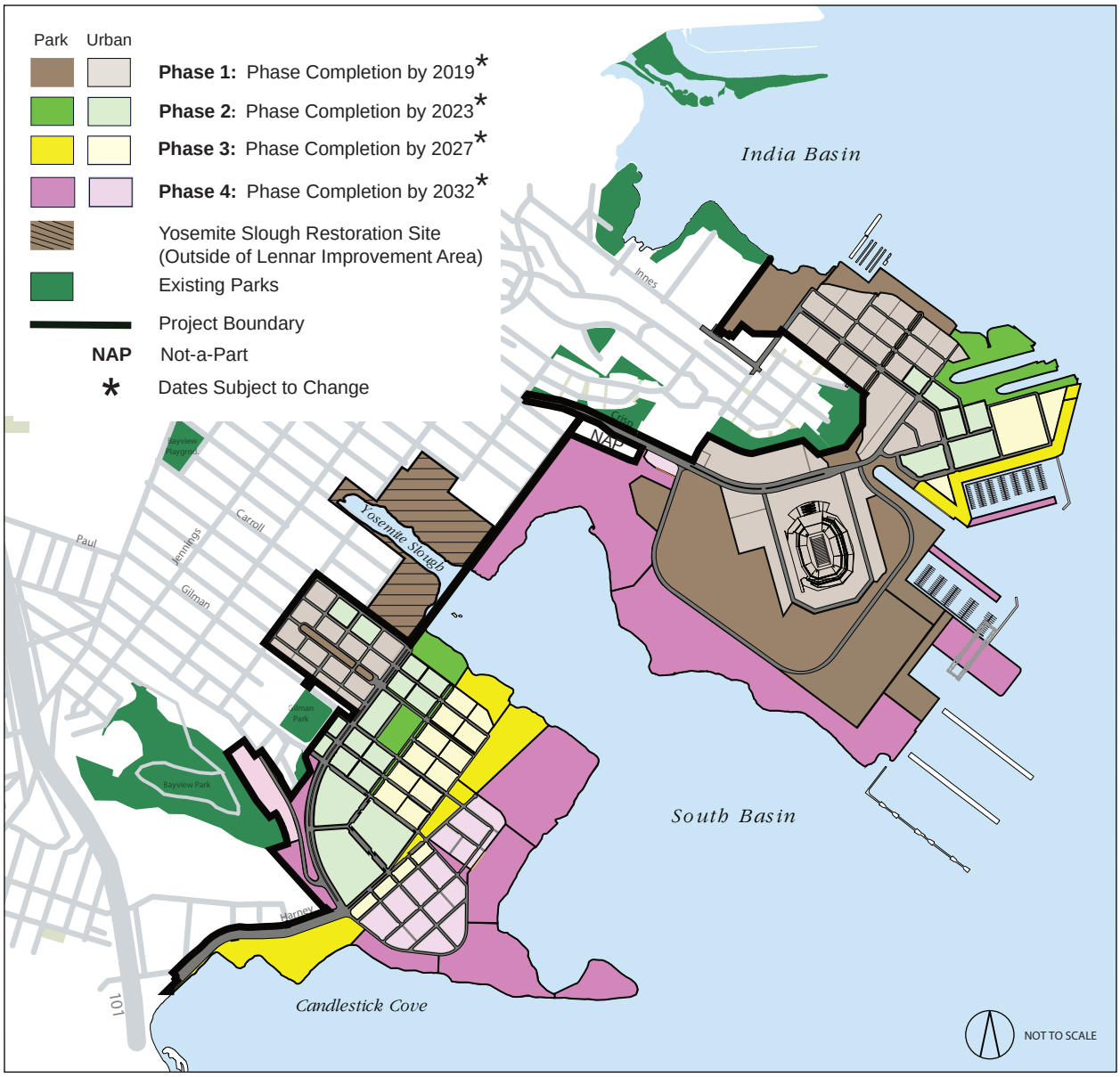
Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED SITE PREPARATION SCHEDULE

FIGURE II-16



SOURCE: Lennar Urban, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED BUILDING AND PARKS CONSTRUCTION SCHEDULE

FIGURE II-17

Page II-54, first full paragraph

The estimate of earthwork grading requirements for Candlestick Point was based on a profile along the edge of development, which allows for overland flow and piped storm drainage flow. All earthwork is assumed to be used on site for Project grading and for grading improvements to the State Park land, or is exported to HPS Phase II. Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA. …

Page II-55, first paragraph

Construction of Yosemite Slough bridge would include: radiological excavations along the boundary of Parcel E to clear the HPS Phase II bridge approach from radiological restrictions; bridge and revetment construction; and construction of the streets leading to the bridge. … The construction of footings and piers would require cofferdams for access to those specific sites. The bridge footings on either side of Yosemite Slough would require removal of portions of parkland from the CPSRA (red hatched areas). On the north side of the slough, this would result in 0.8 acre, and on the south side of the slough it would be part of 2.6 acres, that would be reconfigured. The bridge footings on the north side of the slough are located at the eastern edge of the park boundary. On the south end of the slough, the area removed for bridge footings would impinge approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA. Construction materials would be transported to the construction area from the South bay or by barge from the East bay. …

Page II-55, a new last sentence to the fourth paragraph

… several locations. The creation or expansion of beaches or tidal habitat will be determined during the public general plan process for the CPSRA.

Page II-58, Table II-13 (Summary of Shoreline Improvements at the Project Site) has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table II-13 Summary of Shoreline Improvements at the Project Site [Revised]

			Proposed Shoreline Improvements										
			Repairs				*Modifications*						
Parcel or Area	*Location*	*Proposed Use*	*Deck*	*Piles*	*Walls*	*Riprap*	*Remove*	*Remove Portion*	*Slope Top of Wall*	*New Buttress*	*Sandy Beach*	*Tidal Habitat*	*Estimated Change in Shoreline Location (feet)*[d]
…													
	Berth 37 to 42	Wildlife Habitat						X					0
	Natural Edge/Riprap	Grasslands Ecology Park										X	~~-3.0~~+3.0
E2	Natural Edge/Riprap	Grasslands Ecology Park										X	~~-3.0~~+3.0

…

d. These numbers represent an average estimated change in the shoreline at the specified location. A positive number indicates an increase in the shoreline (bay fill); and a negative number indicates a decrease in the shoreline (creation of bay).

…

Page II-78, last paragraph

Building construction at Candlestick Point would coincide with completion of the utilities and roadways for each district. Building construction would begin in the Alice Griffith district~~ followed by Candlestick Center, Candlestick North, and then Candlestick South districts~~. The second major phase of development would construct the Candlestick North district. Development of CP Center District and the Harney Way improvements would occur in Phase 3, and, finally, CP South and major shoreline improvements would be completed in Phase 4. Development in Candlestick Point would begin in 2012 and would conclude in ~~2029~~2031.

Page II-79, Table II-15 (Building Construction Completion Dates) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table is included to provide the reader with a comparison of the revised development schedule compared to the original schedule described in the Draft EIR.]

Table II-15 Building Construction Completion Dates [Revised]

Use	Development Area	Completion Year 2019	2023	2027	2032	Subtotal	Total
Residential Units	CP	1,000	1,515	2,505	2,830	7,850	10,500
	HPS	2,160	490	—	—	2,650	
Regional Retail (gsf)	CP	—	635,000	—	—	635,000	635,000
	HPS	—	—	—	—	—	
Neighborhood Retail (gsf)	CP	—	35,000	90,000	—	125,000	250,000
	HPS	84,000	41,000	—	—	125,000	
Office (gsf)	CP	—	150,000	—	—	150,000	150,000
	HPS	—	—	—	—	—	
Hotel (gsf)	CP	—	150,000	—	—	150,000	150,000
	HPS	—	—	—	—	—	
R&D (gsf)	CP	—	—	—	—	—	2,500,000
	HPS	583,000	842,000	1,075,000	—	2,500,000	
Community Services (gsf)	CP	—	50,000	—	—	50,000	100,000
	HPS	38,000	—	—	12,000	50,000	
Performance Venue (gsf/seats)	CP	—	10,000	—	—	10,000	10,000
Stadium (Seats)	HPS	69,000	—	—	—	69,000	69,000

SOURCE: Lennar Urban, 2010.

Page II-79, first paragraph following Table II-15

At Hunters Point Shipyard, new development would begin with the construction of the 49ers stadium, scheduled for completion during the 2014–2017 time period. Hunters Point North residential development and the mixed-use, neighborhood retail and residential development at Hunters Point Village Central District would begin in the first Major Phase ~~during 2011–2015~~ and is planned for completion by

~~2017~~2023. Build-out of the Shipyard Research and Development Park is planned by ~~2017~~2027. ~~The mixed-use, neighborhood retail and residential development at Hunters Point Village Center district would be completed in 2021.~~

Page II-80, first paragraph

Construction activities in Candlestick Point would occur from ~~2011~~2012 through ~~2028~~2031.[39] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2013 through 2021~~ beginning in 2013 and would align with vertical development. The number of construction workers on the site on any given day would vary from a low of ~~10~~70 during the final stages of vertical development to a maximum of ~~180~~328 workers during the peak years of development. The number of truck trips on any given day would vary from a low of ~~4~~ 8 truck trips to a maximum of ~~152~~96 during site preparation at Alice Griffith. The number of on-site equipment would be about ~~60~~68 pieces during the height of construction activity.

Page II-80, second paragraph

Construction activities in HPS Phase II would occur from ~~2010~~2011 through ~~2023~~2031.[40] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2011 through 2016~~ beginning in 2013 and would align with vertical development. The number of construction workers on the site on any given day would vary from a low of ~~14~~15 workers during the final stage of ~~shoreline improvements~~ vertical development to a maximum of ~~504~~455 workers during the peak years of development. The number of truck trips on any given day would vary from a low of 4 to 8 trucks trips to a maximum of ~~512~~288 truck trips, primarily during the peak year of grading and infrastructure development. The number of on-site equipment would be about ~~130~~65 pieces during the height of construction activity.

Pages II-80 to II-82, Table II-16 (Major Project Approvals) has been revised

[NOTE: This table has been revised in response to comments and as requested by staff to include additional information on Project approvals.]

Table II-16 Major Project Approvals [Revised]

…

Redevelopment Agency Commission

…

- ~~Approves~~ Reports to the Board of Supervisors on the amendments to Redevelopment Plans

…

- Approves land transfer agreements with Port Commission, State Lands Commission, and California Department of Parks and Recreation (CDPR)

…

…

Bay Conservation and Development Commission

- Approves amendments of the Bay Plan and Seaport Plan
- Approves permits for activities within BCDC's jurisdiction, including the proposed Yosemite Slough bridge
- Reviews 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

…

Table II-16 Major Project Approvals [Revised]

US Army Corps of Engineers

- Approves permit for fill related to the Yosemite Slough bridge, shoreline improvements, and other activities~~.~~
- Consults with USFWS or NMFS regarding federally listed species prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to Section 7 of federal ESA
- Consults with NMFS regarding pile-driving and harbor seal and California sea lion prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to *Marine Mammal Protection Act*
- Consults with NMFS regarding modifying designated EFH prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to the *Magnuson-Stevens Act*

…

Page II-83, last paragraph

~~**Streetscape Plan.** The Streetscape Plan describes street types (e.g., Residential Streets, Commercial Streets, Parkways, Transit Priority Streets), and the pedestrian, bicycle, and transit amenities proposed for each type. Design guidelines for amenities including street furnishings, plantings, lighting, and special pavement treatments at crosswalks would be included.~~

Page II-84, third paragraph

In addition, construction employees would also be needed to construct the Project. The number of construction employees would vary depending upon the phase of construction, but would range from ~~60~~83 workers at the commencement of construction activities to approximately ~~500~~617 workers during ~~2016~~2015, the most labor-intensive phases of construction. …

F.4 Changes to Section III.A (Introduction to the Analysis)

Page III.A-5, first full paragraph

This EIR evaluates the direct, indirect, and cumulative impacts resulting from planning, construction, and operation of the Project, including impacts that occur on site or off site. Since publication of the Draft EIR, the development was revised to begin one to two years later, with the completion of building construction in 2031 (rather than 2029) and full occupancy by 2032. Appendices A1 through A5 provide substantiation that the change in phasing does not alter the conclusions of this EIR.

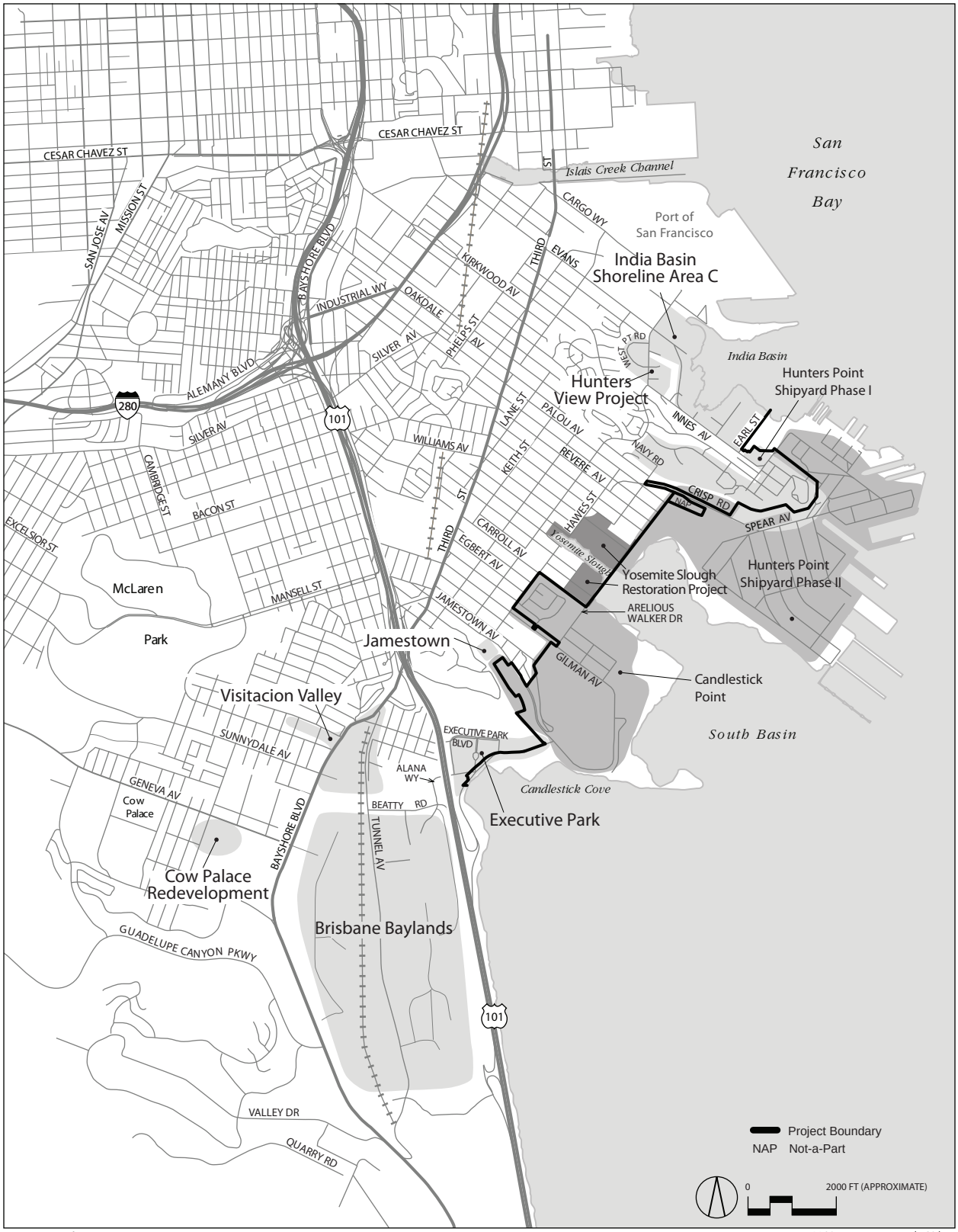
Page III.A-7, beginning with the first paragraph after the bulleted list

- Visitacion Valley/Schlage Lock

A comprehensive list of all related projects included in background growth assumptions for the traffic, air quality, and noise analyses can be found in the Traffic Report, which is included as Appendix D (Transportation Study) to this EIR. For other issue areas, the Yosemite Slough Restoration Project was also included as a related project.

Page III.A-8, Figure III.A-1 (Cumulative Development in the Project Vicinity) has been revised

[NOTE: The figure has been revised to add Yosemite Slough Restoration Project.]



SOURCE: Fehr & Peers, AECOM, 2010.

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FIGURE III.A-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

CUMULATIVE DEVELOPMENT IN THE PROJECT VICINITY

F.5 Changes to Section III.B (Land Use and Plans)

Page III.B-2, last paragraph

… Other uses in the Baylands include building supply businesses, lumberyards, the Kinder Morgan Energy tank farm, and the Bayshore Sanitary ~~water~~ Sewer pump station. …

Page III.B-3, Figure III.B-1 (Existing Land Use) has been revised

[NOTE: The figure has been revised to switch the label colors between Residential and Commercial/Industrial.]

SOURCE: San Francisco Planning Department; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING LAND USE

FIGURE III.B-1

Page III.B-10, first paragraph

Project Consistency: The Project includes both trust consistent and trust inconsistent uses; they will be distributed consistent with the final Trust map approved in Senate Bill 792. A trust exchange agreement will be approved as part of the Project consistent with the final Trust map. Negotiations with the CSLC are ongoing.

Pages III.B-10 and -11, beginning with last partial paragraph

The Facilities Element lists the following types of recreational uses for the park: trails (hiking, jogging, and bicycling), group picnic areas, family picnic areas, group campgrounds, fishing piers, wind surfing facilities, a sand beach, a quiet area in the southeastern point, scenic overlooks, and a cultural program center. Maritime facilities proposed in the CPSRA General Plan include a non-powered boat/wind surfing rental facility; a boating center for boat classes and education; a boat access facility that includes a four-lane launching ramp; a ~~200~~251-space parking area for car-boat trailers; a boat service station; and a ferry landing. A family dinner restaurant and family picnic rest stop are proposed for the Last Port area to the west of Hermit's Cove, off Harney Way.

The facilities and land uses called for in the current CPSRA General Plan have only been partly realized. Current uses in the park include hiking, limited bicycling, day use picnicking, group picnicking, jogging, nature viewing, three sand beaches, undeveloped windsurfing, two piers used by fishermen, and three restroom buildings. The park also includes a park staff/maintenance facility, ~~140~~275 parking spaces for the developed portion of the park and a community garden. However, substantial portions (73 acres) of the park remain undeveloped (refer to Section III.P [Recreation]). Of this, approximately 40 acres of the park are used for parking for football games and other events at Candlestick Park.

Page III.B-12, fourth paragraph

Pursuant to SB 792, no CPSRA General Plan Amendment is required for the reconfiguration of the recreation area. However, before new facilities would be developed, a CPSRA General Plan Amendment would be required to reflect the boundary changes and the proposed new uses that would located on park lands ~~removed from the park~~ following the reconfiguration. The proposed improvements described in Draft EIR Section III.P (Recreation) will be reviewed by the CDPR as an option for the development of CPSRA. …

Page III.B-13, the following paragraph is inserted prior to the last paragraph on the page

The Bay Plan also includes design policies related to waterfront development so as to enhance the visual quality of development around the Bay. Design policies that are applicable to the proposed Project are set forth in Section III.E (Aesthetics). The proposed Project is a high-quality urban development that integrates substantial open space, pedestrian pathways, and shoreline improvements and would redevelop an underutilized, primarily vacant, or deteriorated site. The Bay Plan indicates that "uses such as parking lots and industrial structures, which neither visually complement the Bay nor take advantage of a waterfront location, should be phased out or upgraded by normal market forces." The Project has been designed to preserve view corridors. The Project would connect the existing street grid in an orientation that would allow an uninterrupted view toward the Bay from numerous area streets. Project towers have been situated

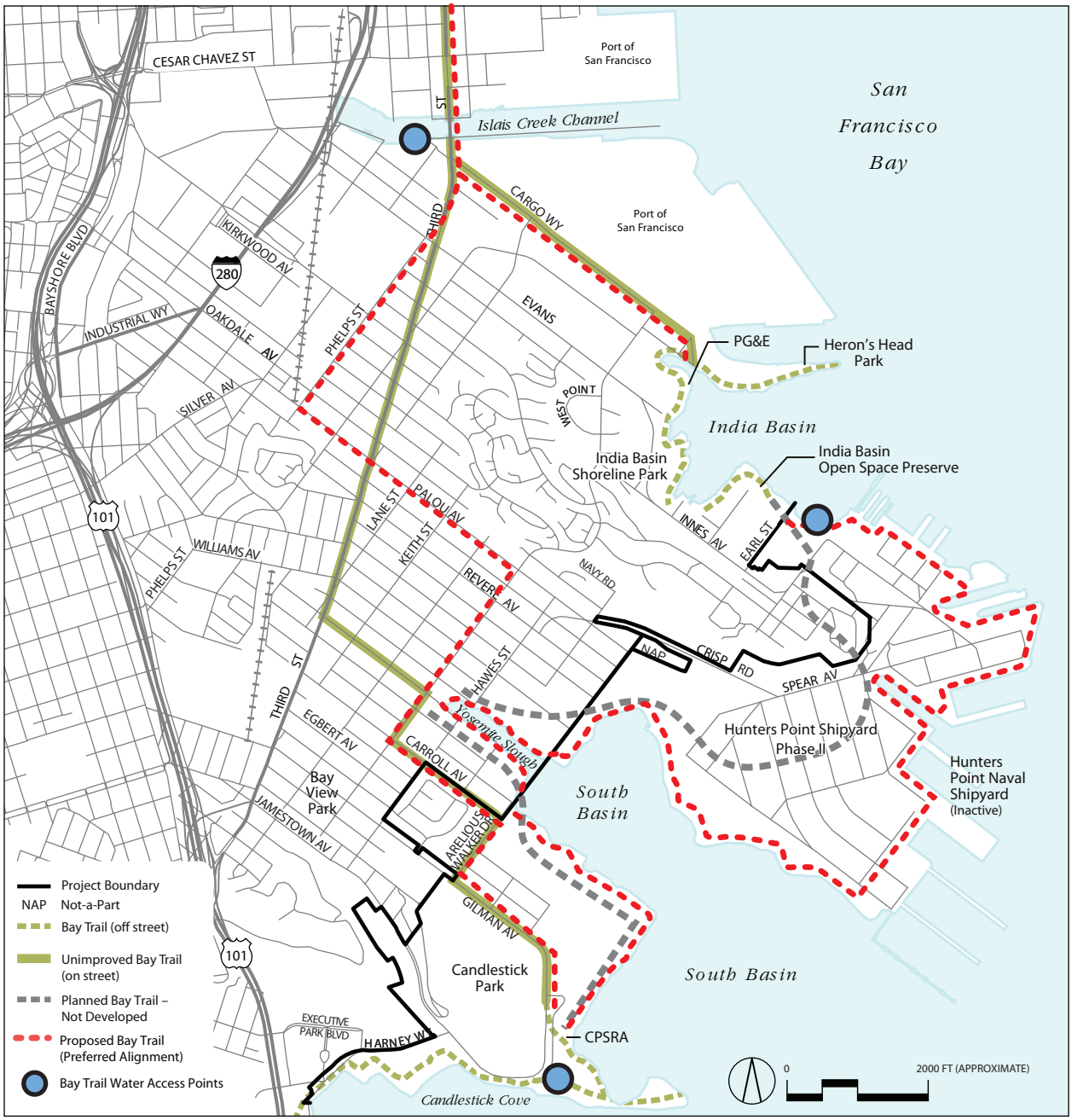
in zones that would allow the provision of view corridors. Numerous open space areas and waterfront pedestrian pathways would provide expansive viewing opportunities as well. Buildings and structures have been designed to be complementary to the surroundings. Parking structures are not proposed for shoreline areas. The proposed bridge would be low in height and would connect two urban areas, relating to the adjacent developed and to-be-redeveloped land uses. The proposed bridge would provide unique viewing opportunities that are not currently available. The bridge would not substantially obstruct views of the Bay or affect the visual dominance of the hills around the Bay. The Project has been developed in conformance with the BCDC's Public Access Design Guidelines. Therefore, the Project would be consistent with the design policies of the Bay Plan.

Page III.B-15, first full paragraph

The Project is consistent with the intent of the Bay Plan as it relates to the Candlestick Point area. The Project would provide park improvements, and on-going funding for park operation and maintenance. The ultimate configuration of improvements to various areas of the CPSRA would be determined by the ~~CPDR~~CDPR but the Project would not preclude a water trail camping site or fishing, windsurfing, hiking and viewing opportunities. The inclusion of the Yosemite Slough bridge would not conflict with the Bay Plan's policy regarding additional bridges over the Bay, which aims to preserve the visual impact of the large expanse of the Bay. Expansive views of the Bay would remain from numerous vantage points, even with inclusion of the bridge over the neck of the slough.

Page III.B-18, Figure III.B-3 (Existing San Francisco Bay Trail Route) has been revised

[NOTE: The figure has been revised to include Bay Area Water Trail access points in the Project vicinity; and to show the Bay Trail in the preferred alignment along the Yosemite Slough shoreline.]



SOURCE: San Francisco Bay Trail Plan; PBS&J, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING SAN FRANCISCO BAY TRAIL PLAN ROUTE

FIGURE III.B-3

Page III.B-33, first paragraph after "Analytic Method"

The analysis compares land use conditions at full build-out of the Project against the existing land use environment, on the ground, as of the date of publication of the NOP. The Project would be built out by the year ~~2029~~2031, with full occupancy occurring in ~~2030~~2032. Changes in land use character at Project build-out are described and assessed according to the significance criteria listed above.

Page III.B-34, second full paragraph

… Pedestrian access to the CPSRA and the San Francisco Bay from surrounding land uses is limited. …

Page III.B-35, new paragraph following second full paragraph

There are five blocks with privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one on Jamestown Avenue (currently vacant) in the Jamestown District and four contiguous blocks (currently vacant or developed with an RV park) in the Candlestick Point North District. If these private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the Project would result in the same overall development level as proposed by the Applicant.

Page III.B-38, last paragraph

The Project would be inconsistent with the *San Francisco Zoning Code*'s "Public" or "P" designation for Candlestick Point. … Similarly, the zoning inconsistencies related to the widening of Harney Way and the Walker-Crisp road connection do not ~~implicate~~ relate to designations that protect the environment. If the Applicant is unable to acquire any or all of the privately owned parcels on Candlestick Point, the private parcels would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan, or would be allowed to operate as an existing non-conforming use. Thus, the Project's inconsistency with the P zoning is not considered a significant environmental impact.

Page III.B-41, first full paragraph

The geographic context for evaluation of cumulative impacts associated with land use changes … including the India Basin Shoreline Plan, the Executive Park project, HPS Phase I, Jamestown, and Hunters View. In addition, the Yosemite Slough Restoration Project, which has been approved and would add approximately 12 acres of wetlands to the tidally influenced area of Yosemite Slough, is considered in this cumulative context. Future conditions would also account for land use changes expected through implementation of the Bayview Hunters Point Redevelopment Plan.

F.6 Changes to Section III.C (Population, Housing, and Employment)

Page III.C-11, first paragraph under "Analytic Method"

The analysis compares the population, housing, and employment that would result from implementation of the Project to existing conditions, which is defined as conditions in 2005. The 2005 data are used to represent baseline conditions because 2005 data are the most current data consistently available for the Project site across all population, employment, and housing indices. Table III.C-6 (Project Housing Units and Population) through Table III.C-8 (Project Construction Employment) provide the projected population, housing, and employment characteristics of the Project. The population, housing, and employment that would result from implementation of the Project are also compared against 2030 projections, either the latest year for which projections have been formulated or the closest year to Project build-out for projections which extend in 5-year increments beyond 2030.

Page III.C-13, Table III.C-8 (Project Construction Employment) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the construction employment as a result of the revised development schedule.]

Table III.C-8 Project Construction Employment [Revised]

	Candlestick Point		*HPS Phase II*		*Combined*	
Year	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*
2011	0	0	95	76	95	76
2012	0	0	83	66	83	66
2013	93	74	130	104	223	178
2014	158	126	205	152	363	278
2015	163	130	455	364	617	494
2016	163	130	446	358	609	488
2017	163	130	278	227	440	357
2018	176	139	280	227	456	366
2019	218	174	253	202	470	376
2020	218	174	243	194	460	368
2021	115	92	143	114	258	206
2022	255	203	189	152	443	355
2023	285	228	149	120	434	348
2024	235	187	60	48	295	235
2025	208	166	56	46	264	212
2026	155	133	123	102	278	235
2027	162	129	73	58	235	187
2028	282	225	38	30	320	255
2029	328	262	20	16	348	278

Table III.C-8 Project Construction Employment [Revised]

	Candlestick Point		*HPS Phase II*		*Combined*	
Year	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*
2030	163	130	33	26	195	156
2031	70	56	15	12	85	68

SOURCE: MACTEC, 2010.

a. Construction employment includes on-site construction, off-site roadway improvements, field management, and shoreline improvements.

Page III.C-14, first paragraph after Impact PH-1

There would be direct, but temporary, construction job growth at the Project site as a result of the Project. … Peak construction employment would occur in ~~2016 and 2017~~2029 for Candlestick Point, with an average of ~~144~~262 and a maximum of ~~169~~328 workers on site in ~~2016 and an average of 136 and a maximum of 172 workers on site in 2017~~2029. Peak construction employment for HPS Phase II would occur in 2015~~ and 2016~~. During ~~this time~~2015, an average of ~~275~~364 workers and a maximum of ~~342~~455 construction workers would be employed at HPS Phase II in 2015~~, and an average of 269 and maximum of 335 construction workers during 2016. A maximum of 504 construction workers would be expected to be working at the Project site at any given point~~ during the construction period.

Page III.C-14, last paragraph

As shown in Table III.C-6, the Project would develop approximately 10,500 housing units, of which 7,850 (approximately 75 percent) would be at Candlestick Point. Based on an average household size of 2.3 persons per unit and full occupancy of all units, population at Candlestick Point would be approximately 18,290 residents at full ~~build-out~~ occupancy in ~~2030~~2032. … In total, the population at Candlestick Point would represent approximately 2.0 percent of the citywide population of 916,800 in 2030, while employment would represent 0.5 percent of the 748,100 jobs in 2030.

Page III.C-18, first full paragraph

Direct population growth at HPS Phase II would include the residents and employees who would occupy the new homes and businesses developed at this site. As shown in Table III.C-6, 2,650 housing units (approximately 25 percent of the Project total) would be at HPS Phase II. The population at HPS Phase II would be approximately 6,175 residents at full ~~build-out~~ occupancy in ~~2030~~2032. … In total, the population at HPS Phase II would represent approximately 0.7 percent of the citywide population of 916,800 in 2030, while employment would represent 1.0 percent of the 748,100 jobs in 2030.

Page III.C-24, third full paragraph

Development at the Project site would provide 10,730 permanent jobs by ~~2030~~2032 (along with temporary construction-related jobs). … The Project's contribution of 10,730 permanent jobs would represent 0.3 percent of the anticipated increase in regional employment through 2030 (the closest year to Project build-out for which employment projections have been prepared). …

F.7 Changes to Section III.D (Transportation and Circulation)

Page III.D-4, last paragraph

Bayshore Boulevard is a north/south arterial that generally parallels US-101. Bayshore Boulevard has two to three travel lanes in each direction, separated by a median. …

Page III.D-8, seventh paragraph

Tunnel Avenue is a two-way north/south roadway that extends south of Bayshore Boulevard and merges into Bayshore Boulevard at Old County Road. The roadway has one lane in each direction with sidewalks and unrestricted on-street parking on both sides of the street north of Sierra Point Lumber. On-street parking is prohibited on Tunnel Avenue south of Sierra Point Lumber. Tunnel Avenue provides access to Bayshore Caltrain Station and to the US-101 ramps at Alana/Beatty. Tunnel Avenue is part of Bicycle Route #905.

Page III.D-19, seventh paragraph, fifth line

… At various locations, the Bay Trail consists of paved multi-use paths, dirt trails, and in some cases, bike lanes~~,~~ and sidewalks~~, or city streets signed as bike routes~~. …

Page III.D-27, under "State"

~~There are no state transportation regulations applicable to the Project.~~The San Francisco Bay Plan was prepared by the San Francisco Bay Conservation and Development Commission (BCDC) pursuant to the McAteer-Petris Act of 1965 which established the Commission as a temporary agency to prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline. The Bay Plan contains the following transportation policies that are relevant to the Project:

- Transportation Policy 1: Because of the continuing vulnerability of the Bay to filling for transportation projects, the Commission should continue to take an active role in Bay Area regional transportation and related land use planning affecting the Bay, particularly to encourage alternative methods of transportation and land use planning efforts that support transit and that do not require fill. The Metropolitan Transportation Commission, the California Department of Transportation, the California Transportation Commission, the Federal Highway Administration, county congestion management agencies and other public and private transportation authorities should avoid planning or funding roads that would require fill in the Bay and certain waterways.
- Transportation Policy 2: If any additional bridge is proposed across the Bay, adequate research and testing should determine whether feasible alternative route, transportation mode or operational improvement could overcome the particular congestion problem without placing an additional route in the Bay and, if not, whether a tunnel beneath the Bay is a feasible alternative.
- Transportation Policy 3: If a route must be located across the Bay or a certain waterway, the following provisions should apply:
    a. The crossing should be placed on a bridge or in a tunnel, not on solid fill.
    b. Bridges should provide adequate clearance for vessels that normally navigate the waterway beneath the bridge.

c. Toll plazas, service yards, or similar facilities should not be located on new fill and should be located far enough from the Bay shoreline to provide adequate space for maximum feasible public access along the shoreline.

d. To reduce the need for future Bay crossings, any new Bay crossing should be designed to move the largest number of travelers possible by employing technology and operations that increase the efficiency and capacity of the infrastructure, accommodating non-motorized transportation and, where feasible, providing public transit facilities.

- Transportation Policy 4: Transportation projects on the Bay shoreline and bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.
- Transportation Policy 5: Ferry terminals should be sited at locations that are near navigable channels, would not rapidly fill with sediment and would not significantly impact tidal marshes, tidal flats or other valuable wildlife habitat. Wherever possible, terminals should be located near higher density, mixed-use development served by public transit. Terminal parking facilities should be set back from the shoreline to allow for public access and enjoyment of the Bay.

Page III.D-36, second bullet

- **Geneva Avenue/Harney Way Extension**— … The lead agency for this Project is the City of Brisbane, with the Caltrans Project Study Report (PSR) expected to be completed in ~~early~~ 2010.

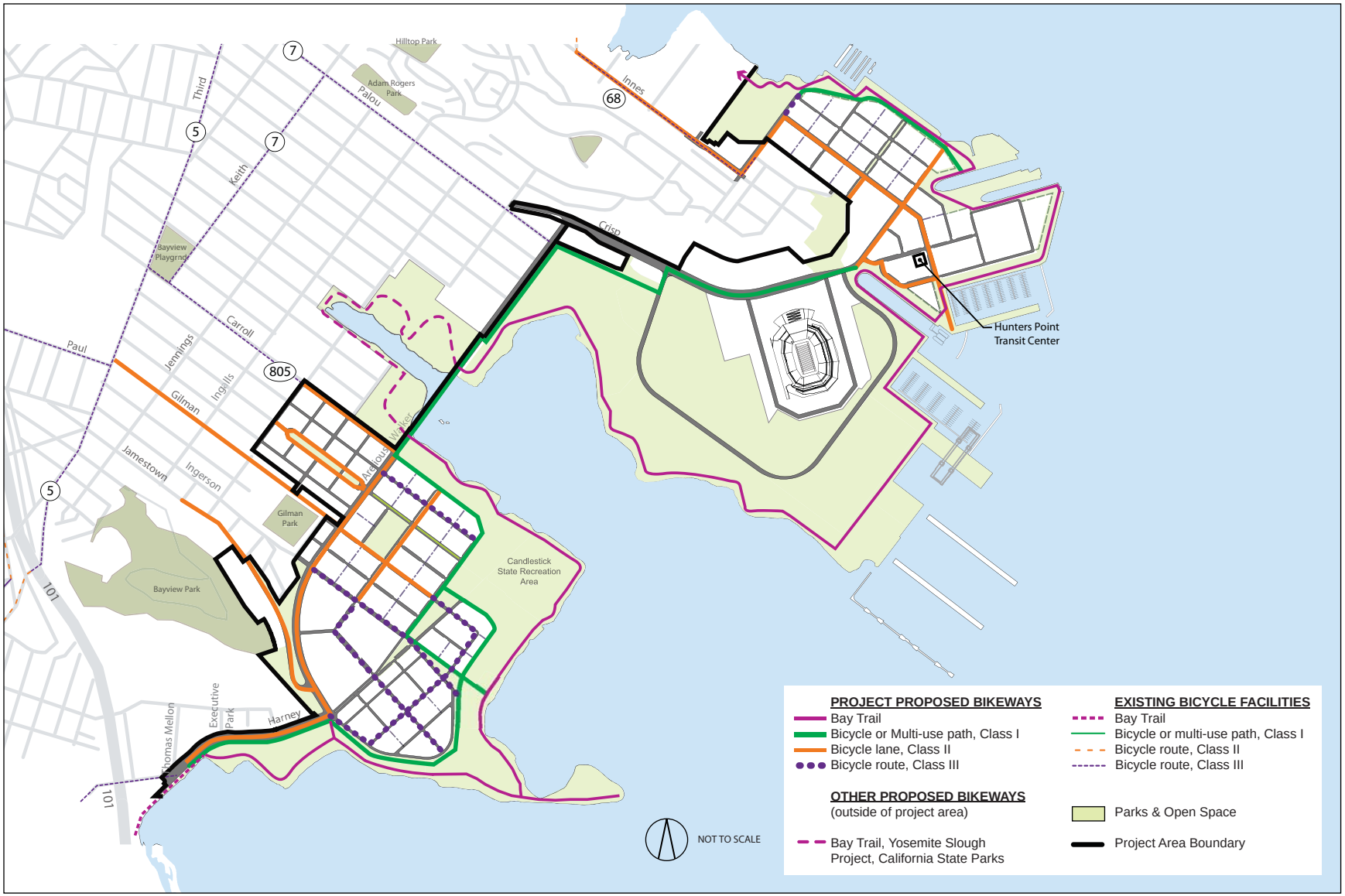
Page III.D-36, third bullet

- **New US-101 Interchange at Geneva/Harney**—In conjunction with the extension of Geneva Avenue east, the existing Harney Way interchange ~~would~~ is proposed to be redesigned as a typical diamond interchange, subject to review and approval by Caltrans. …

  At the time the analysis was completed, ~~T~~the Geneva Avenue/Harney Way crossing of US-101 ~~would~~ was proposed to have six lanes eastbound (three left-turn lanes and three through lanes) and six lanes westbound (three left-turn lanes and three through lanes), for a total of twelve lanes (refer to Appendix L of the Transportation Study). …

Page III.D-51, Figure III.D-10 (Project Bicycle Network and Bay Trail Improvements) has been revised

[NOTE: The figure has been revised to show the improvements to Gilman Avenue are proposed to be a Class III bicycle route rather than a Class II route.]



SOURCE: Fehr & Peers, 2010.

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FIGURE III.D-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT BICYCLE NETWORK AND BAY TRAIL IMPROVEMENTS

Page III.D-61, third paragraph

The geographic distribution of spectators was obtained from information provided by the San Francisco 49ers on their season ticket holders. Since the vast majority of football spectators are season ticket holders, the pattern can be expected to be representative of travel patterns by both season, as well as non-season, ticket holders. The information obtained from the 49ers indicates that approximately 40 percent of the season ticket holders reside in the South Bay (including all of San Mateo County), 16 percent in the East Bay, 14 percent within San Francisco, and 10 percent in the North Bay counties. The remaining 20 percent reside in locations outside the Bay Area such as the Central Valley and Sacramento.

Page III.D-66, Table III.D-9 (Additional Muni Transit Vehicle Requirements—2030 Conditions Weekday AM and PM Peak Periods) has been revised

[NOTE: This table has been revised to reflect modifications in transit mitigation measures requested by City/Agency staff.]

Table III.D-9 Additional Muni Transit Vehicle Requirements—2030 Conditions Weekday AM and PM Peak Periods [Revised]

	Project Requirement		2030 No Project Needs	
Route	*AM*	*PM*	*AM*	*PM*
9-San Bruno	1	1	5	7
23-Monterey	0	0	1	1
24-Divisadero	~~1~~2	~~3~~2	1	0
28L-19th Avenue/Geneva Limited	1	1	1	1
29-Sunset	~~1~~2	~~3~~4	1	0
44-O'Shaughnessy	~~2~~1	~~2~~3	3	4
48-Quintara-24th Street	~~1~~0	~~0~~1	1	1
54-Felton 2	0	1	1	1
T-Third	0	1	2	1
Total	***7***	***~~12~~14***	***16***	***16***

SOURCE: Fehr & Peers

Page III.D-67, first, second, and third paragraphs after Impact TR-1

Build-out of the Project would occur over a 20-year period between ~~2010~~2011 and ~~2029~~2031. Initial construction activities would include demolition of existing structures, utility relocation and site clearance and grading at Hunters Point Shipyard to make the land available for the new stadium. …

Construction of the Project would occur in several phases. The duration of each phase would vary, depending on the type of development (e.g., residential, retail, office) and the amount of building space included in each phase. The majority of development would occur and be occupied by the end of the second phase, which has a scheduled completion date of ~~2021~~2023. The majority of the roadway network improvements would occur by ~~2017~~2019 (Phase I), and most transit improvements would be phased in by ~~2021~~2023 (within Phase I and Phase II). …

During construction of the Project phases, building activities would generate traffic volumes from construction workers, truck deliveries of supplies and construction equipment, and the hauling of soils during Project grading and excavation. The peak phases of construction activities would occur between ~~2012~~2013 and ~~2016~~2018, when grading and infrastructure improvements would be ongoing at both Candlestick Point and Hunters Point Shipyard. During this phase, there would be between ~~50~~130 and ~~180~~460 construction workers that would be on site on a daily basis, and between ~~140~~70 and ~~570~~540 construction truck trips that would travel to and from the site on a daily basis. … Shoreline improvements at both Hunters Point Shipyard and Candlestick Point would peak in ~~2016 and~~ 2017, and would require an additional ~~40~~45 to 50 construction workers on site.

Pages III.D-69 to -70, mitigation measure MM TR-1

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

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 ~~II~~2, Phase ~~III~~3, and Phase ~~IV~~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.

Pages III.D-79 to -80, Table III.D-12 (Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour) has been revised

[NOTE: The changes to Table III.D-12 represent typographical corrections and do not indicate new impacts at any intersection. All of the impacts were correctly reported in the Draft EIR. In particular, these typographical corrections do not indicate a new Project impact at the intersections of Bayshore/Visitacion or Alana/Beatty.]

Table III.D-12 Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour [Revised]

		Existing		2030 No Project		2030 Project	
	Intersection	Delay[a]	LOS[b]	Delay	LOS	Delay	LOS
	…						
21	Bayshore Blvd/Bacon St	13	B	~~63/0.57~~17	~~E~~B	~~58/0.70~~31	~~E~~C
22	Bayshore Blvd/Arleta St	12	B	~~17~~56	~~B~~D	~~30~~49	~~C~~D
23	Bayshore Blvd/Leland Ave	24	C	~~54~~41	D	~~49~~38	D
24	Bayshore Blvd/Visitacion Ave	18	B	~~41~~64/0.98	~~D~~E	~~38~~70/1.03	~~D~~E
25	Bayshore Blvd/Sunnydale Ave	15	B	~~64/0.98~~55	~~E~~D	~~70/1.03~~55	~~E~~D
26	Tunnel Ave/Blanken	19	B	~~55~~30	~~D~~C	~~55~~51	D
27	Alana/Beatty (US-101 SB Ramps)[c]	8	A	~~30~~>80/2.04	~~C~~F	~~51~~>80/2.34	~~D~~F
28	Alana/Harney/Mellon (101 NB)[c]	8	A	~~>80/2.04~~54	~~F~~D	>80/~~2.34~~1.36	F
29	Harney Way/Jamestown Ave[d]	9	A	~~54~~22	~~D~~C	~~>80/1.36~~24	~~F~~C
30	Crisp Ave/Palou Ave[d]	7	A	~~22~~37	~~C~~D	~~24~~46	~~C~~D
31	Ingalls St/Thomas Ave[d]	11.1 (sb)	B	~~37~~11.8 (wb)	~~D~~B	~~46~~26	~~D~~C
32	Ingalls St/Carroll Ave[d]	9.9 (wb)	A	~~11.8 (wb)~~9	~~B~~A	~~26~~28	C

Table III.D-12 Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour [Revised]

		Existing		*2030 No Project*		*2030 Project*	
	Intersection	*Delay*[a]	*LOS*[b]	*Delay*	*LOS*	*Delay*	*LOS*
33	Ingalls St/Egbert Ave	7	A	~~9~~8	A	~~28~~8	~~C~~A
34	Arelious Walker/Gilman Ave[d]	7	A	~~8~~72.5 (eb)	~~A~~F	~~8~~36	~~A~~D
35	Amador St/Cargo Way	8.9 (sb)	A	~~72.5 (eb)~~21	F	~~36~~20	~~D~~B
36	Bayshore Blvd/Cortland Ave	28	C	~~21~~23	C	~~20~~25	~~B~~C
37	Bayshore Blvd/Oakdale Ave	17	B	~~23~~21	C	~~25~~21	C
38	Bayshore/Alemany/Industrial	24	C	~~21~~40	C	~~21~~52	~~C~~D
39	Bayshore/US-101 nb off to Cesar	35	D	~~40~~25	D	~~52~~26	~~D~~C
40	Bayshore Blvd/Silver Ave	25	C	~~25~~19	C	26	C
	…						

Page III.D-84, mitigation measure MM TR-6

MM TR-6 …

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 Interchange Project.

Page III.D-86, mitigation measure MM TR-8

MM TR-8 …

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 Geneva Avenue Extension Project.

Pages III.D-92 to -94, Table III.D-14 (Ramp Junction LOS Existing, 2030 No Project and 2030 Project Conditions) has been revised

[NOTE: These revisions correct typographical errors to make the table consistent with the Draft EIR impact analysis and determination. No impact conclusions have changed.]

Table III.D-14 Ramp Junction LOS Existing, 2030 No Project and 2030 Project Conditions [Revised]

	Existing		*2030 No Project*		*2030 Project*		*~~Project Var. 1 (R&D)~~*		*~~Project Var. 2 (Housing)~~*	
Ramp Location	*LOS*	*Density[a] (pc/mi/ln)*	*LOS*	*Density (pc/mi/ln)*	*LOS*	*Density (pc/mi/ln)*	*~~LOS~~*	*~~Density (pc/mi/ln)~~*	*~~LOS~~*	*~~Density (pc/mi/ln)~~*
WEEKDAY ~~P~~AM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	C	27.0	C	27.5	D	30.4				
…										
SB on from Pennsylvania/25th	C	22.9	E	36.3	E	36.1				
~~SUN~~WEEKDAY PM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	D	29.7	F	>45	F	>45				
…										
SB on from Pennsylvania/25th	E	38.5	F	>45	F	>45				
SUNDAY PM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	B	19.3	~~A~~C	~~9.1~~22.5	~~A~~C	~~9.8~~25.3				
…										
SB on from Pennsylvania/25th	C	26.4	D	29.5	D	29.5				

SOURCE Fehr and Peers, 2009

a. Density of vehicles per segment. pc/mi/ln = passenger cars per mile per lane.

b. Cumulative 2030 No Project conditions assume the reconstruction of the Harney Way interchange, as well as the extension of Geneva Avenue from Bayshore Boulevard east to the reconstructed interchange.

c. Ramp junctions at LOS E or LOS F conditions highlighted in bold

Page III.D-97, Impact TR-16

Impact TR-16 **Implementation of the Project would increase traffic volumes ~~and~~, but would not ~~contribute~~ make a considerable contribution to cumulative traffic volumes on Harney Way. (Less than Significant with Mitigation) *[Criterion D.a]***

Page III.D-98, mitigation measure MM TR-16

MM TR-16 Widen Harney Way as shown in Figure 5 in the Transportation Study. *Prior to issuance of the grading permit for Development Phase ~~II~~1 of the Project, the Project Applicant shall widen Harney Way as shown in Figure 5 in the Transportation Study.* …

Page III.D-105, mitigation measure MM TR-21.1

MM TR-21.1 Maintain the proposed headways of the 9-San Bruno. *To address Project impacts to the 9-San Bruno, prior to issuance of a grading permit for Development Phase ~~I~~1, the Project Applicant in cooperation with SFMTA* …

Pages III.D-105 to -106, last partial paragraph

The ~~three~~ treatments for Impact TR-21 contained in mitigation measure MM TR-21.1 combined could reduce AM peak hour travel times by 4 minutes and 6 seconds in the northbound direction, and 6 minutes 18 seconds in the southbound direction. During the PM peak hour, these treatments could reduce PM peak hour travel times by 4 minutes 6 seconds in the northbound direction and by 8 minutes in the southbound direction. With the combination of mitigation measures, transit travel times in each direction and during each peak period would be ~~no greater than for~~ similar to 2030 No Project conditions. …

Page III.D-106, last paragraph

Project-related transit delays due to congestion on study area roadways and passenger boarding delays … Overall, the Project-related congestion would add up to ~~7~~9 minutes of delay per bus during peak hours. The provision of transit-only lanes on Palou Avenue would reduce travel time delays and impacts on these lines.

Pages III.D-107 to -108, mitigation measure MM TR-22.1

MM TR-22.1 Maintain the proposed headways of the 23-Monterey, 24-Divisidero, and the 44-O'Shaughnessy. *To address Project impacts to the 23-Monterey, 24-Divisidero and the 44-O'Shaughnessy, prior to issuance of a grading permit for Development Phase ~~I~~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-Divisidero, and the 44-O'Shaughnessy.*

- …
- *As an alternative to the bulleted measures above, narrow the existing sidewalks on Palou … 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.

…

Page III.D-108, beginning with second bullet

- **24-Divisadero**~~—Combined, these measures (either the first three bullets combined or the fourth alone)~~ Mitigation measure MM TR-22.1 could reduce AM peak hour travel times by 4 minutes and ~~45~~43 seconds in the westbound direction and by 4 minutes in the eastbound direction. During the PM peak hour travel times could be reduced by 8 minutes and ~~15~~16 seconds in the westbound direction and by 4 minutes in the eastbound direction. In each direction ~~and~~ during the PM peak hour, the transit travel times with the Project might ~~not be~~ remain greater than the 2030 No Project travel times by more than ½ headway, and therefore additional transit vehicles ~~would not~~ may still be required.
- **44-O'Shaughnessy**—The improvements along Palou Avenue ~~between Keith Street and Newhall Street~~ would improve the travel times on the 44-O'Shaughnessy by 4 minutes and 26 seconds in the westbound direction and by 4 minutes in the eastbound direction in the AM peak hour. During the PM peak hour, travel times could be reduced by 4 minutes and 43 seconds in the westbound direction and 4 minutes in the eastbound direction. In each direction during the PM peak hour, the transit travel times with the Project might remain ~~such that in each direction and peak hour, the transit travel times with the Project would not be~~ greater than the 2030 No Project travel times by more than ½ headway, and therefore additional vehicles ~~would not~~ may still be required to maintain the proposed headways.

With the ~~combination of~~ treatments identified in mitigation measure MM TR-22.1, transit travel times in ~~each~~ some directions and during ~~each~~ some peak periods would be no greater than for 2030 No Project conditions. …

Pages III.D-109 to -110, beginning with second full paragraph

Project-related transit delays due to congestion on study area roadways and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the 29-Sunset. Within the study area, the 29-Sunset would experience substantial delays at key intersections along Gilman Avenue and Paul Avenue, particularly at Third Street and Bayshore Boulevard. Overall, the Project-related congestion would add up to ~~17~~21 minutes of delay per bus during peak hours. The provision of transit-only lanes on Gilman Avenue and Paul Avenue would reduce travel time delays and impacts on this line.

MM TR-23.1 Maintain the proposed headways of the 29-Sunset. *To address Project impacts to the 29-Sunset, prior to issuance of a grading permit for Development Phase ~~1~~1, the Project Applicant in cooperation with SFMTA …*

- …
- *As an alternative to the two bulleted measures above, ~~narrow the existing sidewalks~~ convert one of the travel lanes in each direction on Gilman Avenue from Third Street to Griffith Street ~~(four blocks) from 15 feet to 12 feet in width. The resulting 12-foot-wide sidewalks would be consistent with the Better Streets Plan guidelines. The reduction in sidewalk width~~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 is a feasible and viable alternative to the two bulleted items above.

- …

Pages III.D-110 to -111, last full paragraph

Implementation of transit-only lanes identified in mitigation measure MM TR-23.1 could reduce AM peak hour transit travel times by ~~4~~ 5 minutes and ~~48~~17 seconds in the westbound direction and 5 minutes and ~~10~~59 seconds in the eastbound direction. During the PM peak, these measures would reduce transit travel times by ~~5~~6 minutes and ~~20~~25 seconds in the westbound direction and by ~~2~~1 minute~~s~~ in the eastbound direction. With the ~~combination of~~ mitigation measures, transit travel times ~~in each direction and during each peak period~~ would ~~be no~~ remain greater than for 2030 No Project conditions. ~~However, b~~Because 2030 No Project conditions constitute adverse delays to transit service, cumulative adverse delays to transit service would occur even with these Project transit mitigation measures. Because adverse transit delays affecting this line are generated by adverse traffic congestion to which the Project has a considerable contribution, the Project also has a cumulatively considerable contribution to adverse transit delays.

~~Implementation of mitigation measure MM TR-23.1, on the other hand, would allow operation of headways as described under MM TR-17. However, g~~Given the congestion along the Gilman Avenue corridor, implementation of MM TR-23.2 alone, without MM TR-23.1, might not be sufficient to reduce the impact to less-than-significant levels.

Page III.D-111, third full paragraph

Project-related transit delays due to congestion on study area roadways and passenger loading delays … up to ~~3~~8 minutes of delay per bus during peak hours. The provision of transit-only lanes on Evans Avenue and other transit-priority treatments would reduce travel time delays and impacts on this line.

Page III.D-111, mitigation measure MM TR-24.1

MM TR-24.1 Maintain the proposed headways of the 48-Quintara-24th Street. *To address Project impacts to the 48-Quintara-24th Street, prior to issuance of a grading permit for Development Phase ~~1~~1, the Project Applicant in cooperation with SFMTA …*

Page III.D-112, first full paragraph

Provision of the transit-only lane on Evans Avenue, as identified in mitigation measure MM TR-24.1 would reduce AM peak hour transit travel times by ~~80~~104 seconds in the westbound direction, and by ~~2~~3 minutes and ~~33~~50 seconds in the eastbound direction. During the PM peak hour transit travel times would be reduced by ~~1 minute and 40~~58 seconds in the westbound direction, and by ~~2~~13 minutes and ~~15~~31 seconds in the eastbound direction. With the combination of mitigation measures, transit travel times in each direction and during each peak period would be no more than ½ headway greater than for 2030 No Project conditions. …

Page III.D-113, last paragraph

Project-related transit delays due to congestion on Third Street and passenger loading delays associated … within an exclusive right-of-way. Overall, the Project-related congestion would add up to 3 minutes of delay per ~~bus~~ vehicle during peak hours. Providing exclusive right-of-way for the T-Third in the segment between Thomas Avenue and Kirkwood Avenue would reduce travel time delays for the T-Third.

Page III.D-114, mitigation measure MM TR26.1

MM TR-26.1 Maintain the proposed headways of the T-Third. *To address Project impacts to the T-Third, prior to issuance of a grading permit for Development Phase ~~I~~1, the Project Applicant in cooperation with SFMTA …*

- …

Implementation of the ~~intersection~~ 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.

Page III.D-114, third full paragraph

Implementation of mitigation measure MM TR-26.1~~2~~ would also exacerbate automobile LOS F conditions at intersections along Third Street that were identified as significant and unavoidable impacts. …

Page III.D-117, fifth full paragraph

Outside of the Project site, street improvements would include striping of bicycle lanes on Innes Avenue, ~~Gilman Avenue,~~ Jamestown Avenue and on Harney Way. As noted in Section III.D.3 (Regulatory Framework), the *San Francisco Bicycle Plan* includes a near-term project on Innes Avenue (Bicycle Route #68) between Donahue Street and Hunters Point Boulevard; however, a preferred option was not identified in the Final EIR for the Bicycle Plan. The Project proposes to provide a bicycle lane in both directions on Innes Avenue between Donahue Street and Hunters Point Boulevard, which would require removal of on-street parking on the south side of Innes Avenue between Earl Street and Hunters Point Boulevard. The Project proposal is consistent with Option 1 in the Bicycle Plan, however, it would not preclude implementation of Option 2 (sharrows added to the existing Class III facility), if that option were determined to be preferable by SFMTA. The Project would improve Gilman Avenue, and a Class III bicycle route with sharrow designations would be provided between Arelious Walker Drive and Third Street.

Page III.D-118, mitigation measure MM TR-32

MM TR-32 Determine the feasibility of relocating Bicycle Routes #70 and #170. *Prior to issuance of the grading permit for Development Phase ~~I~~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. ~~Since the feasibility of the relocation of the routes is uncertain at this time, the Project impact on bicycle circulation on Palou Avenue would remain significant and unavoidable.~~*

Page III.D-128, Figure III.D-13 (Stadium Game Day Traffic Control Plan) has been revised

[NOTE: The figure was revised to correct the disconnected transit-only lane on the figure.]

Page III.D-129, Figure III.D-14 (Stadium Game Day Ingress Routes) has been revised

[NOTE: The figure was revised to correct the second western "Muni service" on the figure.]

SOURCE: Fehr & Peers, 2010.

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FIGURE III.D-13

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY TRAFFIC CONTROL PLAN

SOURCE: Fehr & Peers, 2010.

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FIGURE III.D-14

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY INGRESS ROUTES

Page III.D-136, mitigation measure MM TR-39

MM TR-39 Transit Service during Game Days. *SFMTA shall increase frequency …*

Page III.D-144, mitigation measure MM TR-46

MM TR-46 Traffic Control Officers. *The stadium operator shall develop …*

Page III.D-145, mitigation measure MM TR-47

MM TR-47 Transit Service during Secondary Events. *SFMTA shall increase …*

Page III.D-146, mitigation measure MM TR-49

Impact TR-49 **With implementation of the Project, pedestrian circulation would not be impeded during ~~arena~~ secondary events at the stadium. (Less than Significant) *[Criterion D.j]***

Pages III.D-148 and -149, mitigation measure MM TR-51

MM TR-51 Transportation Management Plan (TMP). *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 provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light-rail route. 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.*

Page III.D-149, Impact TR-52: Transit Impacts from Arena Uses

Impact TR-52 **With implementation of the Project, sell-out weekday evening events at the arena could ~~be accommodated within the~~ impact existing and proposed transit service. (Significant and Unavoidable with Mitigation) *[Criteria D.f, D.i]***

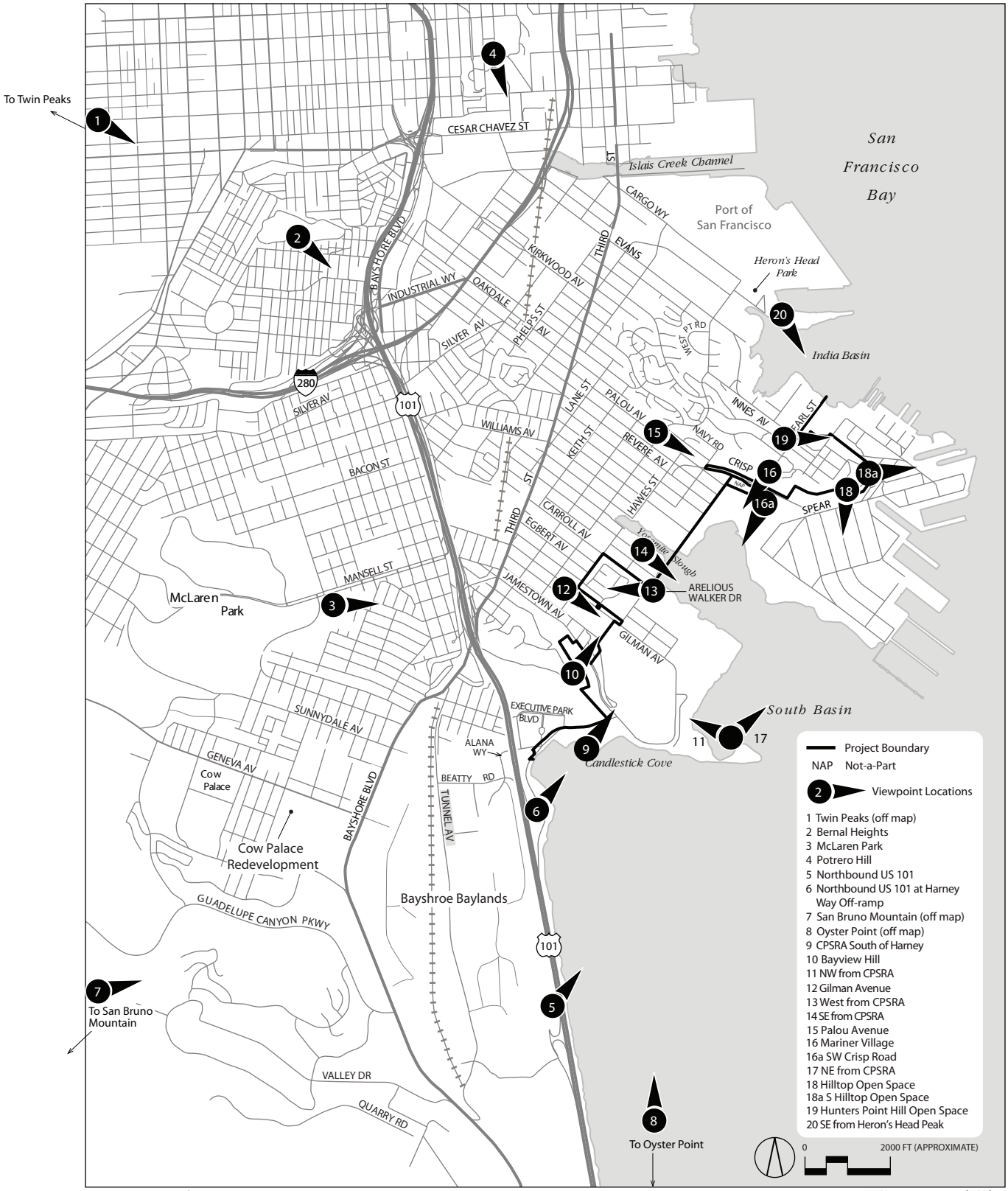
F.8 Changes to Section III.E (Aesthetics)

Page III.E-13, "Yosemite Slough"

The Yosemite Slough is a slow-moving tidal channel that winds through a marsh between Hunters Point and Candlestick Point. Except for the mouth of the slough across which the bridge would be constructed, t~~T~~he Slough is not within the Project site. …

Page III.E-23, Figure III.E-10 (Viewpoint Locations) has been revised

[NOTE: The figure has been revised to add viewpoint locations #16a and #18a.]



SOURCE: PBS&J, Clement Designs, 2009; PBS&J, 2010.

PBS&J 04.10.10 02056 | JCS | 10

FIGURE III.E-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

VIEWPOINT LOCATIONS

Page III.E-47, under "San Francisco Bay Plan" after Policy 4

Policy 6 Additional bridges over the Bay should be avoided, to the extent possible, to preserve the visual impact of the large expanse of the Bay. The design of new crossings deemed necessary should relate to others nearby and should be located between promontories or other land forms that naturally suggest themselves as connections reaching across the Bay (but without destroying the obvious character of the promontory). New or remodeled bridges across the Bay should be designed to permit maximum viewing of the Bay and its surroundings by both motorist and pedestrians. Guardrails and bridge supports should be designed with views in mind.

Page III.E-50, first paragraph after Impact AE-1

Construction activities would occur throughout the 702-acre Project site over the ~~19~~20-year ~~build-out~~ construction period of the Project (ending in ~~2029~~2031). During construction, four basic types of activities would be expected, and some activities could occur simultaneously.

Page III.E-51, second paragraph after Impact AE-2

Although these activities would take place primarily on site, these visual impacts could affect surrounding land uses. … Although the Project would be constructed through the year ~~2029~~2031, construction activity would not occur all at once and would be phased, as described Chapter II. …

Page III.E-58, first full paragraph

The Yosemite Slough bridge would change the appearance of a portion of the ~~S~~slough, with the addition of a bridge structure and roadway approaches (refer to Figure III.E-8). The bridge would replace some views of open water as seen from nearby locations. The bridge would contain "green" auto lanes, with plantings in the middle providing a green boardwalk. The bridge would be low profile and integrated into the open space on either side of the ~~S~~slough, and would contain piers and lookout points for a pedestrian viewing experience. Yosemite Slough would continue as a waterway bordered by open space opening from a narrow channel to the west to the wider South Basin to the east and would remain a scenic resource on the site. The Project would complete the Bay Trail along the waterfront, make shoreline improvements, and provide substantial areas of parks and open space that would complement the slough restoration. The Project's proposed roadway and bridge through an otherwise entirely recreational open space area would have some adverse impact on the aesthetic experience, when compared to a natural open space area with no roadway or bridge running through it. The introduction of a roadway and bridge, together with activity on and use of those features, would adversely affect the natural feel of this portion of the park. Nevertheless, the EIR does not consider the proposed roadway and bridge to result in a significant adverse impact on the proposed improved recreation area for a variety of reasons. The slough is presently, and would continue to be, located within an urban environment, bordered in part by developed lots and roads. Hence, even without the proposed roadway and bridge, park users would be aware of and in close proximity to the roads and developed areas bordering the park. While the proposed road and bridge would cut through the open space in one location, the majority of the restored slough area would remain

unaffected and available for its intended use. In addition, the proposed road and bridge would provide some benefits to the restored park in terms of access and new vantage points for views. Overall, the bridge would not substantially damage a resource that contributes to a scenic public setting.

Page III.E-59, first partial paragraph on page

… reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline. The Project would complete the Bay Trail along the waterfront and provide substantial areas of parks and open space that would complement the slough restoration. While the Yosemite Slough bridge would alter the visual character of the slough by placing a structure across the neck of the slough, this change would not be substantially adverse. The bridge would be designed to be low in height and blend as much as possible into the environment through the use of openwork, materials, and color. The Project's proposed roadway and bridge through an otherwise entirely recreational open space area would have some adverse impact on the aesthetic experience, when compared to a natural open space area with no roadway or bridge running through it. The introduction of a roadway and bridge, together with activity on and use of those features, would adversely affect the natural feel of this portion of the park. Nevertheless, the EIR does not consider the proposed roadway and bridge to result in a significant adverse impact on the proposed improved recreation area for a variety of reasons. The slough is presently, and would continue to be, located within an urban environment, bordered in part by developed lots and roads. Hence, even without the proposed roadway and bridge, park users would be aware of and in close proximity to the roads and developed areas bordering the park. While the proposed road and bridge would cut through the open space in one location, the majority of the restored slough area would remain unaffected and available for its intended use. In addition, the proposed road and bridge would provide some benefits to the restored park in terms of access and new vantage points for views. Therefore, development at the HPS Phase II site would not have significant adverse impacts on scenic resources or other features that contribute to a scenic public setting, and the impact would be less than significant. No mitigation is required.

Page III.E-59, first paragraph after Impact AE-5

As shown by the various photographs and simulations and the discussions provided in Impact AE-5(a) and Impact AE-5b, above, development of the Project would not damage or remove any identified scenic resources that contribute to a scenic public setting. The Project would complete the Bay Trail along the waterfront and provide substantial areas of parks and open space. While the Yosemite Slough bridge would alter the visual character of the slough by placing a structure across the neck of the slough, this change would not be substantially adverse. The bridge would be designed to be low in height and blend as much as possible into the environment through the use of openwork, materials, and color. The change would not be considered adverse, as the bridge would be part of an overall urban setting on either side of the slough. The Project's impact would be less than significant. No mitigation is required.

Page III.E-64, third full paragraph

The Project would alter the scenic nature of the Project site in that it would create a dense urbanized setting where one does not currently exist. On the north side, the bridge would cross the extreme eastern edge of

the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is substantially out of character or scale with surrounding development. ~~However~~Therefore, this change in character would not represent a degradation of scenic quality. …

Page III.E-68, between the second and third paragraphs, the following paragraph is inserted

The Project would alter the scenic nature of the Project site in that it would create a dense urbanized setting where one does not currently exist. On the north side, the bridge would cross the extreme eastern edge of the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is out of character or scale with surrounding development. Therefore, this change in character would not represent a substantial degradation of scenic quality.

Page III.E-69, first paragraph after Impact AE-6

As shown by the various photographs and simulations and the accompanying discussions, above, … The Project would provide extensive areas of open space integrated with new development and existing open space that would enhance the positive features of Bayview Hunters Point, with its immediate proximity to the shoreline, and would not substantially obstruct views of the Bay, the East Bay hills, and the San Bruno Mountains from adjacent neighborhoods. On the north side, the bridge would cross the extreme eastern edge of the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is substantially out of character or scale with surrounding development. Although the Project would replace the existing conditions …

Page III.E-71, third paragraph

Area lighting would illuminate larger areas that are well-traveled so as to promote way-finding and provide for a safe environment. … this increase in ambient light would be consistent with the urban character and associated ambient lighting of the City as a whole. Because the Project site is located immediately adjacent to a developed urban area, existing views of the night sky are diminished as is typical in all urban areas. Nighttime lighting would not affect users of the Yosemite Slough/CPSRA, as the CPSRA is closed after dark. Therefore, ~~and~~ the light and glare as a result of the Project would not substantially interfere with these currently limited views.

Page III.E-72, mitigation measure MM AE-7a.3

MM AE-7a.3 Lighting Plan. *The ~~Applicant~~ Developer shall prepare a lighting plan for each sub-phase of the Project and submit it ~~for review and approval~~ to the ~~San Francisco Police Department and the~~ Agency prior to ~~the issuance~~ approval ~~of building permits~~ a sub-phase. Outdoor lighting shall maintain a minimum required illumination, as determined appropriate by the ~~San Francisco Police Department and the Planning Department,~~ 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 adjacent streets, or properties or result in spill light that would adversely impact sensitive receptors in the project area.*

Page III.E-74, first partial paragraph

… off from the maximum light intensity levels on the playing field. Field lighting would only be required for large events during evening hours … the lighting would not spill over or directly impact residences in the neighborhoods west and northwest of the HPS Phase II site or the residences within the Project itself. Users of the Yosemite Slough/CPSRA would not be affected by nighttime lighting, as the CPSRA is closed after dark.

Pages III.E-74 to III.E-75, beginning with last paragraph

Information on lighting effects for the San Francisco Giants Ballpark … Light levels from the stadium at other locations, such as Mariner Village, approximately 1,250 feet away, and the proposed HPS Phase I development along Crisp Road, and residential development within HPS Phase II, each approximately 1,500 feet or more away, also would not be substantial. As noted, users of the Yosemite Slough/CPSRA would not be affected by stadium lighting, as the CPSRA is closed after dark. Nonetheless, …

Page III.E-76, last paragraph

The geographic context for an analysis of construction impacts is the same limited geographic area as the Project, as visual construction impacts are generally site-specific. The past and present development in the City is described in the Setting section of this chapter, representing the baseline conditions for evaluation of cumulative impacts. Reasonably foreseeable future development includes existing development at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, as well as the Yosemite Slough Restoration Project, which has been approved and will restore tidal wetlands in a 34-acre parcel of the CPSRA.

Page III.E-77, first full paragraph

Construction impacts on aesthetics are site-specific, as construction activities are temporary. Therefore, the geographic context for an analysis of cumulative construction impacts to aesthetics would be limited to projects in the immediate vicinity of the Project that could be seen together with the Project, assuming that construction activities were to be concurrent. These projects would include the Yosemite Slough Restoration Project, Executive Park, and HPS Phase I, which have been approved and/or are under construction.

Pages III.E-77 through III.E-78, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on scenic vistas is the area covered by the BVHP Redevelopment Plan, the HPS Redevelopment Plan, and the BVHP Area Plan (of the City's General Plan), as development in these Plan areas could affect the same scenic vistas analyzed for the Project as identified in Figure III.E-11 through Figure III.E-18. … Reasonably foreseeable future development includes ~~existing~~ development at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

The areas described by these plans contain a mixture of land uses, including open space, residential, commercial, and industrial. The past and present …

…

Overall, development of the Project would not substantially block publicly accessible views of the Bay or other scenic areas. The Project would provide a continuation of the existing street grid, thereby maintaining existing view corridors to the Bay and East Bay hills. The Project would also provide new parks and open space facilities. Public access areas (City and State parks) would provide views from the Project site toward the East Bay and the Bay. The Yosemite Slough Restoration Project would restore tidal wetlands in a 34-acre parcel of the CPSRA immediately adjacent to the Project site and would include continuation of the Bay Trail and viewpoints/interpretative signage. The bridge component of the Project would place a low bridge structure across the neck of the slough that would partially obstruct a scenic view from the slough toward the Bay from some vantage points. Views of the Bay and the remainder of the slough would be retained from numerous other vantage points, including along the shoreline, from the view corridors within the Project site, the CPSRA, and the proposed bridge itself. The Project would improve access to the entire area, allowing a greater number of people to take advantage of the scenic resources at CPSRA and the slough. The General Plan Urban Design Element … the Project's incremental contribution would not be cumulatively considerable, as the Project would not result in a~~n~~ substantial adverse impact on any scenic vista. Therefore, the Project's cumulative impact would be less than significant.

Pages III.E-78 to III.E-79, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on scenic resources is the area covered by the BVHP Redevelopment Plan, the HPS Redevelopment Plan, and the BVHP Area Plan (of the City's General Plan), as development in these Plan areas could affect the same scenic vistas analyzed for the Project as identified in Figure III.E-11 through Figure III.E-18. The past and present development in the City is described in the Setting section of this chapter, representing the baseline conditions for evaluation of cumulative impacts. Reasonably foreseeable future development includes ~~existing~~ the Yosemite Slough Restoration Project and development at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

Damage to scenic resources would occur if a project would directly affect environmental features, such as topographic features, landscaping, or a built landmark, that contribute to a scenic public setting. There are

no identified built landmarks, topographic features, or landscaping that contributes to a scenic public setting in the Plan area except for Double Rock, Bayview Hill, Hunters Point Hill, the Re-gunning crane, CPSRA, and the Yosemite Slough. … Overall, the bridge would not substantially damage a resource that contributes to a scenic public setting. On completion of the Yosemite Slough Restoration Project, publicly held views from the proposed bridge would include the improved slough area, as well as the Bay, and provide additional viewing opportunities that would not exist without the Project. The Project would retain structures …

Pages III.E-79 to III.E-80, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on visual character … Reasonably foreseeable future development includes ~~existing~~ development under the Yosemite Slough Restoration Project and at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

Page III.E-80, last paragraph

The proposed shoreline improvements would improve the aesthetic quality of the shoreline along the Project frontage, reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would complement the improvements to the tidal wetlands planned under the Yosemite Slough Restoration Project to provide expanded open space opportunities, including recreational trails linked to other regional trails and wildlife viewing. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline.

Page III.E-81, third paragraph

The geographic context for an analysis of cumulative impacts on light and glare … Reasonably foreseeable future development includes ~~existing~~ development under the Yosemite Slough Restoration Project and at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

F.9 Changes to Section III.F (Shadow)

Page III.F-5, fourth full paragraph

In addition, shadow effects would be significant if they would affect, in an adverse manner, the use of any park ~~of~~ or open space under the jurisdiction of the SFRPD, or significantly detract from the usability of other existing publicly accessible open space.

Page III.F-8, first full paragraph

For parks and open space that are not subject to the review requirements of *Planning Code* Section 295, only ~~provides~~ a qualitative assessment of shadow effects is provided, to determine whether enjoyment of the park or public space by users would be substantially and adversely affected by shadow effects. …

Page III.F-43, first and fourth paragraphs

The geographic context for an analysis of cumulative new shadow impacts on outdoor recreation facilities or other public space is limited to the immediate Project site and vicinity. … Reasonably foreseeable future development in this geographic area includes approved or under construction development as part of the Yosemite Slough Restoration Project, at Hunters Point Phase I, proposed development at Executive Park, and future development at India Basin Shoreline Area C. …

…

The shadow analysis has determined that the extent and duration of new shadow cast by the Project on public open space would not substantially affect outdoor recreation facilities or other public facilities, including the newly restored Yosemite Slough when that project is completed. The analysis did not identify potential cumulative shadow effects from other potential development. …

F.10 Changes to Section III.G (Wind)

Page III.G-7, mitigation measure MM W-1a

MM W-1a Building Design Wind Analysis. *Prior to design approval of Project buildings, ~~if recommended by Agency staff~~ for high-rise structures above 100 feet, the Project Applicant shall retain a 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.* …

F.11 Changes to Section III.H (Air Quality)

Page III.H-1, second paragraph

The analyses includes an (1) evaluation of criteria air pollutant mass emissions including emissions by construction workers and equipment (refer to Appendix H~~1~~2 [Construction Workers and Equipment]) using methodology provided in Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines; (2) operational emissions from project-related and mobile sources; and (3) ambient carbon monoxide concentration from mobile sources (refer to Appendix H~~1~~2 [Air Quality Model Input/Output]).[168,169] …

[169] BAAQMD. 2009. California Environmental Quality Act, Draft Air Quality Guidelines. September & ~~October~~ November Drafts.

Page III.H-7, Table III.H-2 (San Francisco Bay Area Air Basin and San Francisco County Criteria Pollutant Emissions Inventory and Projections, 2008 [Tons/Day—Annual Average]) has been revised

[NOTE: Table III.H-2 has been revised to reflect the amount of criteria pollutants that were emitted from mobile sources, rather than exclusively on-road motor vehicle sources.]

Table III.H-2 San Francisco Bay Area Air Basin and San Francisco County Criteria Pollutant Emissions Inventory and Projections, 2008 (Tons/Day—Annual Average) [Revised]

	CO	*ROG*	*NO_X*	*SO_X*	*PM_{10}*	*$PM_{2.5}$*
SFBAAB						
2008 Estimated						
Total Emissions	1,748	378	448	62	212	81
~~On-Road Motor Vehicle~~Mobile Source Emissions	1,542	183	381	15	20	16
San Francisco						
2008 Estimated						
Total Emissions	148	34	79	15	17	7.5
~~On-Road Motor Vehicle~~Mobile Source Emissions	142	18	74	15	4.6	4.1

SOURCE: California ARB, Almanac Emission Projection Data, http://www.arb.ca.gov/app/emsinv/emssumcat.php (accessed October 2009).

Natural source are excluded from this inventory.

Page III.H-8, first paragraph

The BAAQMD operates many air quality monitoring stations throughout the Bay Area. While the monitoring network is designed to measure air quality on a regional level, the locations of the monitors may not capture variations in air quality conditions on the sub-regional level. The closest monitoring station to the Project operated by the BAAQMD is the San Francisco-Arkansas Street monitoring station, which is located approximately three miles to the north of the Project on Potrero Hill. ….

The Bayview Community Air Monitoring Project (BayCAMP) was a joint project conducted by the San Francisco Department of the Environment, the California ARB, and the BAAQMD to measure air pollutants (i.e., criteria pollutants and air toxics) for a one-year period in the Bayview Hunters Point community and compare them to measurements collected at Arkansas Street in San Francisco and the Cities of San Jose and Fremont.[173a] Measurements were collected from mid-2004 to mid-2005 from a monitoring station located at the Earl P. Mills Community Center on Whitney Young Circle. Criteria pollutants measured in the Bayview-Hunters Point neighborhood were below federal and state standards and similar to or less than those collected in at other locations, with the exception of $PM_{2.5}$ and ozone. Peak ozone concentration (0.096 ppm) in the Bayview-Hunters Point neighborhood were slightly above state standards but were comparable to the other sites. The maximum 24-hour average $PM_{2.5}$ concentration (~50 $\mu g/m^3$) was comparable to the other sites, but exceeded the federal standard. Conversely, the annual average $PM_{2.5}$ (10.3 $\mu g/m^3$) concentration was well below the federal and state standards and was much lower than the concentrations reported for the other sites.

In 2005 and 2006, air quality monitoring associated with the San Francisco Electric Reliability Project[173b] was conducted to compare the BAAQMD air quality monitoring data, as noted above, to several community stations located in the Potrero Hill and Bayview Hunters Point neighborhoods. This study involved measuring annual average concentrations of PM_{10} and $PM_{2.5}$ at five locations including Arkansas Street, the Southeast Community Center, the Muni Maintenance Yard, Potrero Recreation Center, and Malcolm X Academy. The measured annual average PM_{10} concentrations at these five locations ranged from 16.9 to 20 $\mu g/m^3$, with the minimum and maximum measurements reported at the Potrero Recreation Center and Muni Maintenance Yard, respectively. The measured annual average $PM_{2.5}$ concentrations ranged from 7.6 to 9.3 $\mu g/m^3$, with the minimum and maximum measurements reported at the Potrero Recreation Center and Southeast Community Center, respectively.

Toxic Air Contaminants and $PM_{2.5}$

TACs are a regulatory designation that includes a diverse group of air pollutants that can adversely affect human health. …

[173a] Sierra Research, Inc., *State of the Air* in *Bayview/Hunters Point, Results of the Bayview Community Air Motoring Project (BayCAMP)*, November 2006.
[173b] Rajiv Bhatia and Thomas Rivard, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*, 2008.

Page III.H-10, new text following first paragraph

Fine Particulate Matter ($PM_{2.5}$)

Though $PM_{2.5}$ is a criteria pollutant, as discussed above, its human health impacts are also of concern as these particles can deposit deep in the lungs and can contain substances that are particularly harmful to human health. Extended exposure to particulate matter can reduce lung function, aggravate respiratory and cardiovascular disease, increase mortality rate and reduce lung function growth in children. Motor vehicles are currently responsible for about half of the particulates in the SFBAAB and wood burning in fireplaces and stoves is another large source.[178a] Many scientific studies link fine particulate matter and traffic-related air pollution to respiratory illness. California ARB has established that $PM_{2.5}$ is associated with dose-dependent adverse health effects below existing federal and state air quality standards and in a 2008 study that a 10 percent increase in $PM_{2.5}$ concentrations increased the non-injury mortality by 10 percent.[178b]

[178a] BAAQMD, *Draft California Environmental Quality Act, Air Quality Guidelines*, December 2009.
[178b] BAAQMD, *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*, December 7, 2009.

Pages III.H-11 to -12, Table III.H-4 (Ambient Concentrations of Carcinogenic TACs in the Bay Area Air Basin) and the following text have been revised

[NOTE: Table III.H-4 has been revised to add footnote "a" and to further clarify footnote "b" with respect to cancer risk estimates.]

Table III.H-4 Ambient Concentrations of Carcinogenic TACs in the Bay Area Air Basin [Revised]

Compound	Concentration[a] (ppb)	Concentration[a] (µg/m³)	Unit Risk (per µg/m³)	Cancer Risk[*b] (Chances in one million)
1,3-Butadiene	0.09	0.21	1.7×10^{-4}	36.0
Benzene	0.40	1.30	2.9×10^{-5}	37.7
Carbon tetrachloride	0.11	0.70	4.2×10^{-5}	29.1
Formaldehyde	2.18	2.72	6.0×10^{-6}	16.3
Acetaldehyde	0.72	1.32	2.7×10^{-6}	3.6
Perchloroethylene	0.03	0.18	5.9×10^{-6}	1.1
Methylene chloride	0.36	1.27	1.0×10^{-6}	1.3
Methyl tert-butyl ether (MTBE)	0.53	1.95	2.6×10^{-7}	0.5
Chloroform	0.02	0.12	5.3×10^{-6}	0.6
Trichloroethylene	0.02	0.12	2.0×10^{-6}	0.2
Particulate TACs				
Chromium (hexavalent)	0.10	1.00×10^{-4}	1.5×10^{-1}	14.4
Dioxin	0.000025	2.50×10^{-8}	38	1.0
Nickel	3.30	3.30×10^{-3}	2.6×10^{-4}	0.8
Polycyclic aromatic hydrocarbons (PAHs)	0.47	4.70×10^{-4}	1.1×10^{-3}	0.5
Lead	7.80	7.8×10^{-3}	1.2×10^{-5}	0.1
Total for all TACs (excluding DPM)				***143***

SOURCE: BAAQMD, Toxic Air Contaminants 2003 Annual Report, August 2007.

ppb = parts per billion; µg/m³ = micrograms per cubic meter.

*a. The concentration used in the risk calculation is the mean of all daily samples taken for the BAAQMD monitoring network in 2003; however, for some compounds the concentration represents data collected at a subset of the stations in the network. See the BAAQMD Toxic Air Contaminants 2003 Annual Report (issued August 2007) for more details.

b. Cancer risks are calculated for the inhalation pathway using the Unit Risk Factors adopted by OEHHA for the Air Toxics Hot Spots Program, and assuming 70-year continuous exposure. While this risk estimate is representative of the average measured concentrations in urban areas of the Air District, this value does not reflect the potential spatial variation of TAC emissions and/or exposure. Localized TAC "hot spots" can occur.

Cancer risks were also estimated in the Bayview Hunters Point neighborhood as part of the monitoring efforts in the BayCAMP project (Sierra Research, Inc. 2006). The reported cancer risks from TACs based on the monitoring results were estimated to be 219 in one million. However, the authors of the report noted that "more than half of the measured risk (113 in a million out of 219 in a million) is due to acrylonitrile.[178c] However, this estimate is probably not very accurate because most of the measurements were below the limit of detection." This means that the risk estimates were calculated using the high detection limit, not measured concentrations. As explained by the authors, "most of the estimated risk comes from this assumed (not measured) concentration." Thus, "the estimated risk would be 106 in a

million from the remaining compounds," which is lower than the cancer risk estimates reported for the Bay Area Basin in Table III.H-4.

[178c] "Acrylonitrile is primarily used in the manufacture of acrylic and modacrylic fibers, which may be used in products such as apparel and carpets. Acrylonitrile may be released to the ambient air during its manufacture and use." The source of acrylonitrile detected is not known as there are no permitted sources. http://www.epa.gov/ttn/atw/hlthef/acryloni.html.

Page III.H-13, last paragraph

The *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides California ARB recommendations for the siting of new sensitive land uses (i.e., residences, schools, daycare centers, playgrounds, and medical facilities) near recognized major sources of TACs (e.g., freeways, large warehouses/distribution centers, rail yards, etc.), as shown in Table III.H-4a (Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities [from CARB 2005]).

Table III.H-4a Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities (from CARB 2005) [New]

Source Category	*Advisory Recommendations*
Freeways and High-Traffic Roads	■ Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
	■ Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week).
	■ Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	■ Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	■ Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	■ Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
	■ Chrome Platers: Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	■ Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district.
	■ Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	■ Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality-of-life issues.

Page III.H-14, first paragraph

The BAAQMD is the primary agency responsible for ~~comprehensive~~ air pollution control in the SFBAAB. To that end, the BAAQMD works directly with the Association of Bay Area Governments (ABAG), the

Metropolitan Transportation Commission (MTC), and local governments and cooperates actively with all federal and state government agencies. The BAAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The BAAQMD is directly responsible for reducing emissions from stationary (area and point) sources and for assuring that state controls on mobile sources are effectively implemented, although BAAQMD has no direct authority to regulate mobile source emissions. It has responded to these requirements by preparing a series of Ozone Attainment Plans and Clean Air Plans that comply with the federal CAA and the CCAA to accommodate growth, reduce the pollutant levels in the SFBAAB, meet NAAQS and CAAQS, and minimize the fiscal impact that pollution control measures have on the local economy. …

Page III.H-15, first full paragraph

As of the date of this ~~Draft~~ Final EIR, the BAAQMD is in the process of revising their CEQA guidelines and ~~expects the draft to be approved by their~~ is currently planning for the Board of Directors to consider the draft ~~by the end of 2009~~in June 2010. ~~On October 7, 2009~~In December 2009, the BAAQMD released ~~a~~ its most recent draft table of Staff-Recommended CEQA Thresholds of Significance which indicates a number of modifications to existing guidelines, including changes to the maximum daily emissions thresholds for criteria pollutants emissions from operational sources as well as requirements for the quantification of criteria pollutant and TAC emissions from construction activities and comparison to mass emission or risk thresholds, respectively. As these draft guidelines have not been adopted by the BAAQMD's Board of Directors, the Project is not subject to the draft requirements; however, a brief analysis of these proposed guidelines in relation to the Project emissions is included at the end of the impact analysis.

Page III.H-15, following last bullet

- …
- Link the positive effects of energy conservation and waste management to emission reductions
- Exercise air quality modeling in building design for sensitive land uses, such as residential developments that are located near the sources of pollution such as freeways and industries

Page III.H-16, second paragraph

As explained earlier, exposure to $PM_{2.5}$ can result in adverse health effects. SFDPH has developed a strategy for addressing exposures in the siting of new residential buildings.[179a] ~~The~~ *San Francisco Health Code* Article 38 requires an air quality assessment to evaluate the concentration of $PM_{2.5}$ from local roadway traffic sources that may impact ~~a~~new residential development containing 10 or more dwelling units on a site. If the air quality assessment indicates that the estimated concentration of $PM_{2.5}$ at the site attributable to all roadway vehicle emissions within 500 feet (approximately 150 meters) of the site would be greater than 0.2 $\mu g/m^3$ (micrograms per cubic meter), Section 3807 requires development on the site to be designed or relocated to avoid exposure greater than 0.2 $\mu g/m^3$, or a ventilation system to be installed that would be capable of removing 80 percent of ambient $PM_{2.5}$ from habitable areas of the residential units. An Article 38 analysis done for the Project area identified three locations along Arelious Walker between Harney Way and Carroll Avenue, within 50 to 100 feet from the roadway, where total $PM_{2.5}$ roadway

concentrations would be expected to exceed 0.2 μg/m^3 assuming 2030 traffic conditions.[179b] Residential structures planned in these locations will be required to comply with Article 38 provisions, which could include redesign or setback of structures to avoid residential exposure or installation of a ventilation system in new residential units, all of which would reduce exposures below the 0.2 μg/m^3 level.

[179a] San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 6, 2008.
[179b] ENVIRON, Community Hazards and San Francisco Health Code Article 38 Analyses, May 2010 (also contained in Appendix H4 of the EIR).

Page III.H-17, first bullet

- 80 pounds per day (ppd) or 15 tons per year (tpy) of ROG~~,~~

Page III.H-18, second paragraph

BAAQMD does not currently recommend a threshold of significance for determining impacts associated with ~~PM_{25}. The San Francisco Department of Public Health (SFDPH) is concerned that individuals who live in the proximity of heavily travelled roads or freeways could incur adverse health effects as a result of exposure to vehicle emissions. To minimize contributions to health impacts associated with locating new residential projects near roadway "hot spots," the SFDPH developed a strategy to assess and mitigate air pollution at these locations.[183] Their strategy is based on the use of an annual average threshold concentration of $PM_{2.5}$ (0.2 μg/m^3) within a 150-meter zone (about 500 feet) of a new project as a means of assessing the potential for concern.[184] The threshold concentration of $PM_{2.5}$ is meant to serve as a health-protective "proxy" or surrogate for pollutant exposures from vehicles, i.e., $PM_{2.5}$ is not the only pollutant of concern.[185] The $PM_{2.5}$ threshold serves as a concentration meant to protect the health of residents from all vehicle-associated emissions from a project.[186]~~localized exposures to $PM_{2.5}$, but is addressing this issue in its draft CEQA guidelines. California ARB also has not established a health-protective threshold for $PM_{2.5}$. In the absence of an agency-recommended health-based $PM_{2.5}$ standard, annual average exposures from roadway vehicles within a 150-meter buffer of a sensitive receptor below an action level (0.2 μg/m^3) identified by SFDPH[186a] were considered less than significant for CEQA purposes. The rationale provided by SFDPH for the 0.2 μg/m^3 action level included studies suggesting that "a change in ambient concentrations of $PM_{2.5}$ by 0.2 μg/m^3, independent of other vehicle pollutants would result in significant forecasted health impacts" (2008).

The 0.2 μg/m^3 identified level is in accord with proposed CEQA guidelines developed by BAAQMD for $PM_{2.5}$.[186b] According to BAAQMD, "emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of $PM_{2.5}$ from any source would result in an average annual increase greater than 0.3 μg/m^3."[186c] This determination is based on the lower range of a USEPA proposed Significant Impact Level (SIL) for stationary sources, which is interpreted by the USEPA as the level of ambient impact that is considered to represent a "significant contribution" to regional nonattainment. The BAAQMD goes on to indicate that the USEPA did not design this threshold for addressing community risks and hazards, but it was designed to protect human public health at a regional level by helping an area to maintain the NAAQS. The BAAQMD determined this SIL to be a reasonable goal at the local scale and, therefore, a useful reference for comparison. The BAAQMD states that this proposed threshold (0.3 μg/m^3) is consistent with the SFDPH threshold of 0.2 μg/m^3. The BAAQMD

reached that conclusion based on an ARB report that determined an increase in mortality from a 0.3 μg/m^3 increment of $PM_{2.5}$ was consistent with the estimated increase in mortality assumed by SFDPH in identifying the 0.2 μg/m^3 increment. BAAQMD further states that "On balance, the Air District estimates that the SFDPH threshold and the [District proposed threshold of 0.3 μg/m^3], in combination with the cumulative threshold for $PM_{2.5}$, will afford similar levels of health protection." BAAQMD is recommending a cumulative threshold for $PM_{2.5}$ of 0.8 μg/m^3, which is the mid-range USEPA proposed SIL.

~~[183] San Francisco Department of Public Health (SFDPH). 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review. May 6.~~
~~[184] Ibid.~~
~~[185] Ibid.~~
~~[186] Ibid.~~
[186a] San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 6, 2008.
[186b] BAAQMD, *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7, 2009.
[186c] BAAQMD, *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*, December 7, 2009, page 43.

Page III.H-19, fourth paragraph

The Project, at full build-out (2032~~9~~), would also generate 78,109 daily external motor vehicle trips. …

Page III.H-21, third full paragraph

Since the HRAs for DPM or TACs bound to soil-PM_{10} emitted during construction activities were completed, changes were made to the Project Description including the addition of roadway improvements on Ingerson and Jamestown Avenues, ~~compaction of~~change in the Candlestick Point construction schedule (completion in ~~2026~~2031), and slight changes to the Candlestick Point phasing boundaries. These changes to the Project Description were found not to change the HRA conclusions significantly, as documented in a technical memorandum included in Appendix H3, Attachment VI.

Page III.H-21, fourth full paragraph

… regarding this assessment can be found in Appendix H3, Attachment III.[193]

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[193] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, ~~September 28, 2009~~ May 4, 2010. See Appendix H3.

Pages III.H-21 to A-22, last bullet

- In order to approximate the maximum potential number of facilities with TAC emitting sources, the area designated for proposed R&D development would be divided into one-acre plots, which is generally consistent with the minimum size of a parcel based on the expected land uses within the R&D parcels.

Page III.H-22, third paragraph

~~The potential health impacts from traffic-related $PM_{2.5}$~~–Although not required as part of the criteria pollutant analysis, the incremental increase in the concentration of vehicular emissions of $PM_{2.5}$ associated with the Project that would occur along selected roadways were ~~evaluated by comparing predicted~~

~~concentrations of $PM_{2.5}$~~compared to the ~~SFDPH $PM_{2.5}$ threshold of~~ 0.2 μg/m^3~~. The analysis of $PM_{2.5}$ emissions from Project-related traffic was consistent with methodologies recommended by SFDPH~~ identified action level. The details of the HRA for $PM_{2.5}$ can be found in Appendix H3, Attachment IV.[194]

[194] ~~ENVIRON, Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan, Appendix IV, September 28, 2009.~~

Pages III.H-22 to -23, last partial paragraph

The concentration of $PM_{2.5}$ from vehicular emissions was characterized by developing exposure point concentrations at residential receptors surrounding the thoroughfares and roadways evaluated: Third Street; Innes Avenue/Hunters Point Boulevard/Evans Avenue; Palou Avenue; Gilman Avenue/Paul Avenue; Jamestown Avenue; Ingerson Avenue; and Harney Way. Those thoroughfares would connect the Project and major arterials to US-101 or downtown San Francisco. In addition, Innes Avenue/Hunters Point Boulevard/Evans Avenue and Harney Way were identified as streets with ~~substantial~~ truck traffic and thus would be expected to yield more $PM_{2.5}$ compared to other roads. Palou Avenue and Gilman Avenue/Paul Avenue were evaluated quantitatively as there are residences in the vicinity of these roads where individuals may incur exposure to $PM_{2.5}$, while Jamestown and Ingerson Avenues were evaluated in a semi-quantitative manner as they are immediately adjacent to residences; however, have much lower expected Project-related vehicle traffic than Pal~~a~~ou and Gilman/Paul.

Annual average airborne concentrations of $PM_{2.5}$ attributable to Project-related traffic emissions were estimated by applying a Gaussian air dispersion model, CAL3QHCR, which has been approved by the USEPA and California ARB for use in the environmental documentation of transportation projects. Both free flowing traffic and queuing at intersections were evaluated.

Page III.H-24, second full paragraph

As described earlier, an HRA[199] evaluated potential human health effects due to exposure to DPM from heavy equipment exhaust that may be emitted during Project-related construction activities including abatement, demolition, grading, excavation, and foundation and structure construction. … :

- Construction equipment used for the Project ~~will~~ would utilize a phased-in emission control technology in advance of a regulatory requirement such that 50 percent of the fleet will meet USEPA Tier ~~4 engine~~2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~ the first two years of construction activities, increasing to 75 percent of the fleet in ~~2012~~ the third year and 100 percent of the fleet starting in ~~2013~~ the fourth year and for the duration of the Project
- Construction equipment used in the Alice Griffith parcels (CP01 through CP06) would utilize equipment which meets the USEPA Tier ~~4 engine~~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~~.~~

[199] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*~~, September 28, 2009~~ May 4, 2010. See Appendix H~~1~~3.

Pages III.H-25 through -27, beginning with first paragraph

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks. The HRA, which took into account the mitigation measures described above, concluded that the cancer risk at the MEI would be 3.3 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during Candlestick Point construction activities. Exposure to DPM from construction activities associated with Candlestick Point would not exceed the threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.007, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

The impact of Candlestick Point construction activities without the mitigation described above would result in an estimated cancer risk at the MEI of 11 in one million, above the significance threshold of 10 in one million and, therefore, significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.027, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds with mitigation, this impact is less than significant with mitigation measure MM AQ-2.1:

MM AQ-2.1 Implement Emission Control Device Installation on Construction. *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 USEPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~the first two years of construction activities, increasing to 75% of the fleet in ~~2012~~the third year and 100% of the fleet starting in ~~2013~~the fourth year and for the duration of the Project.*

Impact of Hunters Point Shipyard Phase II

Impact AQ-2b **Construction at HPS Phase II would not result in impacts to off-site populations from Project-generated emissions of DPM. (Less than Significant with Mitigation) *[Criterion H.d]***

As noted above, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI would be 3.8 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during HPS-Phase II construction activities. Construction activities associated with HPS-Phase II would not exceed the threshold. In addition, the HRA

concluded the maximum chronic non-cancer HI to be 0.01, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the~~The impact of ~~Candlestick Point~~HPS Phase II construction activities without the mitigation described above~~; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts~~ would ~~be potentially above the BAAQMD's~~ result in an estimated cancer risk at the MEI of 8.4 in one million, which is below the significance threshold of 10 in one million and ~~would~~, therefore, ~~be potentially~~ less than significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.024, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of HPS~~-~~ Phase II have been determined to be below established thresholds with and without mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1.

Impact of Alice Griffith Public Housing

Impact AQ-2c **Construction activities associated with the Project would not result in impacts to the existing Alice Griffith Public Housing from Project-generated emissions of DPM. (Less than Significant with Mitigation)** ***[Criterion H.d]***

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI inside Alice Griffith would be 4.5 in one million. This represents the maximum level of DPM experienced by all on-site sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the threshold. In addition, the HRA concluded the maximum chronic non-cancer HI to be 0.02, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

The impact of Candlestick Point and HPS Phase II construction activities without the mitigation described above would result in an estimated cancer risk at the on-site MEI (sensitive receptors inside Alice Griffith) of 20 in one million, above the significance threshold of 10 in one million and therefore significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.09, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of the Project have been determined to be below established thresholds with mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1 and mitigation measure MM AQ-2.2:

MM AQ-2.2 Implement Accelerated Emission Control Device Installation on Construction Equipment Used for Alice Griffith Parcels. *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 though CP06) ~~would~~ utilize equipment which meets the USEPA Tier ~~4 engine~~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.*

Combined Impact of Candlestick Point and Hunters Point Shipyard Phase II

Impact AQ-2 **Construction activities associated with the Project would not result in impacts to on-site and off-site populations from Project-generated emissions of DPM. (Less than Significant with Mitigation) *[Criterion H.d]***

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the inhalation cancer risk at the on-site and off-site MEI would be 4.5 in one million. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.01, which is below the BAAQMD's ~~significance threshold of 1.0. An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant~~noncancer HI significance threshold of 1.0.

The impact of Candlestick Point and HPS Phase II construction activities without the mitigation described above would result in an estimated cancer risk at the on-site and off-site MEI of 20 in one million, above the significance threshold of 10 in one million and therefore significant without mitigation. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.09, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds with mitigation in place, this impact is less than significant with implementation of mitigation measure MM AQ-2.1 and mitigation measure MM AQ-2.2.

Page III.H-29, second full paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measures, the impacts from TACs bound to soil PM_{10} would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-29, last paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measure, the impacts from TACs bound to soil PM~~10~~$_{10}$ would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-30, fourth paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measure, the impacts from TACs bound to soil PM_{10} would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-30, Impact AQ-4 and the following paragraph

Impact AQ-4 **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~~ in the year 2029~~. (Significant and Unavoidable)** ***[Criteria H.a and H.c]***

The proposed Project's design incorporates a dense, compact development plan that includes a diverse mix of land uses that are well connected with regional mass transit systems. … With these features included,

the proposed Project at full buildout ~~(2029)~~ is expected to generate 78,109 daily external motor vehicle trips. …

Page III.H-33, Impact AQ-6

Impact AQ-6 **Implementation of HPS Phase II would not expose nearby receptors to an increase in local concentrations of toxic air contaminants due to the operation of Research and ~~Implementation~~ Development uses. (Less than Significant with Mitigation) *[Criterion H.d]***

Pages III.H-34 and -35, beginning with first paragraph

Using the assumptions discussed in the Analytic Method section, the HRA[202] estimated the excess lifetime cancer risk and chronic noncancer HI due to the combined TAC emissions from the R&D areas at any surrounding receptor location. All receptors were initially evaluated as residential receptors. The estimated excess lifetime cancer risks and HIs within areas designated for residential use were found not to exceed the BAAQMD's significance thresholds of an incremental residential cancer risk of 10 in one million for carcinogenic and a chronic noncancer HI of 1.0 for noncarcinogenic health risks. An analysis was not conducted to determine the impact without the assumptions discussed earlier (such as the assumptions that each lot would be 1 acre in size and have one source of TAC emissions); however, due to the potential number of R&D facilities with sources of TAC emissions capable of locating in the R&D areas and their proximity to adjacent receptors, without mitigation, the impacts would potentially be above the BAAQMD's significance threshold and therefore potentially significant.

… Due to the decrease in the frequency and duration of potential exposures, the chronic HI would also be reduced below the HI threshold of 1.0.

The estimated health risks would be below BAAQMD thresholds for all residential receptor locations as a result of implementation of the Project, including implementation of the following mitigation measures. The mitigation measures would require TAC emitting facilities that are located on a lot 1 acre or larger in size to establish that their TAC emissions are below the BAAQMD thresholds. If they exceed these thresholds, or if a TAC emitting facility locates on a lot smaller than 1 acre in size, the facility would further need to analyze the effect of its emissions in combination with other TAC emitting facility emissions to establish that the combined emissions would be below the BAAQMD thresholds. Impacts would be less than significant.

MM AQ-6.1 ~~*In accordance with the approach used to evaluate this impact, the minimum plot size for facility with sources of TAC emissions in R&D areas will be no smaller than 1 acre.*~~ *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 these 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.*

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 not cause these thresholds to be exceeded at the nearest residential locations.

Impact AQ-7: Traffic $PM_{2.5}$

Impact AQ-7 **Operation of the Project would not ~~exceed SFDPH thresholds or otherwise~~expose receptors to concentrations of $PM_{2.5}$ above a 0.2 μg/m^3 action level for $PM_{2.5}$ and, therefore, would not substantially affect the health of nearby receptors as a result of an increase in local concentrations of vehicle emissions ($PM_{2.5}$) associated with vehicle use attributable to operation of the Project. (Less than Significant) *[Criterion H.d]***

With development of the Project, vehicle trips and thereby vehicle emissions along local roadways would increase. The exposure of residential receptors to increased vehicle emissions could affect human health. As a result, and as discussed above, potential $PM_{2.5}$ concentrations at select roadways with the addition of Project traffic were estimated compared against ~~SFDPH thresholds to determine the potential health risks~~an identified 0.2 μg/m^3 action level to determine whether sensitive receptors would be exposed to a substantial increase in $PM_{2.5}$ concentrations attributed to vehicle emissions that would be associated with the Project. Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of Project-related traffic, no receptors along the streets listed above would experience and increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's 0.2 μg/m^3 threshold.[203]~~the identified 0.2 μg/m^3 action level. The details of the HRA for $PM_{2.5}$ can be found in Appendix H3, Attachment IV. As concentrations of $PM_{2.5}$ at sensitive receptor locations would not exceed the identified 0.2 μg/m^3 action level, impacts would be less than significant. No mitigation is required.

~~Concentrations would not exceed SFDPH's threshold, or the BAAQMD's proposed threshold, and as such, impacts would be less than significant. No mitigation is required.~~

[202] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Attachment III, ~~September 28, 2009~~ May 4, 2010. See Appendix H3.
~~[203] ENVIRON, Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan, Appendix IV, September 28, 2009.~~

Page III.H-37, new first bullet

- Yosemite Slough Restoration Project: Re-vegetation, recreational and trails only; no structures
- Hunters View: 550 new homes
- …

Pages III.H-37 and -38, last paragraph

When evaluating combined impacts, the relative location of the other proposed project to the Project is a critical factor to consider as local wind patterns affect the transport of pollutants from each location. As shown in Figure 1 of the HHRA Appendix V,-[205] the winds in the vicinity of the Project are predominantly from the west, blowing directly east. As such, only construction activities on other projects directly west of the Project are likely to combine with Project-related construction activities. As the Project is on the San Francisco Bay shoreline, there are no additional projects immediately east. … The Project will not substantially impact HPS Phase I; the impacts of Project-related construction activities on HPS Phase I were explicitly evaluated in Impact AQ-2 and Impact AQ-3, as discussed above. Depending on the construction schedule for the Yosemite Slough Restoration Project, air quality impacts from construction equipment could combine with construction emissions of the Project. However, construction emissions from the Yosemite Slough Restoration Project would be predominantly blown east over the Bay and would not be anticipated to combine with construction emissions of the Project to cause a significant impact on sensitive receptors.

[205] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix V, September 28, 2009 May 4, 2010. See Appendix H3.

Page III.H-38, third full paragraph

Project operational emissions of the ozone precursors, ROG and NO_X, and of the criteria pollutants PM_{10} and $PM_{2.5}$ would exceed the BAAQMD project-specific significance thresholds. Therefore, as discussed earlier, these emissions would be considered to have a significant and unavoidable cumulative impact. However, these emissions are typically addressed through the BAAQMD Clean Air Plan so that Project emissions, in combination with all adjacent projects, will be addressed at a regional level.

Pages III.H-38 and -39, last partial paragraph

Project stationary–-source TACs and the $PM_{2.5}$ from motor vehicles on site access roads, which could present human health risks to nearby receptors as a result of operation of the Project, would not exceed current or proposed BAAQMD thresholds. In addition, the analysis of potential health hazards resulting from mobile emissions took into account future (including all existing) traffic, including that attributed to future growth within the cumulative context, and the relative health risks future motor vehicle traffic would impose would not exceed BAAQMD thresholds. Therefore, in accordance with BAAQMD guidelines, TAC and $PM_{2.5}$ emissions would be considered to have a less-than-significant cumulative impact.[206]

No guidance is currently available for the assessment of $PM_{2.5}$ cumulative impacts from Project operations. $PM_{2.5}$ cumulative effects are assessed below based on the proposed BAAQMD CEQA guidelines.

F.12 Changes to Section III.I (Noise)

Page III.I-1, second paragraph

Data used to prepare this analysis were obtained from the *San Francisco General Plan* (General Plan) *Environmental Protection Element*; the *Bayview DEIR San Francisco 49ers Stadium Operational Noise Study*, prepared by Wilson, Ihrig & Associates (included as Appendix I1); the Federal Transit Administration's *Transit Noise and Vibration and Impact Assessment* methodology; and by measuring and modeling existing and future noise levels within the Project site and at surrounding land uses. … All construction activity estimates were based on the September 2009 and March 2010 MACTEC Engineering Construction Phasing Plan.

Page III.I-6, second paragraph

The Project site is located in the southeastern area of San Francisco and extends east to San Francisco Bay (refer to Figure II-1 [Project Location]). This promontory is bounded on the south and west by the Bayview Hunters Point neighborhood and on the north and east by San Francisco Bay. The ground surface across the entire Project site is relatively flat with elevations ranging from approximately 0 feet to +20 feet (San Francisco City Datum [SFCD]).[210] …

[210] San Francisco City Datum (SFCD) is a local vertical geodetic reference system specific to the City and County of San Francisco and formally established in 1964 as 8.616 feet above the National Geodetic Vertical Datum of 1929 (NGVD29), making it about 8.13 feet above mean sea level. The North American Vertical Datum ~~was established in 1988~~ (NAVD88) ~~and~~ generally has replaced NGVD29 as a standard reference. Elevations expressed in NGVD29 may be converted to NAVD88 by adding 2.69 feet.

Page III.I-24, first paragraph

It is anticipated that the Project would be constructed beginning in ~~2010~~2011, with full build-out by ~~2029~~ 2031 and full occupancy in 2032, which represents an approximately ~~19~~20-year construction period. …

Page III.I-26, Figure III.I-5 (Existing and Future Noise-Sensitive Land Use in Project Site and Vicinity) has been revised

[The figure has been modified to more accurately depict land uses identified as noise sensitive by the City of San Francisco's General Plan or Municipal Code. The figure also identifies Yosemite Slough as a noise-sensitive land use.]

SOURCE: Lennar, 2009; CCSF, 2007; PBS&J, 2010. PBS&J 04.21.10

FIGURE III.I-5 ~~Candlestick Point - Hunters Point Shipyard Phase II EIR~~

EXSITING AND FUTURE NOISE SENSITIVE LAND USES IN PROJECT SITE AND VICINITY

Page III.I-27, third paragraph

Off-site roadway improvements would utilize a pavement crusher (similar in noise levels to a grader), loaders and graders, as well as water and haul trucks. Based on the noise levels presented in Table III.I-11, the approximate noise levels experienced by adjacent noise-sensitive uses due to construction activities occurring during off-site roadway improvements, which are conservatively assumed to be ~~50~~25 feet from the proposed improvement activity, would be approximately ~~85~~92 dBA during the loudest off-site activities (noise from a grader).

Page III.I-28, first paragraph

Residential uses that would be developed as part of the Project in Candlestick Point would be occupied starting in ~~2017~~2019, as shown in Table II-15 (Building Construction Completion Dates) in Chapter II (Project Description). These residential uses would be located in the Alice Griffith district. Subsequent residential uses in Candlestick Point are scheduled for occupancy in ~~2021~~2023, ~~2025~~2027, and ~~2029~~2032 in the CP North, CP South, CP Center, and Jamestown districts as shown in Figure II-16 (Proposed Site Preparation Schedule) and Figure II-17 (Proposed Building and Parks Construction Schedule). As shown in Table II-15, the commercial, neighborhood and regional retail, hotel and performance venue associated with Candlestick Point would be completed by ~~2021~~2023.

Page III.I-30, second paragraph

While the construction activities would occur over an approximately ~~19~~20-year timeline, the activities that impact individual receptors would be temporary. …

Page III.I-31, last paragraph

At HPS Phase II, new development would begin with the construction of the 49ers stadium, scheduled for completion during the 2014–2017 time period. HPS North district residential development would begin during 2011–2015 and is planned for completion by ~~2017~~2019. Build-out of the R&D district is planned by ~~2017~~2027. The mixed-use, neighborhood retail, and residential development at the HPS Village Center district would be completed in ~~2021~~2023. …

Page III.I-33, first paragraph

Construction activities for the Project would create a substantial temporary increase in ambient noise levels on the site and in existing residential neighborhoods adjacent to the site. While construction activities would occur over a ~~19~~20-year timeline, the conditions under which noise levels would be considered excessive during construction activities, such as excavation or pile driving, would only occur for the duration of the specified and would only impact receptors located within 150 feet or closer of the noise producing activity. …

Page III.I-39, last paragraph

Mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a have been identified to minimize or reduce construction related noise levels to the extent feasible. … However, pile-driving and excavation

activities would last throughout the ~~18~~20-year construction phasing, and, therefore, this temporary increase in ambient noise levels would be noticeable and would likely be cause for human annoyance. …

Page III.I-43, Figure III.I-6 (Project-Related Roadway Noise Level Increases) has been revised

[NOTE: This figure has been corrected to show a less-than-3 dBA increase along Harney Way instead of the 5 dBA increase shown in the Draft EIR.]

SOURCE: PBS&J, 2010.

PBS&J 04.28.10

FIGURE III.I-6

~~Candlestick Point - Hunters Point Shipyard Phase II EIR~~

PROJECT-RELATED ROADWAY NOISE LEVEL INCREASES

Page III.I-51, mitigation measures MM NO-7.1 and Mm NO-7.2

MM NO-7.1 …

- *After ~~certification of the EIR~~ 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*
- …

MM NO-7.2 Residential Use Plan Review by Qualified Acoustical Consultant. *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 proposed on-site residential uses closest to the proposed Stadium, the ~~Stadium Operator~~ 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}.*

Page III.I-54, Table III.I-18 (Modeled Cumulative Traffic Noise Levels along Major Project Site Access Roads) has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table III.I-18 Modeled Cumulative Traffic Noise Levels along Major Project Site Access Roads [Revised]

Roadway	*Land Use*	*Existing Noise Level*	*2030 Without Project*	*2030 With Project*	*Cumulative Increase*	*Allowable Increase*	*Significant Cumulative Impact?*
…							
Ingalls Street north of Carroll Avenue	Residential	56.7	61.7	63.1	6.4	3	**Yes**
Carroll Avenue east of 3rd Street	~~Residential~~ Commercial	**52.6**	**53.8**	**58.1**	**5.5**	5	**Yes**
Gilman Avenue east of 3rd Street	Residential	**57.7**	**60.6**	**64.6**	**6.9**	3	**Yes**
…							

F.13 Changes to Section III.J (Cultural Resources)

Page III.J-1, second paragraph

The cultural resources section is based on the following technical studies: *Historical Context for the Archaeology of the Bayview Waterfront Project*,[225] San Francisco, California, ~~July~~ November 2008;[226] *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project*, San Francisco, California, ~~October~~ November 2009, and Addendum, March 2010;[227] *Historic Context for the Bayview Waterfront Plan*, ~~December 2008~~ July 2009~~;~~;[228] ~~and~~ the *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Historic Resources Survey and Technical Report*, October 2009~~;~~;[229] *Historic Resource Evaluation for Candlestick Park Sports Stadium, San Francisco*, April 2010;[229a] and *Memorandum on Comparative Rarity of World-War-II Era Buildings at Hunters Point Shipyard*, April 2010.[229b] …

[226] Archeo-Tec, *Historical Context for the Archaeology of the Bayview Waterfront Project, San Francisco, California*, ~~July~~ November 2008. Archaeological reports are on file with the City, but are not available to the public.
[227] Archeo-Tec, *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*, ~~October~~ November 2009, and *Addendum*, March 2010. Archaeological reports are on file with the City, but are not available to the public.
[228] Circa Historic Property Development, *Historic Context for the Bayview Waterfront Plan*, December 2008~~. This report is on file at the City and is available for review upon request~~ (refer to Appendix J1 [CIRCA, *Historic Context Statement*, July 2009]).
[229] Circa Historic Property Development, *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Draft Historic Resource Survey and Technical Report*, ~~July~~ October 2009~~. This report is on file at the City and is available for review upon request~~ (refer to Appendix J2 [CIRCA, Historic Resources Survey, October 2009]).
[229a] Circa: Historic Property Development, *Historic Resource Evaluation for Candlestick Park Sports Stadium, San Francisco, CA*, April 2010 (refer to Appendix J3 [CIRCA, *Historic Resources Evaluation for Candlestick*, April 2010]).
[229b] Circa: Historic Property Development, *Memorandum on Comparative Rarity of World-War-II Era Buildings at Hunters Point Shipyard*, April 2010 (refer to Appendix J4 [CIRCA, *Rarity of HPS Military/Industrial Buildings*, April 2010]).

Page III.J-18, third paragraph and new fourth paragraph

Based on archival research, the following indigenous sites are known or are believed to be located within the boundaries of the Project site. ~~Those~~ Some sites have not been evaluated for eligibility for listing on the California Register of Historic Resources (CRHR) or National Register of Historic Places, since most are under fill or on areas that have been developed. However, if a site or portion of a site contains intact archaeological deposits it would be considered a significant archaeological resource.[238]

CA-SFR-7

Site CA-SFR-7, as described above, has been determined to the eligible for the National Register of Historic Places (NRHP). The site is at the western end of Candlestick Point.

Pages III.J-18 and III.J-19, beginning with last partial paragraph

CA-SFR-12

Site CA SFR 12 is a shellmound, recorded by Nelson as Site #391 on the south side of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~identified~~ to identify the likely location of the site in HPS.[241]

CA-SFR-13

Recorded by Nelson as Site #392, site CA-SFR-13 may be located at the eastern end of Hunters Point.[242] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have spotted~~ to identify the likely location of the site in HPS.[243] Hamusek-McGann et al. report that based on historical maps the probable location of this site would have placed it at the original shoreline where Drydock 4 was later built. Due to extensive excavations that occurred during construction of the drydock Hamusek-McGann et al. assume that CA-SFR-13 was destroyed; however, as with other sites that were later determined to be wholly or partially intact, such as CA-SFR-7, CA-SFR-17, and CA-SFR-140, this site might also present intact discoveries.

CA-SFR-14

Site CA-SFR-14 is probably a mound, recorded by Nelson as Site #392a on the northeast end of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site in HPS.[244]

CA-SFR-11

Site CA-SFR-11 is a shell midden recorded as Nelson's Site #390 on the south side of Hunters Point.[245] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site inside HPS.[246]

Page III.J-19, fourth paragraph

However, the MEA Shellmound Archaeo GIS Project map also places the site at another location—one immediately northeast of the Project boundary.[247]~~.~~ This appears to support Olmsted's original observation that the site Nelson designated as Mound #390 was situated on Palou Avenue near the shoreline.[248] ~~Although these two alternative locations fall outside the Project site, their location and boundaries are not precisely known. Given the vagaries of overlaying historic and modern maps, the latter alternative location lies close to, and may extend into the Project site.~~ The site appears to be in the western part of Hunters Point Shipyard Phase II.

Page III.J-21, first paragraph

The Candlestick Point site does not contain historic resources. In 2007, Jones & Stokes completed a review of Candlestick Park stadium, built in 1960, for potential eligibility in the NRHP.[251] The evaluation determined that the stadium did not meet the criteria to qualify as an exceptional property less than 50 years old. The report noted extensive alterations since its construction, including the expansion and enclosure in 1970 and more recent modifications to convert the stadium into a football-only facility.~~ The stadium, if reviewed at the 50-year mark, would not meet criteria for listing on the NRHP or CRHR due to lack of physical integrity resulting from the extensive alterations discussed above.~~ A recent Historic Resource Evaluation (HRE) reviewed the stadium as a 50-year-old structure and the HRE concluded that, while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, specifically the expansion of Major League Baseball to the West Coast and the career of Willie Mays with the San Francisco Giants, the stadium does not retain sufficient integrity to qualify as an historic resource under NRHP or CRHR criteria.[251a] …

[251a] Circa: Historic Property Development, *Historic Resource Evaluation for Candlestick Park Stadium, San Francisco, CA*, April 2010 (refer to Appendix J3 [CIRCA, *Historic Resources Evaluation for Candlestick*, April 2010]).

Page III.J-21, second paragraph

The HPS Phase II site contains buildings and structures identified historic significance. Since Shipyard decommissioning … inclusion in the NRHP.[253] The Navy is currently completing National Register nominations and Historic American Engineering Records documentation for the Hunters Point Commercial Dry Dock Historic District, pursuant to the Memorandum of Agreement with SHPO and the Advisory Council on Historic Preservation, discussed under "Regulatory Framework," below.

Page III.J-21, last paragraph

The Office of Historic Preservation Directory of Properties in the Historic Property Data File included Drydocks 2 and 3 and ~~associated wharves and seawalls,~~ pump houses (Buildings 205 and 140), the western portion of Drydock 1, the Gatehouse (Building 204), and the Paint and Tool Building (Building 207) as the only structures on HPS considered eligible for listing on the NRHP, consistent with the findings of the 1997 JRP report and the subsequent SHPO concurrence. No other buildings or structures had previously been evaluated for listing on the CRHR.

Page III.J-22, first paragraph, new third sentence

In 2008, Circa Historic Property Development performed another investigation of HPS for this EIR. Circa identified a total of 134 buildings and structures at the HPS Phase II site. The investigation evaluated the eligibility of buildings and structures for the NRHP, the CRHR, or local historic registers. …

Page III.J-25, second paragraph

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. While Buildings 208, 211, 224, 231, and 253 may not be individually eligible for listing on the CRHR, when combined with the historic drydocks and associated buildings, the district is a physical representation of the broad history of HPS. Figure III.J-3 (Potential Historic Structures) illustrates views of Buildings 211, 224, 231, and 253.

Page III.J-26, Figure III.J-3 (Potential Historic Structures) has been revised

[NOTE: The figure has been revised to add "North Elevation – Building 224."]

East Elevation — Building 231

East Elevation — Building 211

Northwest Elevation — Building 253

North Elevation — Building 224

SOURCE: Page and Turnbull Feasibility Study, 2009; (Building 224) CIRCA 2009; PBS&J, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

POTENTIAL HISTORIC STRUCTURES

FIGURE III.J-3

Page III.J-33, first paragraph

The Project would demolish Candlestick Park stadium, and would demolish and redevelop the Alice Griffith public housing site. Neither Candlestick Park stadium, nor the Alice Griffith public housing sites are considered eligible for listing on the NRHP, CRHR, or City landmark registers. As discussed above, ~~Jones & Stokes completed a review of Candlestick Park stadium in 2007 and determined that the stadium did not meet the eligibility criteria for the NRHP~~ while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, the stadium does not retain sufficient integrity to qualify as a historic resource. …

Page III.J-34, first full paragraph

Development at HPS Phase II would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible for the CRHR and are contributors to the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. … Therefore, the Project would have a significant and unavoidable impact on the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District, because of demolition of Buildings ~~208,~~ 211, 224, 231, and 253. Chapter VI (Alternatives) analyzes Alternative 4 (Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~No State Parks Agreement, and Without the~~ Marina, or Yosemite Slough Bridge). Alternative 4 would include rehabilitation and reuse of Buildings 211, 224, 231, and 253 in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. Building 208 would be mothballed and maintained as an element of the cultural landscape. Chapter VI also contains an analysis of Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would additionally include rehabilitation and/or reuse of Buildings 211, 224, 231, and 253, while keeping all other components of the Project the same.

Pages III.J-34 and -35, mitigation measures MM CP-1b.1 and MM CP-1b.2

MM CP-1b.1 …

All written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District shall be approved by the ~~Historic Preservation Commission~~ 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 ~~Historic Preservation Commission~~ SFRA, in consultation with the ERO.*

Pages III.J-35 to -36, last paragraph

As discussed above, the Project would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which are historic resources in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. … Alternative 4 would include rehabilitation and reuse of Buildings 211, 224, 231, and 253 and retention of Building 208 as a cultural landscape element in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. Chapter VI also contains an analysis of Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would include rehabilitation and reuse of Buildings 211, 224, 231, and 253, while keeping all other components of the Project the same.

Page III.J-36, first full paragraph

The Project archaeological research has found that archaeological resources expected to be found on the Project … practices; *(vii)* prehistoric changes in social stratification; and *(viii)* the relationship between Hunters Point-Bayview and South of Market area prehistoric settlements. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives. Any potential archaeological resources, e.g., CA-SFR-9, fishing camps, that are covered by existing development will remain covered and unavailable unless the site is redeveloped.

Page III.J-40, second paragraph under Impact CP-2b

Moreover, previous archaeological investigations have shown that prehistoric archaeological sites in the HPS Phase II site tend to be located along the original shoreline. Therefore, it is possible that Project-related construction activities may encounter previously unknown archaeological resources. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives.

Page III.J-40, last partial paragraph

As discussed above, the Project site is expected to contain subsurface archaeological resources from the Native … unavailable unless the site is redeveloped. Construction activities associated with the Project could disturb those archaeological resources, and result in potentially significant impacts. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives. Refer to Impact CP-2a and Impact CP-2b and associated discussions, above. Mitigation measure MM CP-2a would reduce the Project potentially significant effects on archaeological resources to a less-than-significant level through implementation of the *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*.

F.14 Changes to Section III.K (Hazards and Hazardous Materials)

Page III.K-2, first sentence

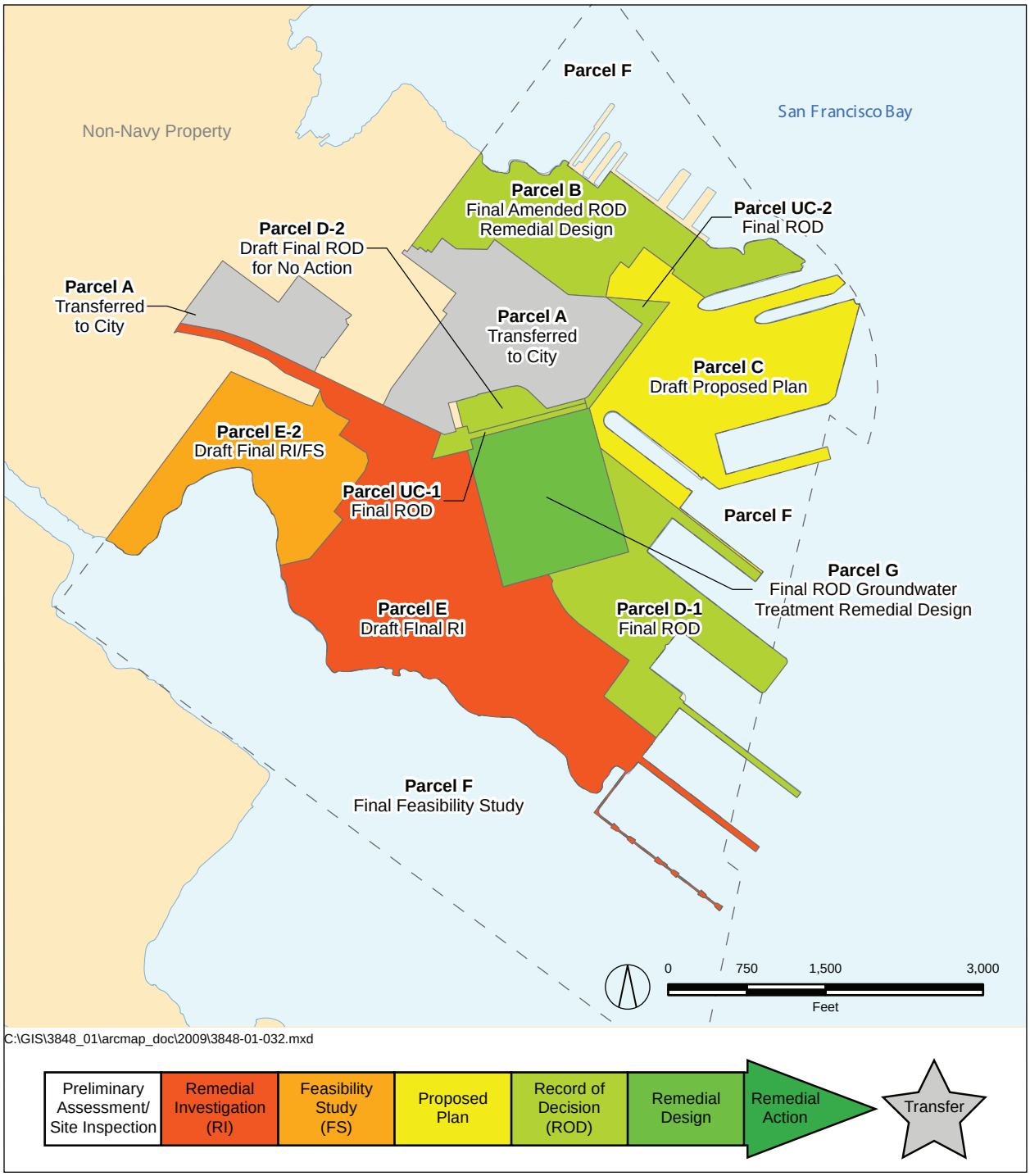
There are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations, Triple A Machine Shop, Inc., and/or its lessees throughout HPS Phase II. …

Page III.K-11, last full paragraph

After the site identification process, the next step under the Navy's program is the preparation of Remedial Investigation (RI) reports for ~~all~~ the IR sites and other locations of concern in each parcel. …

Page III.K-26, new Figure III.K-6 (Status of CERCLA Process) is added

[NOTE: The figure has been added to illustrate the steps in the CERCLA process and the current status of the parcels in the process.]



SOURCE:PBS&J, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

STATUS OF CERCLA PROCESS

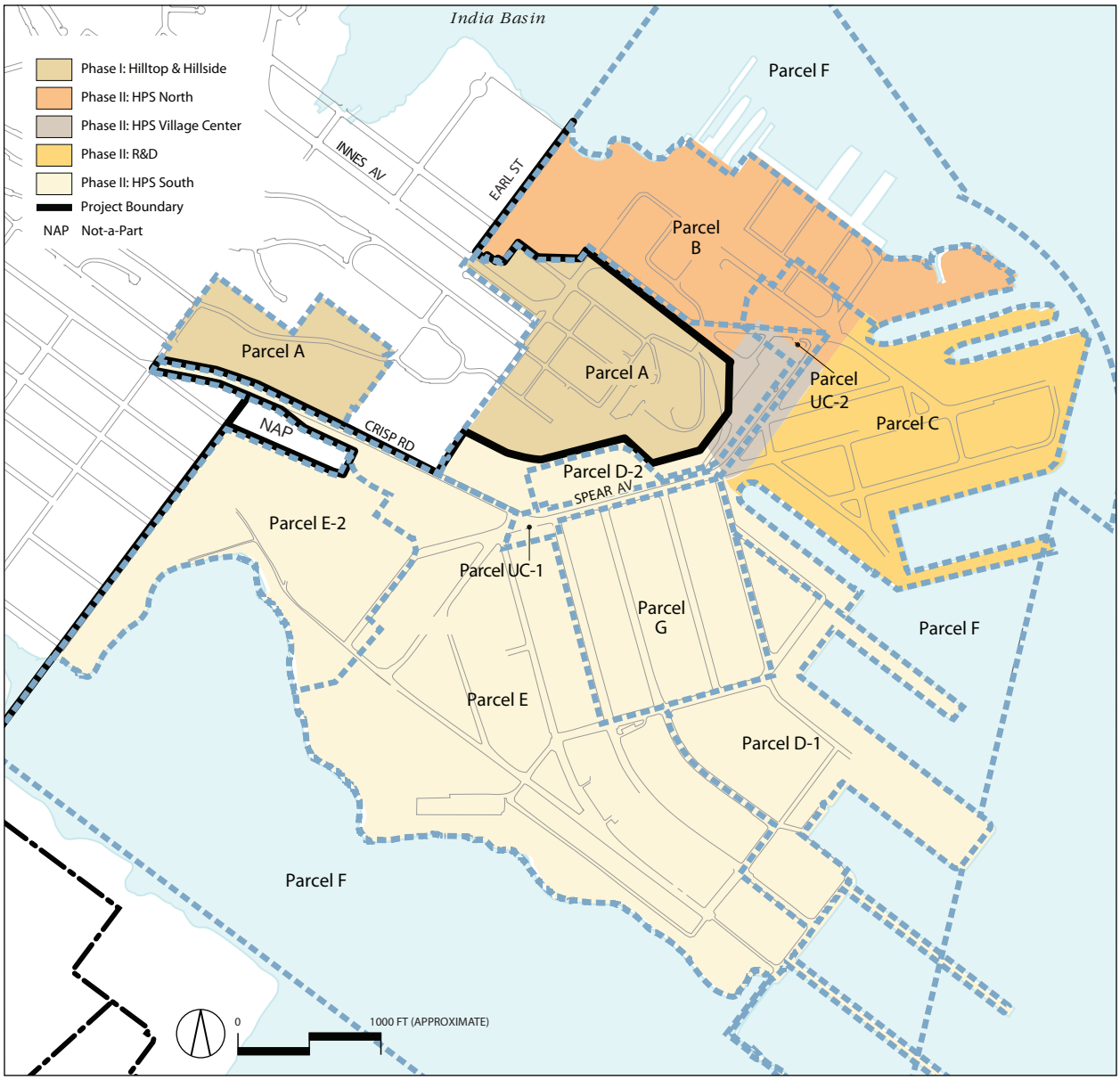
FIGURE III.K-6

Page III.K-33, last bullet

- All remedial investigations~~,~~ and response actions~~, and oversight activities~~ will be completed by the transferee notwithstanding the transfer of the property.

Page III.K-51, Figure III.K-5 (Hunters Point Shipyard Phase II Navy Parcel Overlay) has been revised

[The figure has been revised to show Parcel A' and Parcel A-3 as Parcel A; and a portion of Parcel B as Parcel C.]



SOURCE: Lennar Urban, 2009.

PBS&J 04.21.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

HUNTERS POINT SHIPYARD PHASE II NAVY PARCEL OVERLAY

FIGURE III.K-5

Page III.K-54, second full paragraph

The requirement for a site assessment prior to obtaining a grading permit for new construction would be triggered by Article 22A for sites at Candlestick Point located bayward of the 1851 high-tide line, which are the Candlestick Point North and Candlestick Point South districts, comprising the bulk of the area previously investigated in 1998. Compliance with Article 22A requirements would ensure current conditions are assessed in the area previously investigated in 1998, and that they are assessed in light of the specific planned depths of excavation. As stated below on page III.K-68, Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA, but may be reused on the Shipyard to the extent permissible under the Navy remedial program.

Pages III.K-54 to -55, mitigation measure MM HZ-1a

MM HZ-1a Article 22A Site Mitigation Plans. *(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 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. …*

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 ~~comparable~~ equivalent to those set forth in Article 22A for construction and development activities conducted at Candlestick Point State Recreation Area.

Page III.K-56, mitigation measure MM HZ-1b

MM HZ-1b Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. *(Applies only to HPS Phase II) Prior to obtaining a grading, 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 LIFOCs, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, Community Involvement Plans, and health and safety plans. …*

Pages III.K-58 and -59, mitigation measure MM HZ-2a.1

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 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. …

Page III.K-68, second full paragraph

Various construction activities at HPS Phase II, such as grading, trenching, compacting, and excavating, would result in soil being handled and moved. The excavated soil may be used as fill elsewhere at HPS Phase II, to the extent permissible under the restrictions discussed below, but would not be reused at CPSRA or any other off-site locations. …

Page III.K-77, after the first paragraph under Impact HZ-9

It is expected that construction of the bridge would occur in the early phase of the Project, likely before the Navy completes remediation of Parcels E and E-2. This section describes the impacts that could occur under such a scenario due to the presence of radiological materials and the actions that would be taken to address the presence of radiological materials within the bridge construction area.

Pages III.K-78 and -79, mitigation measure MM HZ-9

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 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. …*

Page III.K-83, the last sentences of items a, b, c, and d

a. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
b. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
c. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
d. … ~~a~~ review by the DMMO ~~permit~~ would likely be required.

Pages III.K-87 and -88, mitigation measure MM HZ-12

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. …*

Pages III.K-99 to -101, mitigation measure MM HZ-15

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

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.

…

Page III.K-108, second full paragraph

Construction impacts associated with the potential to encounter hazardous materials or hazardous conditions during construction anywhere in the Project site, whether at Candlestick Point or HPS Phase II would for the most part be site specific and not additive because development activities at one site would be localized and would not combine with activities at another site to create a greater, combined effect. … The Project would be sequenced as described in Chapter II and is anticipated to be complete by ~~2029~~2031. Some off-site roadway improvements would be done as part of the Project, but these would be of a limited nature, largely involving streetscape improvements, and would be developed over time. On Candlestick Point and HPS Phase II, the development of both areas is expected to continue through approximately ~~2021~~2031, with only portions of each area under development at any one time.

Page III.K-118, third and fourth full paragraphs

The geographic context for the analysis of cumulative impacts related to the routine transport of hazardous materials is … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

The cumulative context for an analysis of impacts related to use and disposal of hazardous materials would include … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

Page III.K-120, first full paragraph

The cumulative context for an analysis of impacts related to risk of upset or accident is … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

Page III.K-122, first full paragraph

The cumulative context for an analysis of impacts related to hazardous materials sites is defined as … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

F.15 Changes to Section III.L (Geology and Soils)

Page III.L-12, fourth paragraph

The intensity of earthquake-induced ground motions can be described using peak ground accelerations, … exceeded in any given year. The CGS Probabilistic Seismic Hazard Assessment map accounts for amplification. Amplification effects can occur when seismic waves travel through soft soils underlain by shallow bedrock.

Page III.L-15, new first paragraph after Table III.L-3 (Active Bay Area Faults)

Amplification

Amplification effects can occur when seismic waves travel through soft soils underlain by shallow bedrock. During the design-level, site-specific seismic hazards assessment, appropriate attenuation relationships will be selected to account for amplification effects. All structures and improvements will be designed based on the appropriate seismic design parameters recommended in the seismic hazards assessment required by mitigation measure MM GE-4a.1.

Page III.L-15, second paragraph

Based on existing data, there is little or no risk of large translational movements.[386a,386b] Design-level liquefaction studies, which are further described in mitigation measures ~~MM GE-4~~MM GE-5a, would address five general types of localized potential hazards, and provide treatment methods, including the following:

[386a] ENGEO, 2009.
[386b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., *Remedial Investigation/Feasibility Study Report for Parcel E-2, Hunters Point Shipyard, San Francisco, California*, February 2009.

Page III.L-46, second paragraph

The potential for adverse ~~a~~effects caused by seismically induced ground failure such as liquefaction, lateral spreading, and settlement exists at the Project site. … The structural design review required by MM GE-4a.1, MM GE-4a.2, MM GE4a.3, and MM GE-5a 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 to a less-than-significant level.

Page III.L-49, first paragraph after Impact GE-7a

The shoreline along Candlestick Point consists of slopes protected by rip-rap or concrete debris and several areas of unprotected, beach-fronted slopes, exposed mudflats, and vegetation. … and include an adaptive management strategy that would provide further protection for future sea level rise ~~up to~~ of 55 inches or more if this should become necessary. These improvements are intended to, will be designed to, and, therefore, would improve the stability of the shoreline. …

Page III.L-52, first paragraph

The Candlestick Point site could be exposed to settlement hazards. … The rate of settlement of the Young Bay Mud from the load of the artificial fill is now very small, but further increase in loads, whether resulting from placement of new fill or the construction of buildings, would initiate a new cycle of consolidation settlement.[416a,416b] The Young Bay Mud is underlain by firmer soils and bedrock that do not pose settlement hazards.

[416a] ENGEO, 2009.
[416b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., 2009.

Page III.L-55, first full paragraph

… Extensive Young Bay Mud deposits are predominant in Parcels D and E. The rate of settlement of the Young Bay Mud from the load of the artificial fill is now very small, but any increase in loads, whether resulting from placement of new fill or the construction of buildings, would initiate a new cycle of consolidation settlement.[417a,417b] …

[417a] ENGEO, 2009.
[417b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., 2009.

Page III.L-64, third full paragraph

Implementation of the Project would modify soil and topographic conditions at the site to accommodate development and provide a stable and safe physical environment. The construction phase of the Project could expose soil to erosion by wind or water. Development of other cumulative projects in the vicinity of the Project site, including the Yosemite Slough Restoration Project, could expose soil surfaces and further alter soil conditions. …

F.16 Changes to Section III.M (Hydrology and Water Quality)

Page III.M-59, mitigation measure MM HY-1a

MM HY-1a.1 *[…]*

> *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.*

Pages III.M-61 through -64, mitigation measure MM HY-1a.2

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.

…

- *Erosion and Sedimentation:*

  …

  > *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 and seeding shall use native, non-invasive species.*

  …

- *Post-construction BMPs:*

  > *Re-vegetate all temporarily disturbed areas as required after construction activities are completed. Re-vegetation shall use native, non-invasive species.*

  …

Page III.M-92, under Impact HY-6c

Stormwater runoff from the Yosemite Slough bridge and discharges of materials from bridge maintenance activities would not cause or contribute to an exceedance of water quality standards. Primary pollutants of concern in stormwater runoff from transportation-related land uses include fuels, PAHs, sediment, metals, and litter and debris. The pollutants could originate from automobiles, transit vehicles, cyclists, and pedestrians. Automobiles would only be a source of stormwater pollutants on game days, which occur twelve days out of the year, because the bridge would only allow automobile traffic on game days. As described in Chapter II (Project Description) on page II-38, the Yosemite Slough bridge would be constructed with a 40-foot-wide greenway, which would be converted to automobile travel lanes on 49ers game days only. The greenway would also provide vegetative treatment for stormwater pollutants associated with automobiles, and would reduce the impacts of automobile-related stormwater runoff to a less than significant level. Runoff from the transit vehicle lanes would also be routed to the greenway and/or to land-based stormwater treatment controls such as swales. The stormwater treatment measures for the bridge would be described in the Project's Stormwater Control Plan, which is subject to SFPUC's approval.

Bridge maintenance activities such as welding and grinding, sandblasting, and painting can also adversely affect water quality if materials generated from maintenance are allowed to discharge into the Bay. It is anticipated that bridge operation would be under the jurisdiction of the City, and thus stormwater runoff mitigation would be performed under the Municipal Stormwater General Permit, which requires development of a pollution prevention program for municipal operations. The municipal operations program would also include street sweeping to remove litter and sediment-associated pollutants generated by transportation land uses.

Pollutants generated from transit vehicles, cyclists and pedestrians would also be addressed under the pollution prevention program for municipal operations implemented by the City. The pollutants would also be reduced through compliance with local stormwater treatment requirements (i.e., San Francisco

Stormwater Design Guidelines), which were put into effect to comply with the new development requirements in the Municipal Stormwater General Permit.

Impacts from bridge operation would be reduced via compliance with the existing stormwater runoff programs, specifically, elements of the Municipal Stormwater General Permit, and local requirements for stormwater treatment measures that would be subject to approval by the SFPUC. Operation of the Yosemite Slough bridge would not cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements and a less than significant impact would result. No mitigation is required.

Page III.M-96, the following sentence has been added to the first partial paragraph

… Because of the increase in permeable surface area, infiltration would be expected to increase, resulting in a corresponding decrease in runoff volumes. Grading would reduce slopes at both sites, slowing runoff rates. The runoff flow rates and volumes do not account for the effect of Project BMPs.

Table III.M-5 (Estimated Existing and Project Stormwater Peak Flow Rates and Runoff Volumes without BMPs) lists the estimated Project site stormwater runoff flow rates for existing and Project conditions, calculated using the Rational Method. …

Page III.M-96, Table III.M-5 has been revised

[NOTE: This table has been revised in response to comments and to correct a typographical error in the table title.]

Table III.M-5 Estimated Existing and Project Stormwater Peak Flow Rates and Runoff Volumes without BMPs [Revised]

			Project Increase[a]	
Storm Event	*Existing (cfs)*[b]	*Project (cfs)*[c]	*(cfs)*	*(%)*
Candlestick Point				
5-Year	477 (130)[d]	249 (0)[d]	-228	-48%
10-Year	545	284	-261	-48%
100-Year	783	408	-375	-48%
Hunters Point Shipyard[e]				
5-Year	644	448	-196	-30%
10-Year	730	509	-221	-30%
100-Year	1,052	733	-319	-30%
2-year 24-hour (acre-feet)				
Candlestick Point	36	20	-16	-44%
HPS Phase II	64	39	-24	-38%

SOURCE: PBS&J 2009

a. A negative number denotes a reduction in Project flow rates compared to existing conditions.
b. Existing flows are based on 72 percent impervious surfaces (505.3 acres).
c. Project flows are based on 54 percent impervious surfaces ~~9~~ (379.1 acres).
d. Values in parenthesis denote the amount of total Candlestick Point site runoff flowing to the combined sewer system.
e. Off-site flow from HPS Phase I is not included in these runoff calculations. Required HPS Phase I diversions into the HPS Phase II separate stormwater sewer system would be 108 cfs.

Page III.M-100

MM HY-12a.1 Finished Grade Elevations Above Base Flood Elevation. *The Project site shall be graded such that finished floor elevations are ~~6.5~~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 a SFHA and requires that the FIRM is updated by FEMA to reflect revised regulatory floodplain designations.

Page III.M-102, mitigation measure MM HY-12a.2

MM HY-12a.2 Shoreline Improvements for Future Sea-Level Rise. *Shoreline and public access 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 ~~along the shoreline~~ 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 legislative 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.*

Page III.M-102, first and second paragraphs after Impact HY-12b

According to proposed site plans, the portions of HPS Phase II that fall within a SFHA are proposed to be used for stadium parking. However, housing could be located in an area subject to flooding if the rate of sea level rise were to exceed the 36 inches that serves as the basis for Project grading plans and fill elevations, and no improvements were to be made along the shoreline.

Mitigation measure MM HY-12.a.1 requires Project finished grade elevations to be above the BFE accounting for future sea level rise. Mitigation measure MM HY-12a.2 requires that shoreline and public access improvements be designed to incorporate setbacks ~~in the event that~~ to accommodate sea level rise-related improvements ~~exceeds 36 inches~~. With implementation of this mitigation measure, impacts pertaining to the placement of ~~flooding~~ housing within a potential future mapped flood hazard area would remain at less-than-significant levels.

Page III.M-103, first paragraph after Impact HY-12

The Project would place housing within a SFHA according to the preliminary FIRM for San Francisco and the City's Interim Floodplain Map (refer to Figure III.M-4). However, the preliminary grading plan for the Project site[630] shows that the site would be graded to be above the Base Flood Elevation with a safety factor of +3 feet to allow for future sea level rise with building finish floor elevations 6 inches above that (total of 3.5 feet above Base Flood Elevation). ~~such that finished grade would comply with recommendations by Moffatt and Nichol,[631] which require land elevations to be graded above the Base Flood Elevation with a safety factor of +3.5 feet to allow for future sea level rise. However, future sea~~

~~levels may rise at a more rapid rate than estimated.~~ Implementation of mitigation measures MM HY-12a.1 and MM HY-12a.2 would …

Page III.M-104, second paragraph after Impact HY-13b

Development at HPS Phase II would also place structures, including the marina~~,~~ and the shoreline improvements, ~~and a portion of the Yosemite Slough bridge,~~ within a Zone V SFHA, according to the preliminary FIRM for San Francisco.[633] Structures in Zone V could be subject to high-velocity wave forces that could cause damage to the structures or redirection of flood flows onto other parts of the site. Existing piers within Zone V would only be used as breakwaters for the marina and for wildlife habitat uses, and no buildings would be constructed. The shoreline improvements, including open space public access areas, would be initially designed and constructed to accommodate a 16-inch increase in sea level rise, with an adaptive management approach to accommodate greater sea level rise increases should they occur, as required by mitigation measure MM HY-12a.2. This conservative shoreline design for sea level rise, as well as the development setback from the shoreline required by MM HY-12a.2, would protect the site against coastal flooding hazards including high-velocity wave forces that could impede flood flows or cause flood flows to be directed to any portions of the site including open space or developed areas. Implementation of MM HY-12a.2 would reduce the impacts of placing structures in a Zone V SFHA to a less-than-significant level. ~~Mitigation measure MM HY-13b would require and the Project Applicant to obtain a Floodplain Development Permit from the City Administrator and to provide a V-Zone Certification for development within any such designated areas.~~

~~*MM HY-13b Floodplain Development Permit. To reduce the impacts of placing structures in a 100-year flood hazard area that could impede or redirect flows, the Project Applicant shall implement that following measures:*~~

- ~~*The Project Applicant shall obtain a Floodplain Development Permit from the Office of the City Administrator in accordance with the City's floodplain management ordinance that includes a hydraulic evaluation to determine whether structures or structural elements would impede or redirect flood flows and mandates minimum design and construction standards. Design and construction methods shall comply with NFIP requirements for placing structures in Zone V.*~~
- ~~*The Floodplain Development Permit shall include a "V-Zone Certification" in accordance with the NFIP. As part of the certification, a professional engineer or architect shall consider the NFIP "Free-of-Obstruction" requirement, to ensure that floodwaters or waves would not be deflected into a building or adjacent structure.*~~

~~Placement of structures in a Zone A SFHA or Zone V SFHA would result in a less-than-significant impact with implementation of mitigation measure MM HY-13b.~~

Pages III.M-104 to -105, first paragraph after Impact HY-13c

The bridge across Yosemite Slough would not place structures within a SFHA that could generate high-velocity flood forces that could cause damage to the structure itself or adjacent structures. The Yosemite Slough bridge would be designed such that the superstructure would be well above the current 100-year flood hazard elevation in Zone V, to account for future sea level rise. Because t~~T~~he bridge ~~was~~ would be designed to avoid potential impedance of flood flows~~; therefore~~, the impacts would be less than significant. No mitigation is required.

Page III.M-105, second paragraph after Impact HY-13

As discussed in Impact HY-13b, the Project would place structures within locations designated as Zone V on the preliminary FIRMs. Structures in Zone V could be subject to high-velocity flood forces that could cause damage to the structure itself or redirect flood flows into adjacent areas. There would be no buildings located in Zone V, and implementation of m~~M~~itigation measure ~~MM HY-13b~~ MM HY-12a.2 would require ~~the Project Applicant to obtain a Floodplain Development Permit from the City Administrator and provide a Zone V Certification prior to development~~ development setbacks and an adaptive strategy for future increases in sea level rise, which would protect the shoreline Zone V areas from the effects of high-velocity flood forces and reduce the impacts to a less-than-significant level.

As discussed in Impact HY-13c, the bridge would be designed to avoid potential impedance of flood flows, and the superstructure would be raised well above the current 100-year flood elevation. Therefore, the impacts would be less than significant.

Page III.M-106, mitigation measure MM HY-14

MM HY-14 Shoreline Improvements to Reduce Flood Risk. *To reduce the flood impacts of failure of existing shoreline ~~protection~~ 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.*[635] *Where feasible, elements of living shorelines shall be incorporated into the shoreline protection improvement measures.*

Page III.M-106, third paragraph after Impact HY-15

The expected 100-year wave run-up height from a tsunami at the South Basin is -3.8 feet SFCD. ~~Accounting for a planned~~ Even with a sea level rise of 3 feet, the 100-year wave run-up at South Basin would increase to -0.7 SFCD. …

Page III.M-107, third paragraph after "Cumulative Impacts"

Construction and operation of cumulative development would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The groundwater basins underlying the Project site are not used for water supply …

Page III.M-108, first full paragraph

Cumulative development in the watershed, including development of the Yosemite Slough Restoration Project and at Executive Park, HPS Phase I, India Basin Shoreline, Jamestown, Brisbane Baylands, and Visitacion Valley, could contribute to violations of water quality standards or WDRs. …

F.17 Changes to Section III.N (Biological Resources)

Page III.N-1, third paragraph

… The off-site aquatic resources discussed include Yosemite Slough (except the area of construction, which is included in the on-site impact analysis), the open water area between Candlestick Point and HPS Phase II (known as South Basin), and adjacent open waters that would be impacted by Project components (i.e., breakwaters, gangways, floats, etc.). …

Page III.N-4, first full paragraph

Information from these sources and from PBS&J's reconnaissance-level surveys ~~were~~ was used to identify and characterize existing conditions at the Project site, and accordingly, were substantially relied upon for this analysis. …

Page III.N-5, second full paragraph

… The vegetation communities are defined according to CDFG's Vegetation Classification and Mapping Program of the Biogeographic Data Branch ~~Wildlife and Habitat Data Analysis Branch List of California Terrestrial Natural Communities~~,[647] H.T. Harvey & Associates' wetland delineation for HPS Phase II and Candlestick Point,[648] and PBS&J's Biological Technical Report prepared for the Project.[649]

[647] California Department of Fish and Game (CDFG), *The Vegetation Classification and Mapping Program: List of Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, ~~Wildlife and Habitat Data Analysis Branch,~~ Sacramento, California, September 2003 edition.

Page III.N-9, third paragraph

… One of these wetlands, in the southwestern portion of HPS Phase II, consists of pools that ~~pools~~ are shallow basins that lack drainage outlets. …

Page III.N-21, first paragraph

… However, because they tend to gather in winter roosting sites along the California coast in relatively few locations, roost sites that are used traditionally by large numbers of individuals are considered sensitive biological resources and, thus, this common butterfly is discussed here as a sensitive species. …

Page III.N-22, last paragraph

… This striking recovery is due in large measure to the ban on the use of DDT (a synthetic pesticide) in many places, including the United States. …

Page III.N-26, last paragraph

Using the likelihood of occurrence definitions provided in Table III.N-5, this species is "known" to occur within the Study Area. …

Page III.N-28, first paragraph

The only special-status bat species ~~likely to occur~~ potentially occurring within the Study Area is the western red bat (*Lasiurus blossevillii*). …

Pages III.N-28 and III.N-29, last paragraph

… Because ~~of~~ the larval forms of oysters are free-floating in the Bay, and a large population exists south of the Study Area at Oyster Point Marina,[729] native oysters are likely present on suitable substrate throughout the Study Area.

Page III.N-32, first full paragraph

… Fall-run Chinook salmon is the most abundant ESU, documented to comprise about ~~80~~92 percent of the Sacramento Basin stock ~~in the early 1980s~~ over the past 10 years of available data.[741a] …

[741a] California Department of Fish and Game, Fisheries Branch, *Anadromous Resources Assessment, Chinook Salmon Escapement—All Runs*, February 18, 2009.

Page III.N-40, first full paragraph

The tidal aquatic habitats adjacent to the Project site are considered EFH by NMFS for a species assemblage that includes anchovies, sardines, rockfish, sharks, sole, and flounder.[768,769] Areas supporting the native Olympia oyster found in San Francisco Bay are also considered EFH by NMFS because oyster beds generally increase fish abundance. In addition, eelgrass beds are considered EFH. …

Page III.N-43, first heading

~~Regional~~

The McAteer-Petris Act (California Government Code 66600–66682)

The *McAteer-Petris Act* created the San Francisco Bay Conservation and Development Commission … and, therefore, subject to BCDC's jurisdiction.

Regional

Page III.N-50, under Impact BI-2, add new sixth sentence to first paragraph

… operation of stadium lights. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species such as common ravens (*Corvus corax*), American crows (*Corvus brachyrhynchos*), raccoons, rats, and feral cats, which in turn could increase predation on more sensitive wildlife species. …

Page III.N-53, second full paragraph

Of 118 bird species observed during the Yosemite Slough Watershed Wildlife Survey, 51 (43 percent) were represented by a maximum count (the maximum number of individuals recorded on a given survey) of 5 or fewer, and thus use the Project site in low numbers. The most abundant wildlife species recorded were

waterbirds. Project impacts to waterbird habitat within the Yosemite Slough bridge footprint would be mitigated by ~~a contribution to the restoration of Yosemite Slough or~~ restoration ~~elsewhere~~ on site or off site, as discussed under mitigation measure MM BI-4a.1 below. Increased human use of the Project site may reduce abundance in aquatic habitats along the immediate shoreline, but ample aquatic habitat is present around the Project site, and, even without restoration, no substantial changes in common waterbird abundance (particularly relative to regional populations) are expected as a result of the Project.

Page III.N-56, under Impact BI-4a, first paragraph

As detailed in Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]) and depicted in Figure III.N-5 (Impacts to Wetlands and Other Waters), through site grading, materials laydown, facilities construction, vegetation removal, and installation of shoreline treatments, Project activities at Candlestick Point would permanently impact 0.29 acre of tidal salt marsh and 4.34 acres of Section 404 "other waters,"~~;~~ relative to existing conditions (i.e., prior to completion of remediation efforts by the Navy). Both wetlands and mud flats, the latter comprising a subset of Section 404 "other waters," are considered Special Aquatic Sites under *Clean Water Act* Section 404. …

Page III.N-57, Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]) has been revised

[NOTE: This table has been revised to reflect modified construction access areas per preliminary bridge drawings.]

Table III.N-4 Impacts to Wetlands and Other Jurisdictional Waters of the United States (Section 404) [Revised]

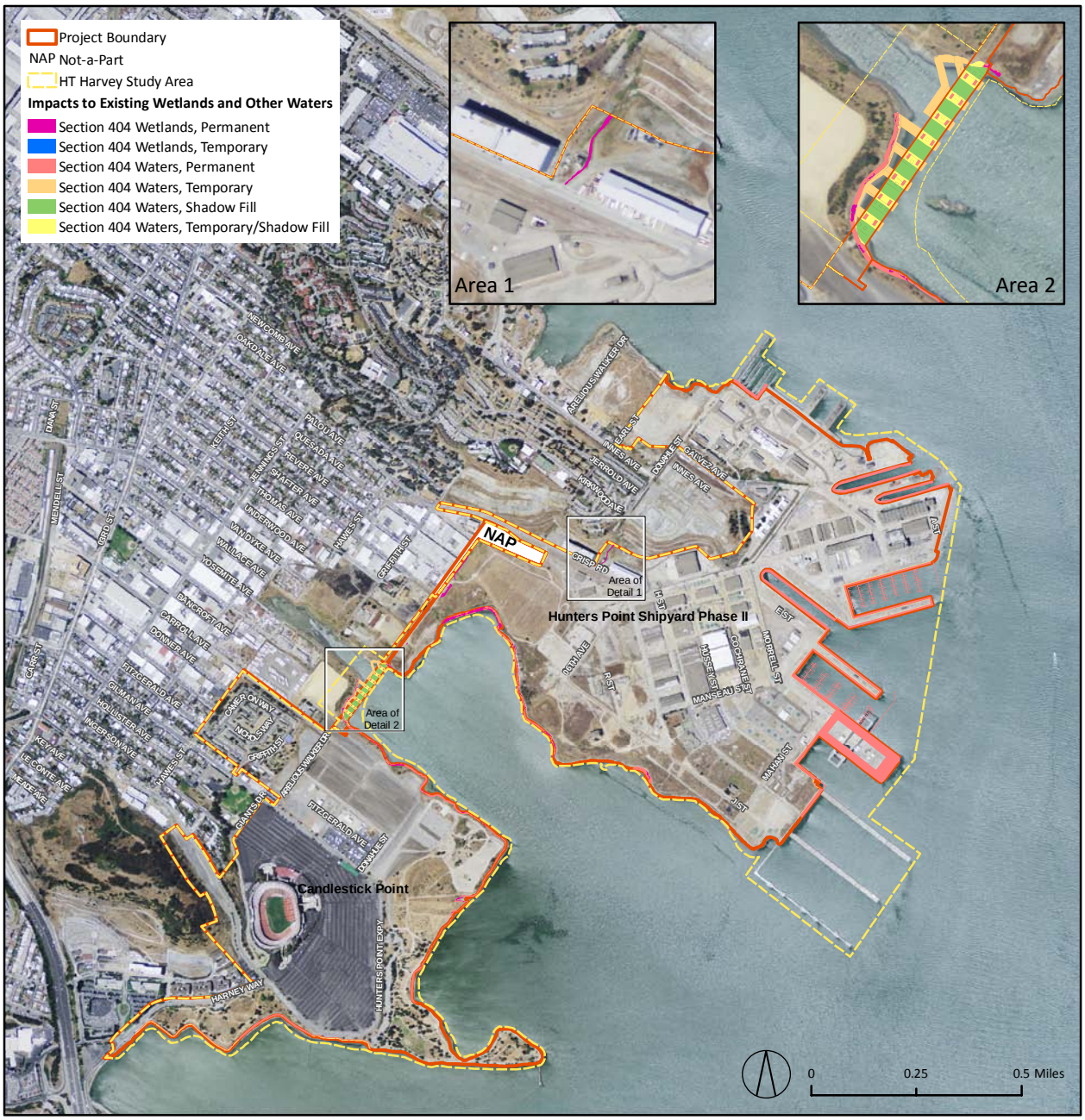
Jurisdictional Feature (Waters of the United States)	Area					Yosemite Slough							
	Candlestick Point		HPS Phase II			On Site			Off Site				
	Temporary Impacts	Permanent Impacts	Temporary Impacts	Permanent Impacts	~~Shadow Fill~~	Temporary Impacts	Permanent Impacts	~~Shadow Fill~~	Temporary Impacts	Permanent Impacts	Temporary Totals	Permanent Totals	Grand Totals[a]
Freshwater Wetland	—	—	~~<0.01 (61 sf)~~ —	0.17	—	—	—	—	—	—	~~<0.01 (61 sf)~~ —	0.17	0.17
Non-tidal Salt Marsh	—	—	~~0.09~~ —	~~0.06~~ 0.15	—	—	—	—	—	—	~~0.09~~ —	~~0.06~~ 0.15	0.15
Tidal Salt Marsh	0.01	0.29	~~0.01~~ —	~~0.08~~ 0.09	—	—	0.01	—	<0.01 (40 sf)	0.03	~~0.02~~ 0.01	~~0.41~~ 0.42	0.43
"Other Waters"	0.64	4.34	0.85	20.26	~~0.08~~	~~0.53~~ 0.52	~~0.17~~ 0.18	~~0.96~~	0.75	0.19	~~2.77~~ 2.76	~~24.96~~ 24.97	27.73
Totals for Impacted Section 404 Jurisdictional Features	***0.65***	***4.63***	***~~0.95~~ 0.85***	***~~20.57~~ 20.67***	***~~0.08~~***	***~~0.53~~ 0.52***	***~~0.18~~ 0.19***	***~~0.96~~***	***0.75***	***0.22***	***~~2.88~~ 2.77***	***~~25.60~~ 25.71***	***28.48***

SOURCES: H.T. Harvey & Associates, *Hunters Point Shipyard and Candlestick Point State Recreation Area Final Delineation of Wetlands and Other Waters, San Francisco, California*, February 2009 and revised July 13 and October 13, 2009.
MACTEC. *Work Program for the Construction of the Yosemite Slough Bridge Corridor*, ~~May 2009~~ March 2010.

a. Totals may not add up due to rounding.

Page III.N-58, Figure III.N-5 (Impacts to Wetlands and Other Waters) has been revised

[NOTE: The figure has been revised to reflect impacts resulting from construction access areas provided in MACTEC's bridge design drawings.]



SOURCE: HT Harvey, 2010; Moffat & Nichol, 2009; Mactech, 2010; PBS&J, 2010. PBS&J 04.19.10

FIGURE III.N-5 ~~Candlestick Point - Hunters Point Shipyard Phase II EIR~~
IMPACTS TO WETLANDS AND OTHER WATERS

Pages III.N-61 and -62, MM BI-4a.1, beginning with the last bullet on page III.N-61

…

- *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 ~~40~~95 percent of the vegetation in the preserve wetland.*
- *Year 5 after restored areas reach colonization 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 ~~65~~95 percent of the vegetation in the preserve wetlands.*

…

Page III.N-63, mitigation measure MM BI-4a.2

…

- *Testing and disposal of any dredged sediment shall be conducted as required by the USACE and the Long-Term Management Strategy (LTMS)*[790]
- *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 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 Water Mitigation and Monitoring Plan as described above.*
- *For impacts to tidal habitats: …*

Page III.N-64, first paragraph

As detailed in Table III.N-4 and depicted in Figure III.N-5, through site grading, materials laydown, facilities construction, vegetation removal, installation of shoreline treatments, and construction of the marina, Project activities at HPS Phase II would permanently impact existing wetlands and other waters as follows: 0.17 acre of nontidal freshwater wetland, ~~0.08~~0.09 acre of tidal salt marsh, ~~0.06~~0.15 acre of non-tidal salt marsh, and 20.26 acres of Section 404 other waters. It would also temporarily impact ~~0.01 acre of tidal salt marsh, 0.09 acre of nontidal salt marsh, less than 0.01 acre of freshwater wetland, and~~ 0.85 acre of Section 404 other waters…

Page III.N-67, second full paragraph

As detailed in Table III.N-4 and depicted in Figure III.N-5, bridge construction equipment and materials would be staged at the site in designated lay down areas. Construction access and dewatering would result in temporary impacts to ~~0.53~~0.52 acre of Section 404 other waters. It would also result in permanent impacts to 0.01 acre of tidal salt marsh, and ~~0.17~~0.18 acre of Section 404 other waters. …

Page III.N-67, last paragraph

… The "shadow fill" produced by the Yosemite Slough bridge may change the biological functions and values of aquatic and mud flat habitats below to some extent; such an impact would cover approximately ~~0.96~~1.48 acres based on the acreage of mud flat below the immediate bridge surface. …

Page III.N-68, second paragraph

… However, shading of ~~0.94~~1.48 acres of mud flats and aquatic habitats would have only moderate effects on the functions and values of these habitats and would not result in the loss of these habitats. Mitigation measure MM BI-4a.2 shall be implemented to minimize indirect construction-related impacts on wetlands and other jurisdictional waters. Further, shading impacts to mud flats and aquatic habitats would be reduced by implementation of mitigation measure MM BI-4c.

Page III.N-68, last paragraph

Mitigation measures MM BI-4a.1 and MM BI-4a.2 (first discussed in Impact BI-4a) 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. …

Pages III.N-69 and -70, Impact BI-5b

Impact of Hunters Point Shipyard Phase II and Yosemite Slough Bridge

Impact BI-5b **Construction at HPS Phase II and construction of the Yosemite Slough bridge 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. (Less than Significant with Mitigation)** ***[Criterion N.b]***

Within HPS Phase II a total of 1.99 acres of eelgrass ~~occurs~~ has been mapped at two locations (refer to Figure III.N-2). A small eelgrass occurrence was reported along the north shore of the South Basin directly across from Candlestick Point. The only other reported occurrence of eelgrass within HPS Phase II is on the north shore, east of the northern end of Earl Street. This eelgrass bed extends from the end of Earl Street to the pier that forms Drydock 5. These eelgrass beds are mapped as being below mean sea level and, therefore, are spatially separated from areas where shoreline treatments would occur. There are no mapped eelgrass beds where the marina improvements would occur or where the Yosemite Slough bridge would be constructed. However, because the locations of eelgrass occurrence may vary over time, eelgrass not detected during previous surveys could potentially occur in the shallow waters in or near the Yosemite Slough bridge construction footprint, either now or in the future.

The shoreline improvements associated with HPS Phase II include transforming the revetment edge in wave-protected reaches to a more natural looking shoreline by placing suitable fill to cover the revetment that would be constructed by the Navy, which may include Articulated Concrete Block (ACB) mats and/or marsh soils. Shoreline wave berms may be included along the southwest facing shoreline at the bayward end of the ACB mats. If wave berms or other shoreline improvements, or the Yosemite Slough bridge, were constructed in ~~either of the two~~ areas where eelgrass beds ~~are known to~~ exist, they could directly impact them through excavation/removal or placement of fill material. Construction of these features or other shoreline treatments near eelgrass beds could also result in the mobilization of some sediment, which,

if it were to settle out on eelgrass, could reduce photosynthesis and, therefore, productivity and survival. Because of the ecological importance but regional scarcity of eelgrass beds and the potential contribution of eelgrass beds in the Study Area to populations of aquatic species (and their predators) throughout larger portions of the Bay, any impacts would be considered a substantial reduction in the local population and, therefore, a substantial adverse effect.

To reduce this impact, the following mitigation measures shall be implemented.

MM BI-5b.1 Avoidance of Impacts to Eelgrass. *As the design of shoreline treatments progresses, and a specific Shoreline Treatment Plan is determined, the Plan shall minimize any in-water construction required for installation of any treatment measures near either of the two eelgrass locations noted above.~~ If in-water work is completely avoided within 750 feet of these areas, there would be no impact and no further mitigation would be required. If complete avoidance of work within 750 feet of these areas is not feasible, measure MM BI-5b.2 shall be implemented.~~*

MM BI-5b.2 Eelgrass Survey. *~~If avoidance of work within 750 feet of two known eelgrass locations is not feasible~~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, t~~T~~his 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.*

If the shoreline treatments can be adjusted so that no direct impacts to eelgrass beds would occur, no 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.

Page III.N-75, first full paragraph

Similar to development at Candlestick Point, … Implementation of mitigation measures MM BI-6a.1 and MM BI-6a.2 (as detailed in Impact BI-6a), both at HPS Phase II and Yosemite Slough, would reduce the effects of Project construction and implementation on nesting special-status and legally protected avian species to less-than-significant levels.

Page III.N-82, mitigation measure MM BI-9b

MM BI-9b …

Design Measures:

…

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.*

…

Construction Measures:

…

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.*

~~3~~4. *If steel piles must be driven with an impact hammer, an air curtain shall be installed to 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.*

~~4~~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.*

~~5~~6. *Unless the area around the piles is dewatered during pile driving, a qualified biologist shall be present during 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.*

Page III.N-86, first full paragraph

… Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these mitigation measures would minimize any adverse effects on aquatic habitat of special-status fish, …

Page III.N-87, first full paragraph

… Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

Page III.N-87

Impact BI-11c **Construction of the Yosemite Slough bridge would not have a substantial adverse effect on designated critical habitat for green sturgeon and Central California Coast steelhead ~~through permanent and temporary impacts to aquatic and mudflat foraging habitat~~ and would not result in impacts to individuals of these species, Chinook salmon, or longfin smelt through disturbance or loss of aquatic and mudflat habitat as a result of construction of shoreline revetments. (Less than Significant with Mitigation) [*Criteria N.a and N.d*]**

Page III.N-87, first and second paragraphs following Impact BI-11c

Construction of the Yosemite Slough bridge would impact designated critical habitat for green sturgeon and … loss of 0.11 acre of mudflat and aquatic habitat in the footprints of the bridge piers. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c). Because of the regional rarity of all these special-status fish, any impacts to individuals or to habitat used by these fish would be significant.

As described under Impact BI-11b above, some Project components would benefit these fish by increasing the extent of open water in the Project area through removal of existing structures and by reducing coastal erosion. In addition, compensatory mitigation for impacts of the bridge to aquatic habitat would be provided as described by mitigation measures MM BI-4a.1 and MM BI-4c, and mitigation measure MM BI-4a.2 shall be implemented to minimize impacts to wetlands, aquatic habitats, and water quality during construction. Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

Pages III.N-89 to -90, last partial paragraph

The same three fishery management plans and the species covered in those plans discussed in the previous impact statement apply to HPS Phase II. The modifications to EFH that could arise from HPS Phase II are associated with the proposed marina, placement of rock fill to buttress existing bulkheads, and the shoreline treatments. Marina operations could affect EFH through potential impacts to water quality and fish habitat resulting primarily from spills or intentional discharges of fuel or other harmful substances from boats using, or fueling facilities associated with, the marina. The most substantial loss of EFH would result from the placement of rock buttress fill necessary to protect the integrity of existing bulkheads. Although aquatic habitat would remain above the buttresses, this rock would occupy existing fish habitat, and the Project would thus substantially modify EFH within the waters adjacent to the HPS Phase II site.

Page III.N-93, Impact BI-12c discussion, first and second paragraphs

Construction of the Yosemite Slough bridge would impact EFH through the construction of pilings required to support the bridge. As detailed in Table III.N-4, the amount of area impacted is approximately

1.28 acres of temporary impacts and 0.40 acre of permanent impacts, which includes both on site and off site areas. These impacts would have a substantial adverse ~~a~~effect on EFH because the function of portions of the impacted habitat would be permanently altered by the Project, a significant impact. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c).

Any loss or modification of EFH that would result from the Yosemite Slough bridge would be mitigated via the compensatory mitigation for impacts to jurisdictional waters (mitigation measures MM BI-4a.1 and MM BI-4c). …

Page III.N-100, first full paragraph

As discussed in Section III.K, the Navy is responsible for some remediation activities (i.e., radiological contamination) on HPS Phase II. Because contaminants have been identified in those parcels for which remedial actions have been selected but not yet implemented by the Navy, construction of shoreline improvements has the potential to disturb sediment or soil that may contain chemical contaminants. However, if the Navy does not complete its remediation activities in advance of Project activities, the San Francisco Redevelopment Agency (~~SFRA~~Agency) or the Project Applicant would implement the remaining remediation activities in conjunction with shoreline improvement activities, with appropriate regulatory oversight, as required by mitigation measure MM HZ-10b. Impact HZ-10b discusses the process that would be followed by ~~SFRA~~Agency or the Project Applicant in conjunction with development activities with appropriate regulatory oversight to manage potentially contaminated sediments that could be affected by Project shoreline improvements.

Page III.N-101, second paragraph, new third sentence

… and other impacts. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species, which in turn could increase predation on more sensitive wildlife species. …

Page III.N-115, first paragraph after Impact BI-24

Table III.N-4 depicts on-site and off-site impact acreages resulting from site grading, materials laydown, facilities construction, vegetation removal, and installation of shoreline treatments for Candlestick Point, HPS Phase II, and Yosemite Slough bridge. Project implementation would permanently impact ~~0.64~~0.74 acre of wetlands; including 0.17 acre of freshwater wetland, ~~0.41~~0.42 acre of tidal salt marsh and ~~0.06~~0.15 acre of non-tidal salt marsh. In addition, Project implementation would permanently impact ~~24.96~~24.97 acres of Section 404 other waters. The Project would temporarily impact ~~0.11~~0.01 acre of jurisdictional wetlands and ~~2.77~~2.76 acres of Section 404 other waters…

Page III.N-121, first and third paragraphs

The geographic context for the cumulative analysis of effects on wetlands or navigable waters is … Reasonably foreseeable development would consist of projects proposed or under construction along the shoreline of the San Francisco Bay, including the Yosemite Slough Restoration Project, that could affect federally protected wetlands or jurisdictional waters, either adversely (i.e., development projects) or beneficially (i.e., restoration projects). …

…

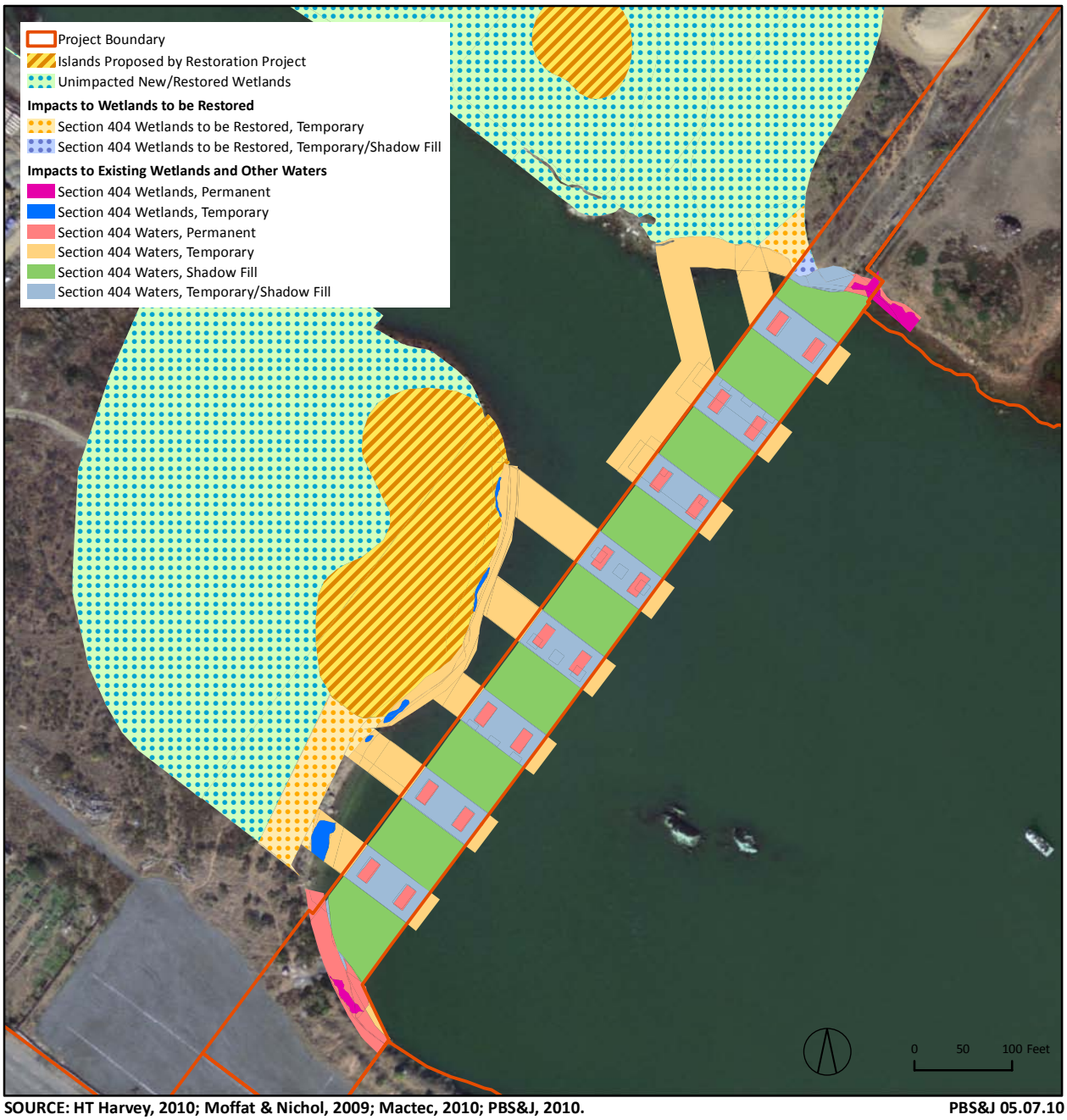
As detailed in Table III.N-4, the Project would permanently impact ~~0.64~~0.74 acre of wetlands and ~~24.96~~24.97 acres of Section 404 other waters. The Project may also permanently impact 0.0992 acre and temporarily impact 0.1532 acre of a proposed Navy wetland mitigation site (refer to Figure III.N-6), if the mitigation site is constructed prior to construction of the Yosemite Slough bridge and its approaches. Temporary Project impacts would occur to ~~0.11~~0.01 acre of wetlands and ~~2.77~~2.76 acres of Section 404 other waters. Consequently, without mitigation of these impacts and compliance with regulations governing wetlands and jurisdictional waters, the Project would contribute to loss of wetlands and jurisdictional waters within the Region.

Page III.N-122, following first partial paragraph

In response to public concerns, additional impacts to future wetland and aquatic habitat in consideration of the Yosemite Slough Restoration Project have been quantified. If the Restoration Project is implemented before the Yosemite Slough bridge is constructed, then the bridge would impact not only existing wetlands, aquatic habitats, and mud flats, but also sensitive habitats that have been restored by the Yosemite Slough Restoration Project. Based on the final Phase I Restoration Plan (on the north side of Yosemite Slough) provided by WRA, Inc. (the firm that designed the restoration plans) on 19 January 2010 and 50 percent plans for Phase II of the Restoration Plan (on the south side of Yosemite Slough) provided by WRA on 4 February 2010, additional impacts to sensitive habitats were calculated and are illustrated by Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration). Bridge construction access would result in temporary impacts to 0.21 acre of new vegetated tidal marsh that is proposed as part of the Yosemite Slough Restoration Project, but the CP-HPS Project would result in no permanent fill of new/restored wetland, aquatic, or mud flat habitat. Further, if the Restoration Project is implemented prior to bridge construction, shoreline improvements that would otherwise have been constructed to extend along the southern Yosemite Slough shoreline will not be necessary. Therefore, 0.03 acre of permanent impacts to wetlands and 0.19 acre of permanent impacts to Section 404 waters along the southern Yosemite Slough shoreline (off site) that were originally identified for the Project would not occur if Phase II of the Restoration Plan is implemented prior to bridge construction (though these existing jurisdictional areas would be temporarily impacted during bridge construction). Temporary impacts would be mitigated through implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2, as required by the Project. Based on the plans for the restoration site provided by WRA as described above, less than 0.01 acre of wetlands that would be restored by the Restoration Project would be impacted by shading as a result of being located directly under the shadow of the bridge. If additional vegetated wetlands are proposed within the bridge footprint as design for Phase II of the Restoration Plan proceeds, such that additional shading impacts to vegetated wetlands would occur, and if such wetlands are constructed prior to construction of the bridge, mitigation for such impacts will be provided by the CP-HPS Project at a 1:1 ratio as described above.

Page III.N-122, new Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration) has been added after page III.N-121

[NOTE: The figure has been added to identify post-Yosemite Slough Restoration Project impacts.]



SOURCE: HT Harvey, 2010; Moffat & Nichol, 2009; Mactec, 2010; PBS&J, 2010. **PBS&J 05.07.10**

FIGURE III.N-7

Candlestick Point - Hunters Point Shipyard Phase II EIR

IMPACTS TO WETLANDS AND OTHER WATERS AFTER YOSEMITE SLOUGH WETLAND RESTORATION

Page III.N-134, Table III.N-5, fourth row, first column

Longfin ~~S~~smelt

F.18 Changes to Section III.O (Public Services)

Page III.O-8

Impact PS-2 **Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. (Refer to ~~the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion O.a]***

Page III.O-9, last paragraph

From ~~2010~~2011 to 2017, demolition and abatement activities would occur on HPS Phase II, as this is where most of the initial development would occur; the construction of a new 49ers stadium would occur between 2014 and 2017. Aside from earlier demolition and replacement of Alice Griffith housing, most construction at Candlestick Point would occur between 2017 and ~~2029~~2031. … As addressed in Impact PS-1, security of the construction areas would be the responsibility of the Applicant. Between ~~2020~~2019 and ~~2029~~2032, as new residential and non-residential uses come on line, there would be an increased need for police protection services.

Page III.O-10, second paragraph

The SFPD evaluates the need for additional officers by sector, and not station or district needs. The Project site is located in two of the five sectors within the Bayview District, both of which have been identified as high demand areas. While it is unlikely that 53 new officers would be needed at the outset of project development as development would occur over a ~~19~~20-year time period, some redistribution of the police presence in the southeastern portion of the City would be warranted by Project development, as described above.

Page III.O-12, first full paragraph

As the Project identifies community service use areas that could be used for police services, and as police services are not tied to a specific station, the SFPD would be able to maintain acceptable levels of police service during operation of the Project. ~~Therefore, w~~While the development of the Project may require new or physically altered police facilities in order to maintain acceptable police services, the potential impacts associated with the construction of a new facility have been addressed in this EIR and would not require further environmental review. As such, no mitigation is required.

Page III.O-12, third full paragraph

Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses, based on recent projections, and associated increased demand for police protection. … Development projections estimate an increase of 61,814 households, 133,359 persons, and 195,010 jobs from 2005 to 2030, either the latest year for which projections have been formulated or the closest year to Project build-out for projections which extend in five-year increments beyond 2030, consistent with other projections in this EIR.

Page III.O-18

Impact PS-4 **Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable response times for fire protection and emergency medical services. (Refer to ~~the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion O.b]***

Page III.O-22, last paragraph

Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses, based on recent projections, and associated increased demand for police protection. … Development projections estimate an increase of 61,814 households, 133,359 persons, and 195,010 jobs from 2005 to 2030, either the latest year for which projections have been formulated or the closest year to Project build-out for projections that extend in 5-year increments beyond 2030, consistent with other projections in this EIR.

Page III.O-28, first paragraph under "Analytic Method"

Impacts on schools are determined by analyzing the estimated increase in student population as a result of Project build-out in ~~2029~~2032 and comparing the increase to the capacity of schools in ~~2029~~2030, the closest year to Project build-out for which housing projections have been calculated, to determine whether new or altered facilities would be required, the construction of which could result in substantial adverse environmental effects.

Page III.O-30, first and second paragraphs

Comparing the 2008 SFUSD school capacity of 63,835 to a projected 2030 population of 71,573 school-age children (recognizing that Project ~~build-out~~ occupancy is projected to occur ~~one year earlier~~ two years later, in ~~2029~~2032), there is a projected shortfall of about 7,738 seats Citywide, or about a 12 percent shortfall.

As discussed in Section III.O.2 (Setting), improvements are planned for many SFUSD schools, such as replacing older schools and modernizing other facilities. … While there are no plans to reduce school capacity at the Project site, in the event that schools located in the Project site reach capacity by the year

~~2029~~2032 (or 2030 as the projections indicate), either due to a reduction in space or an increase in classroom size, the SFUSD may assign students to schools based on a lottery system, which would ensure that student enrollment is distributed to facilities that have sufficient capacity to adequately serve the educational needs of students.

F.19 Changes to Section III.P (Recreation)

Page III.P-1, first paragraph

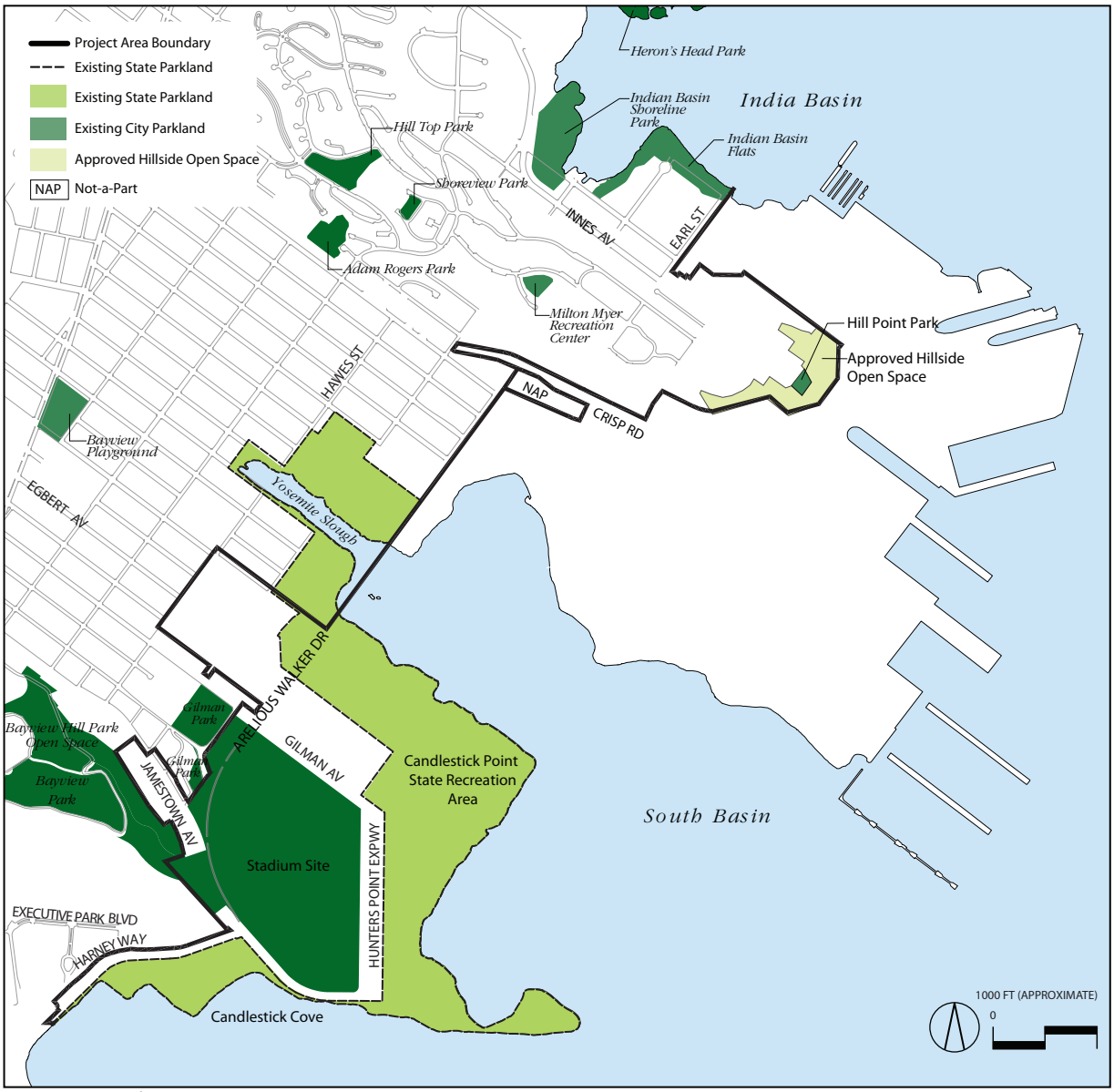
… The analysis in this section concludes that ~~no~~ the Project could have potentially significant ~~or significant~~ environmental impacts ~~would result from the Project~~ related to the timing of proposed park; therefore, ~~no~~ a mitigation measure~~s~~ ~~are~~ is included.

Pages III.P-2 to -4, last partial paragraph

CPSRA (120.2 acres), on the shoreline of Candlestick Point, was acquired … underutilized (totaling approximately 73 acres). The CPSRA lands to the northeast of Yosemite Slough include a now defunct auto salvage yard, old warehouse, and two business locations that are currently occupied by a sound studio and a cabinet shop. CDPR leases the buildings to these tenants on a month-to-month basis. The southern portions … Until recently, the Last Rubble area was characterized by large piles of rubble and debris, remnants of the site's previous use as a dumping ground. California State Parks, with a grant from the California Integrated Waste Management Board, removed 10 acres of rubble and debris in 2009. ~~The California Integrated Waste Management Board completed a rubble and debris removal project in April 2009.~~ As a result of this, the majority of the rubble and debris was either removed or crushed on site. Yosemite Slough is part of the CPSRA, but is not within the Project site except for at its neck, where the proposed bridge would be constructed.

Page III.P-3, Figure III.P-1 (Existing and Approved Parks and Open Space) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.16.10 2056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE

FIGURE III.P-1

Page III.P-12, Impact RE-1

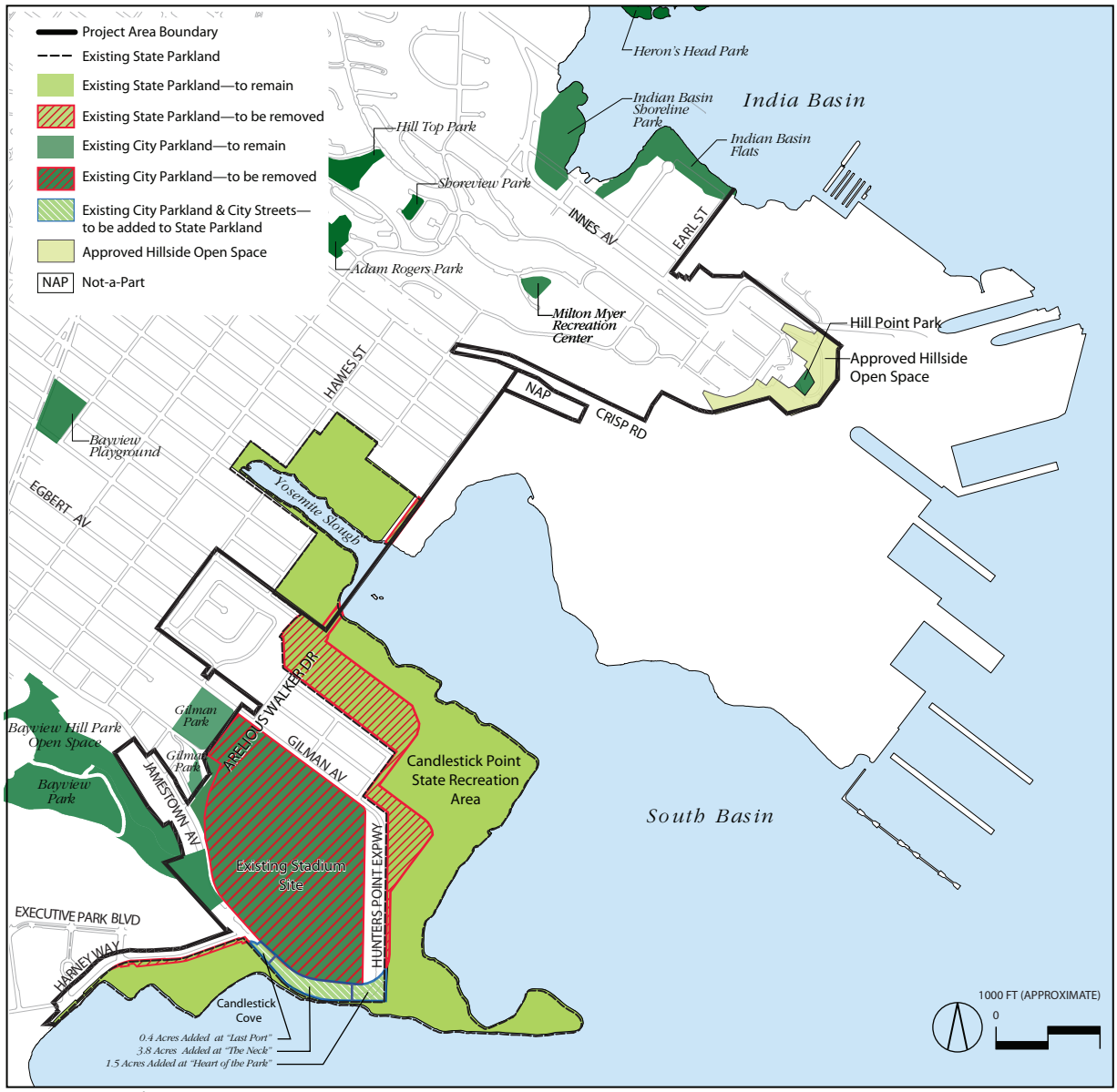
Impact RE-1 **Construction of the parks, recreational uses, and open space proposed by the Project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR. (Refer to ~~the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion P.c]***

Page III.P-12, last partial paragraph

Construction activities associated with the proposed parks and recreational facilities are considered 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), and Section III.N (Biological Resources). …

Page III.P-18, Figure III.P-3 (Proposed CPSRA Reconfiguration) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

PBS&J 04.16.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION

FIGURE III.P-3

Page III.P-25, last paragraph

… In addition, The Last Rubble would contain a new beach area~~ and marshland (refer to Figure II-21)~~. Other features here may include parking, picnic areas, overlook terraces, restrooms, and a restaurant/café.

Page III.P-26, third paragraph

As briefly described in Section III.P.3 (Regulatory Framework) discussion, … The footings for the Yosemite Slough bridge, under preliminary design, would cross the proposed extension of the Bay Trail under the Bay Trail Plan. Visitors utilizing the Bay Trail in the area of the bridge would be able to cross Arelious Walker Drive and pick up the Bay Trail on the other side of the bridge.~~ Bay Trail would be incorporated into the Yosemite Slough bridge, which would serve bus transit and pedestrian and bicycle routes between Candlestick Point and HPS Phase II (refer to Figure III.P-2).~~

Page III.P-27, second and third bullets after "Other Parks and Open Space"

- Hillside Parks and Open Space within the Project site. The hillside parks and open space include the eastern 'tail' of Bayview Park and other hillside areas below Jamestown Road.~~ The steeper areas will be maintained in a more natural state., while the flatter portion of Bayview Hill may be further developed as a neighborhood-serving park space.~~ The steeper areas and the flatter portion of Bayview Hill will be maintained in a more natural state.
- Yosemite Slough. While not located within the Project site except for the mouth of the slough, where the proposed bridge would be located, the Yosemite Slough is located directly adjacent to but outside of the Project site and is planned for restoration by the California State Parks and the California State Parks Foundation. The restoration will focus on providing new wetland habitat and environmental education opportunities. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side.

page III.P-27, last paragraph

… environmental education. The 44.9-acre Grasslands Ecology Park at Parcel E and the 37.2-acre Grasslands Ecology Park at Parcel E-2 on HPS Phase II are contiguous to CPSRA~~ and may be offered to the CDPR by the Agency~~.

Page III.P-30, first paragraph

Despite the availability of sufficient park acreage on the Project site, new residents or employees of the Project site may also choose to use existing ~~nearby~~ parks outside of the Project site (refer to the Setting section for discussion of nearby parks), which could result in the deterioration or degradation of those existing resources. …

Pages III.P-30 to -31, last partial paragraph

The conceptual development plan described in Chapter II would result in the development of residential units and parks during all of four stages of development. Figure ~~11~~II-17 shows the particular residential and park areas that would be developed or improved in each phase. Table III.P-3 (Residential Units and Park Acreage Provided during Each Stage of Development) outlines the number of residential units and

the acreage of parkland to be provided during each stage of development, as well as the resulting park-to-population ratio for residents of the Project site. As this table indicates, at the end of each phase, the park-to-population ratio would be no lower than 13.8 acres per 1,000 residents. Table III.P-3a (Residential Units, Employment, and Park Acreage Provided during Each Stage of Development) identifies the resulting park-to-population ratio for residents and employees of the Project site. ~~Similarly, if~~ With the employee population ~~were~~ added, the lowest park-to-population ratio at the end of a phase would be 9.6~~5~~ acres per 1,000 residents/employees following the last stage of development.

Pages III.P-31,Table III.P-3 (Residential Units and Park Acreage Provided during Each Stage of Development) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table III.P-3 Residential Units and Park Acreage Provided during Each Stage of Development [Revised]

Stage of Development	*Residential Units*	*Population*	*Total Parkland (ac)*	*Park-to-Population Ratio (acres per 1,000 Residents)*
Existing	256	1,113[a]	120.2	108
Phase 1	3,160	7,363[b]	235.6	32.0
Phase 2	5,165	12,035[b]	246.9	20.5
Phase 3	7,670	17,872[b]	250.4	14.0
Phase 4	10,500	24,465[b]	336.4	13.8

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Housing, and Employment). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.
b. Calculated as 2.33 people per residential unit.

Page III.P-31, new Table III.P-3a (Residential Units, Employment, and Park Acreage Provided during Each Stage of Development) has been added

[NOTE: This table has been updated in response to comments and to reflect the revised development schedule and to add information and calculations of park-to-population ratio including Project employees as well as residents.]

Table III.P-3a Residential Units, Employment, and Park Acreage Provided during Each Stage of Development [New]

Stage of Development	Residential Units	Population	Total Parkland (ac)	Park-to-Population Ratio (acres per 1,000 Residents)	Employees	Park-to-Population Ratio (acres per 1,000 Residents & employees)
Existing	256	1,113[a]	120.2	108	—	201.5
Phase 1	3,160	7,363	235.6	32.0	2,346	24.3
Phase 2	5,165	12,035	246.9	20.5	7,474	12.7
Phase 3	7,670	17,872	250.4	14.0	10,595	8.8
Phase 4	10,500	24,465[b]	336.4	13.8	10,730	9.6

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Housing, and Employment). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.
b. Calculated as 2.33 people per residential unit.

Page III.P-32, Impact RE-3

Impact RE-3 **Implementation of the Project would decrease the size of CPSRA but would not, overall, have an adverse~~ly~~ ~~a~~effect on the recreational opportunities offered by that park, nor would it substantially adversely affect windsurfing opportunities at the Project site. (Less than Significant)** ***[Criterion P.d]***

Page III.P-32, second paragraph

Moreover, the Project would provide substantial improvements throughout the CPSRA. These improvements, which are described at length in the discussion of Impact RE-2, include revegetation and landscaping, shoreline restoration and stabilization, infrastructure improvements (such as trails, pathways, and visitor facilities), the provision of habitat and opportunities for environmental education, "Eco-Gardens," and salt-marsh restoration. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side. The area removed for bridge footings would impinge on approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA. Persons using the Bay Trail would be able to cross Arelious Walker Drive and easily access the opposite portion of the CPSRA. Thus, while the road and bridge approach on the south side of the slough would cross the CPSRA, it would not act as a physical barrier preventing use of the entire CPSRA. While the proposed road and bridge would cut through the open space in one location, the majority of the restored Slough area would remain unaffected and available for its intended use. Figure III.P-8 shows the existing unimproved and improved areas of the CPSRA and indicates where land would be removed or added relative to the existing CPSRA uses. …

Page III.P-32, third paragraph

… Moreover, the agreement between CDPR and the City or the Agency, providing for the reconfiguration of CPSRA, would also provide ~~at least $10 million in~~ substantial funding for operation and maintenance of the park~~,~~. The precise amount of operations and maintenance funding to be provided has not yet been determined, but per the requirements of SB 792, it is likely to be at least $10 million. This funding will further enable~~ing~~ the park to accommodate increased demand.

Page III.P-33, fourth paragraph

The geographic context for an analysis of cumulative impacts to recreational resources is the City of San Francisco. … Reasonably foreseeable future development forecasts are based on projections of future growth and take into account projects going through the entitlement process, including the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline, as well as additional growth in the City envisioned through 2030 (refer to analysis below).

F.20 Changes to Section III.Q (Utilities)

Page III.Q-1, second paragraph

Data used to prepare this section include information obtained from the San Francisco Public Utilities Commission (SFPUC), the California Integrated Waste Management Board (CIWMB), the San Francisco Bay Regional Water Quality Control Board (RWQCB), and other regulatory agencies and service providers. Water demand was estimated in the *Water Supply Assessment for the Proposed Candlestick Point–Hunters Point Shipyard Phase II Project* (WSA) prepared by PBS&J for the SFPUC, included as Appendix Q1 (Water Supply Assessment). Additional information was obtained from several studies prepared on behalf of Lennar Urban, including the *Candlestick Point/Hunters Point Shipyard Infrastructure Concept Report* (2007) prepared by Winzler & Kelly Consulting Engineers; the *Low Impact Development Analysis* (2008) prepared by Winzler & Kelly; the *LID Stormwater Opportunity Study* (2009) prepared by Arup; the *Revised Water Demand Memorandum*s dated October 15, 2009, and April 28, 2010,[981a] by Arup, included as Appendix Q2 (Arup, Amendment to Water Demand Memorandum #16—Variant 2A [Housing/R&D Variant], April 28, 2010); Technical Memorandum from Hydroconsult Engineers dated October 2009 (Appendix Q3 [Technical Memorandum from Hydroconsult Engineers]); and the *CPHPS Infrastructure Plan* (October 2009) prepared by Winzler & Kelly and Arup.

[981a] An April 28, 2010, Addendum to the Water Demand Memorandum #16—Variant 2A (Housing/R&D Variant) (dated October 15, 2009) is included as Appendix Q2 of this C&R document.

Page III.Q-10, first full paragraph

The deficit shown in 2010 is the result of the Phased WSIP, which restricts the SFPUC's allocation from the RWS supply to 81 mgd. Full development of the additional 10 mgd of new local supplies is projected to be available by 2015. … The first phase of development of the Project is projected to be completed in ~~2017~~2019. …

Page III.Q-18, mitigation measure MM UT-2

MM UT-2 Auxiliary Water Supply System. *Prior to issuance of occupancy permits, as part of the Infrastructure Plan to be approved, the Project Applicant shall construct an Auxiliary Water Supply System*

(AWSS) loop within Candlestick Point to connect to the City's planned extension of the off-site system off-site on Gilman Street from Ingalls Street to Candlestick Point. The Project Applicant shall construct an additional AWSS loop on HPS Phase II to connect to the existing system at Earl Street and Innes Avenue and at Palou and Griffith Avenues, with looped service along Spear Avenue/Crisp Road.

Page III.Q-43, first paragraph after Impact UT-5a

It is anticipated that the Project would be constructed in phases beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period; however, as indicated by Figure II-16 (Proposed Site Preparation Schedule), all demolition activities would be concluded by ~~2024~~2028 in Candlestick Point.

Page III.Q-45, second paragraph

At current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, its permit expires three years earlier, in January 2029. Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point, ~~five years~~ one year before the landfill is expected to close. …

Page III.Q-46, first paragraph

At HPS Phase II, new development would begin with the construction of the 49ers stadium, scheduled for completion … Demolition activities at the rest of HPS Phase II would begin in ~~2010~~2011 and conclude by ~~2021~~2028, as indicated by Figure II-16.

Page III.Q-46, fourth paragraph

As noted, at current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029.[1034] Most of the d~~D~~emolition activities, which generate construction debris, are expected to conclude in ~~2021~~2028 at HPS Phase II, ~~eight~~ six years before the landfill is expected to close. …

Page III.Q-47, first paragraph

It is anticipated that the Project would be constructed in phases beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period; however, as indicated by Figure II-16, all demolition activities would be concluded by ~~2024~~2028 in both Candlestick Point and ~~by 2021 in~~ HPS Phase II.

Page III.Q-47, third paragraph

At current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029. Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at both Candlestick Point and ~~in 2021 at~~ HPS Phase II, a minimum of ~~five years~~ one year before the landfill is expected to close. …

Page III.Q-48, first partial paragraph

… disposal by a licensed transporter to a TSD authorized to treat such hazardous waste. Disposal of these wastes would occur intermittently as construction occurs over the ~~19~~20-year construction period, and would not likely represent a substantial amount of hazardous waste in a given year. …

Page III.Q-52, first full paragraph

As noted, above, the Altamont Landfill is scheduled to close in January 2029, ~~concurrent with~~ prior to full build-out of Candlestick Point, and the City's existing contract with Altamont Landfill expires in 2014, before build-out of Candlestick Point. …

Page III.Q-53, third paragraph after Impact UT-7

The Altamont Landfill is scheduled to close in January 2029, ~~concurrent with~~ prior to full build-out of the Project, and the City's existing contract with Altamont Landfill expires in 2014, before build-out of the Project. …

F.21 Changes to Section III.S (Greenhouse Gas Emissions)

Page III.S-9, second paragraph

In 2007, 102.6 million metric tonnes of CO_2-equivalent (MMTCO~~2E~~$_2$e) greenhouse gases were emitted by the San Francisco Bay Area (95.5 MMTCO~~2E~~$_2$e were emitted within the Bay Area Air District and 7.1 MMTCO~~2E~~$_2$e were indirect emissions from imported electricity).[1132a] …

[1132a] In February 2010, BAAQMD revised their 2007 GHG emission inventory to 95.8 MMTCO$_2$e. This reduction in emissions is attributable to decreased emissions assigned to ships and boats under the transportation category.

Page III.S-25, second full paragraph and Table III.S-2 (Project Construction GHG Emissions)

Table III.S-2 (Project Construction GHG Emissions) summarizes the output results from Table 3-5 of the GHG inventory and presents the emissions estimates in metric tonnes of CO_2. The table indicates that an estimated ~~105,587~~129,274 tonnes CO_2e emissions from Project construction equipment would be emitted over the course of the ~~minimum~~ entire construction period ~~of 16 years~~.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table III.S-2 Project Construction GHG Emissions [Revised]

Location	Construction Equipment	Worker Commuting	Hauling	Total GHG Emissions
Candlestick Point	56,403	~~1,807~~ 2,913	~~1316~~ 6,103	~~59,526~~ **65,419**
Hunters Point Shipyard Phase II	42,895	~~2,265~~ 2,734	~~901~~ 18,226	~~46,061~~ **63,854**
Total	***99,298***	~~4,072~~ **5,647**	~~2,217~~ **24,329**	~~105,587~~ **129,274**

SOURCE: ENVIRON, Updated Project Phasing Effect on Air Quality and Climate Change Analyses, Candlestick Point-Hunters Point Shipyard Phase II Development Plan, 2010.

If these one-time emissions are annualized assuming a 40-year development life (which is likely low), the one-time emissions contribute approximately ~~2,640~~3,232 tonnes CO_2e emissions annually. …

F.22 Changes to Section IV.A (Introduction) [in Chapter IV (Project Variants)][147]

Page IV-1, first paragraph

This section introduces six variants of the Project that were formulated by the Agency, the City and Lennar Urban. These variants are addressed at a project level of detail in this chapter of this EIR, and include the following:

- Variant 1: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—R&D Variant
- Variant 2: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing Variant
- Variant 2A: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing/R&D Variant
- Variant 3 (Tower Variants A, B, C, and D): Four Candlestick Point tower variants would have the same land use program and overall description as with the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point
- Variant 4: A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy
- Variant 5: Shared stadium where both the San Francisco 49ers and Oakland Raiders would play at the stadium at HPS Phase II

Three variants (Variants 1, 2, and 2A) address the scenario of the San Francisco 49ers moving to the City of Santa Clara or elsewhere with no football stadium constructed at HPS Phase II. Each of those three variants includes a different land use program at the HPS Phase II site. Variant 1 (R&D Variant) would include increases in R&D space at the stadium location. Variant 2 (Housing Variant) would relocate 1,350 residential units from Candlestick Point to the stadium site. Variant 2A (Housing/R&D Variant) would relocate 1,650 housing units from Candlestick Point to the stadium site, and, in addition, includes an additional 500,000 sf of R&D compared to the Project (for a total of 3,000,000 sf of R&D); 1,000,000 sf of the total R&D for Variant 2A would be constructed on the stadium site along with the residential uses.

The Candlestick Point Tower Variant (Variant 3) would have the same land use program and overall description as the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point (expressed as four options for this variant: Candlestick Point Tower Variants A, B, C, and D).

A Utilities Variant (Variant 4) would include an automated solid waste collection system, decentralized wastewater treatment, and district energy. A 49ers/Raiders Shared Stadium Variant (Variant 5) would include the scenario of a shared stadium, where both the 49ers and Oakland Raiders would play at a new stadium at HPS Phase II.

[147] Text changes on pages IV-18, IV-19, IV-21, IV-23, IV-87, and IV-89 related to the R&D Variant (Variant 1) and the Housing Variant (Variant 2) are made to conform the text of the Draft EIR to Appendix D of the Draft EIR.

None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description) of this EIR. The variants are analyzed at a project level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures), Section III.A through Section III.S of this EIR. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table IV-1 (Comparison of Variants to the Project). Table IV-2 (Impact Comparison of Project Variants) summarizes the effects of the Project compared to the variants.

~~This section introduces five variants of the Project that were formulated by the Agency, the City and Lennar Urban., and other stakeholders. Two variants address the scenario of the San Francisco 49ers moving to the City of Santa Clara with no football stadium constructed at HPS Phase II. Those two variants include a different land use program at the HPS Phase II site. Compared to the Project, the development program of these variants at HPS Phase II would include increases in R&D space with the No Stadium—Additional Research and Development Variant (R&D Variant), and relocating residential units to HPS Phase II with the No Stadium—Housing Variant (Housing Variant). The Candlestick Point tower variant would have the same land use program and overall description as the Project, but would have different locations and heights for residential towers at Candlestick Point (expressed as three options for this variant: Candlestick Point Tower Variants A, B, and C). A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy. Another variant would include the scenario of a shared stadium where both the 49ers and Oakland Raiders would play at a new stadium at HPS Phase II.~~

Page IV-1, second paragraph

Most of the features of the variants would be similar to the features of the Project. None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description). The Project could be approved in combination with Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5, any of which can be overlaid on the Project. Variants 1, 2, and 2A represent variants of the Project without a stadium; either of these variants, if approved, could also include components of Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5. For all of these variants, this ~~c~~Chapter IV (Project Variants) provides an environmental analysis such that this EIR would be adequate under CEQA for purposes of review and approval for any of the variants of the Project either individually or in combination with elements of the Project. The variants are analyzed at a project-level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) Section III.A through Section III.S of this document. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table IV-1 (Comparison of Variants to the Project). Table IV-2 (Impact Comparison of Project Variants) summarizes the effects of the Project compared to the variants. ~~As necessary, figures are included to illustrate key details of the Variants and are presented below with the variant descriptions.~~

Pages IV-2 and IV-3, Table IV-1 (Comparison of Variants to the Project) and Table IV-2 (Impact Comparison of Project Variants) have been revised

[NOTE: These tables have been revised to include information concerning Variant 2A and Tower Variant D.]

Table IV-1 Comparison of Variants to the Project [Revised]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
						Same overall development plan as Project, but with minor shifts in building locations to accommodate 570,000 gsf for the proposed utility systems (with 330,000 gsf located below ground).	Same development plan as Project
Land Use Plan							
Residential (units)—Candlestick Point	7,850	7,850	6,500	6,225[a]	7,850	7,850	7,850
Residential (units)—Hunters Point Phase II	2,650	2,650	4,000	4,275[a]	2,650	2,650	2,650
					Same number of residential units, but different placement of towers		
Office	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Research & Development (gsf)	2,500,000	5,000,000	2,500,000	3,000,000	2,500,000	2,500,000	2,500,000
Regional Retail	635,000	635,000	635,000	635,000	635,000	635,000	635,000
Neighborhood Retail	~~125~~250,000	~~125~~250,000	~~125~~250,000	250,000	~~125~~250,000	~~125~~250,000	~~125~~250,000
			Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description)	Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description]			
Tower Floor Plates	10,000 sf	10,000 sf	10,000 sf	10,000 sf	12,500 sf	N/A	N/A

Table IV-1 Comparison of Variants to the Project [Revised]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
Football Stadium (seats)	69,000 Stadium built by 2017	0	0	0	69,000 Stadium built by 2017	69,000 Stadium built by 2017	69,000 Shared stadium with 49ers and Oakland Raiders Stadium site built by 2017
Yosemite Slough Bridge	Auto/BRT/Ped	BRT/Ped	BRT/Ped	BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped
Parks, Open Space, and Recreation Uses							
Total Parks, Open Space, and Recreational Uses	336.4	327.0	349.4	326.6	336.4	336.4	337.5
New Parks	148.1	160.5	158	159	148.1	148.1	148.6
Sports Fields and Active Recreation	91.6	69.8	96.7	70.9	91.6	91.6	91.6
State Parklands (acres)	96.7	96.7	~~94.7~~96.7	96.7	96.7	96.7	96.7

SOURCE: Lennar Urban, 2010.

~~Boxes indicate a change in comparison to the Project.~~

a. The bridge would be open to automobiles only on game days.

Table IV-2 Impact Comparison of Project Variants [Revised]

		Impacts								
		Variant 1: R&D Variant (No Stadium, Additional R&D)	*Variant 2:HousingVariant (No Stadium, Housing)*	*Variant 2A: Housing Variant with R&D (No Stadium)*	*Variant 3: Candlestick Point Tower Variants*				*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/ Raiders Shared Stadium*
	Topic				*Tower Variant 3A*	*Tower Variant 3B*	*Tower Variant 3C*	*Tower Variant 3D*		
III.B	Land Use and Plans	=	=	=	=	=	=	=	=	=
III.C	Population, Housing, and Employment	=	=	=	=	=	=	=	=	=
III.D	Transportation and Circulation	>	<	>	=	=	=	=	=	=
III.E	Aesthetics	=	<	<	>	>	>	>	=	=
III.F	Shadows	<	<	<	>	=	<	<	=	=
III.G	Wind	<	<	<	=	=	=	=	=	=
III.H	Air Quality	=	=	=	=	=	=	=	=	=
III.I	Noise	>	<	=	=	=	=	=	=	=
III.J	Cultural Resources and Paleontological Resources	=	=	=	=	=	=	=	=	=
III.K	Hazards and Hazardous Materials	=	=	=	=	=	=	=	=	=
III.L	Geology and Soils	=	=	=	=	=	=	=	=	=
III.M	Hydrology and Water Quality	>	<	=	=	=	=	=	<	=
III.N	Biological Resources	=	=	=	=	=	=	=	=	=
III.O	Public Services	>	<	=	=	=	=	=	=	=
III.P	Recreation	=	=	=	=	=	=	=	=	=
III.Q	Utilities	=	=	=	=	=	=	=	<	=
III.R	Energy	=	=	=	=	=	=	=	=	=
III.S	Greenhouse Gas Emissions	>	=	=	=	=	=	=	=	=

SOURCE: PBS&J, 2009.

Each topic is compared to the Project and for each impact area, impacts are equal to (=), greater than (>), or less than (<) the Project impacts.

F.23 Changes to Section IV.B (Variant 1: R&D Variant [No Stadium—Additional Research & Development])

Page IV-4, last paragraph

The land use program outlined in the Chapter II for Candlestick Point would be the same for ~~this~~ the ~~Housing~~ R&D Variant (Variant 1), with fewer housing units.[1178a] The discussion below is focused on the changes that would occur at HPS Phase II.

[1178a] The number of residential units in each district may be adjusted depending on market demand; however, the sum total of housing units for Candlestick Point would not exceed 7,850 units.

Page IV-8, first paragraph

As discussed in Chapter II, the HPS Phase II land use plan would consist of four districts: HPS Village Center, HPS North, R&D, and HPS South. … A summary of the development proposed in each of the districts with the R&D Variant (Variant 1) is provided in Table IV-4.[1178b] …

[1178b] The number of residential units in each district may be adjusted depending on market demand; however, the sum total of housing units for HPS Phase II would not exceed 2,650 units.

Page IV-12, first paragraph

Build-out of the R&D uses would begin in ~~2017~~2011, with completion in ~~2021~~2031. Figure IV-4 (R&D Variant Building and Park Construction Schedule) illustrates the overall sequence of development for the R&D Variant (Variant 1).

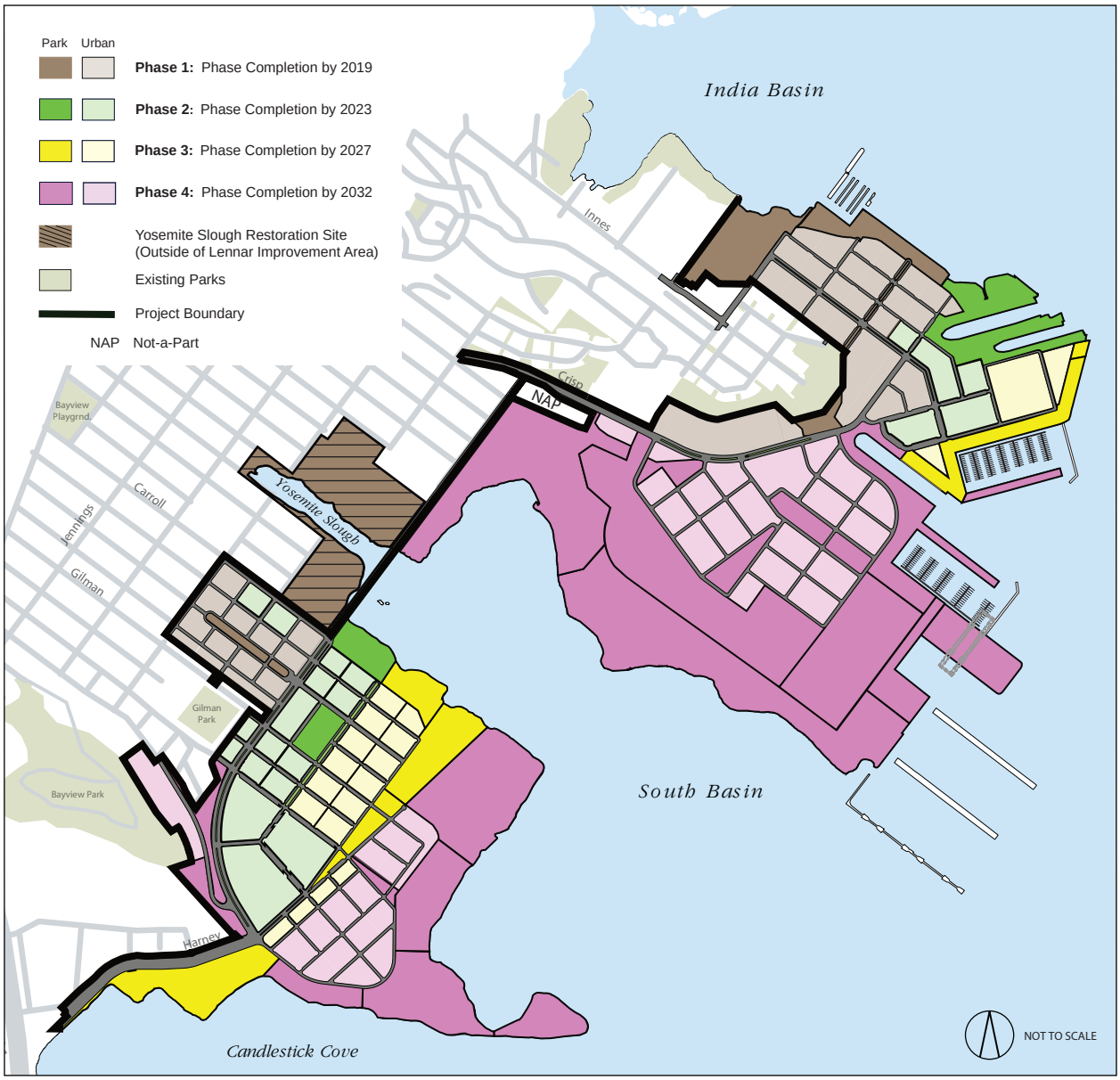
Page IV-12, last paragraph

The R&D Variant (Variant 1) proposes infill development, centered on nodes of commercial and retail activity at Candlestick Point and HPS Phase II with no physical divisions. Residential and non-residential infill around these nodes of activity would provide a more continuous land use pattern and street grid, provide new services and community amenities in the Bayview Hunters Point neighborhood, allow better access to parks and recreational facilities (which would be improved under the R&D Variant [Variant 1]), and remove existing barriers to circulation and access. There are five blocks with privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one on Jamestown Avenue in the Jamestown District (currently vacant) and four contiguous blocks in the Candlestick Point North District (currently vacant or developed with an RV park). If the private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development under this variant would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the R&D Variant (Variant 1) would result in the same overall development level as proposed by the Applicant. The R&D

Variant (Variant 1) would not divide an established community; therefore, no impact would occur, similar to the Project.

Page IV-13, Figure IV-4 (R&D Variant [Variant 1] Building and Park Construction Schedule) has been revised

[NOTE: The figure has been revised to indicate building construction activities starting 1 to 2 years later than originally planned.]



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

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FIGURE IV-4

R&D VARIANT (VARIANT 1)
BUILDING AND PARK CONSTRUCTION SCHEDULE

Page IV-15, first paragraph

With the R&D Variant (Variant 1), construction is scheduled for completion beginning in the Year ~~2017~~2011, extending through the Year 2031, a period of approximately ~~12~~20 years. …

Page IV-18, first paragraph

The R&D Variant (Variant 1) would increase the total amount of development compared to the Project with an increase in R&D space at HPS Phase II of 2,500,000 gsf; there would be no 69,000-seat football stadium. … ~~The R&D Variant would have the same arena-related transportation effects as with the Project.~~ The R&D Variant (Variant 1) would have the same roadway, transit, bikeway, and Bay Trail improvements proposed with the Project, including the Yosemite Slough bridge. …

Page IV-18, last paragraph

With the R&D Variant (Variant 1), 44 of the 60 study intersections would operate at LOS E or LOS F conditions during the weekday AM or PM, or Sunday PM peak hours. Development associated with the R&D Variant (Variant 1) would result in significant unavoidable impacts at 31 intersections, six more than for the Project. …

Page IV-19, first complete sentence at top of page

… would apply as well to the R&D Variant. At ~~five~~ six locations, the R&D Variant (Variant 1) would have significant project-level or cumulative effects on intersection conditions that would not occur with the Project. As discussed below, at ~~three~~ four of the ~~five~~ six intersections, the R&D Variant (Variant 1) impacts would be significant and unavoidable, and at two of the ~~five~~ six intersections (Crisp/Palou and Innes/Earl), the impacts would be less than significant with mitigation.

Page IV-21, the following text is inserted after the first complete paragraph

At the signalized intersection of Cesar Chavez/Evans, the R&D Variant (Variant 1) would contribute significantly to cumulative impacts identified for the 2030 No Project conditions. The Transportation Study (Appendix D) explains in the 2030 No Project analysis, that the Hunters Point Shipyard Redevelopment Plan FEIR identified a mitigation measure at this intersection that involved a reconfiguration of the northbound approach of Evans Avenue to Cesar Chavez Street to provide exclusive northbound left and right turn lanes, and changing the signal timing plan to include the exclusive left turn and right turn movements. The measure identified that the northeast corner curb return would require structural modifications to the existing viaduct. DPW, as part of the BTI Project analysis, determined that widening of the existing structure supporting the intersection of Evans Avenue and Cesar Chavez Street is not feasible. The R&D Variant (Variant 1) and cumulative impacts at this intersection would be significant and unavoidable.

Page IV-23, first partial paragraph

… The R&D Variant would have less-than-significant effects on other transportation conditions (loading, air traffic, emergency access).

Arena Impacts

The R&D Variant (Variant 1) would have the same arena-related transportation effects as with the Project, that is, significant and unavoidable impacts on traffic and transit operations, except the impact to transit operations would be caused by traffic congestion (as for the Project) and by possibly added transit demand. Since the amount of background transit demand under the R&D Variant (Variant 1) would be higher than the Project, it is possible that the added transit demand associated with a sold-out arena event would create demand for transit service greater than the capacity of the transit supply to the arena. This possible effect would be reduced by having SFMTA increase the frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena. Additional shuttle service provided by the arena operator to key regional transit destinations, such as BART, Caltrain, and the T-Third light rail route would also reduce this possible effect, but as for the Project, even with this mitigation and the mitigation identified for the Project to address impacts on transit operations, MM TR-23.1 (Maintain proposed headways for the 29 Sunset), the impact on transit operations would, like the Project, remain significant and unavoidable. Likewise, impacts on traffic, as for the Project, would be reduced but not avoided with implementation of mitigation measure MM TR-41 (Transportation Management Plan for the arena).

Page IV-23, first paragraph after "Construction"

As noted above, construction impacts of the R&D Variant (Variant 1) on the visual character of the area would be similar to the Project, except that the R&D uses would be constructed by ~~2021~~2031, later than the 2017 construction of the Project stadium. This would not change the significance of impacts. Construction activities would occur throughout the 702-acre R&D Variant (Variant 1) site over the approximately ~~19~~20-year build-out period, ending in ~~2029~~2031.

Page IV-29, first paragraph after "Construction"

As stated above, overall construction impacts of the R&D Variant (Variant 1) with respect to air quality would be similar to the Project. Construction activities would occur throughout the 702-acre R&D Variant (Variant 1) site over the approximately 20-year build-out period ending in ~~2029~~2031, with the construction of the additional R&D facilities occurring between ~~2017 and 2021~~ 2018 and 2031. …

Page IV-31, Table IV-7 (R&D Variant [Variant 1] Operational Criteria Pollutant Emissions (Year 2032) has been revised

[NOTE: The title of this table has been updated to reflect the revised development schedule.]

Table IV-7 R&D Variant (Variant 1) Operational Criteria Pollutant Emissions (Year ~~2030~~2032) [Revised]

Scenario/Emission Source	*ROG (lbs/day)*	*NO_X (lbs/day)*	*CO (lbs/day)*	*PM_{10} (lbs/day)*	*$PM_{2.5}$ (lbs/day)*
Hunters Point Shipyard					
Area[a]	182	55	44	1	1
Motor Vehicles (External)	119	109	1,247	576	108
Subtotal	*302*	*164*	*1,291*	*578*	*110*
Candlestick Point					
Area[a]	449	70	53	4	4
Motor Vehicles (External)	216	195	2,221	1,025	193
Subtotal	*665*	*265*	*2,274*	*1,028*	*196*
All Development Sites					
Area[a]	631	125	97	5	5
Motor Vehicles (External)	335	304	3,468	1,601	301
Motor Vehicles (Internal)	30	13	228	45	9
All Sources (R&D Variant)	***997***	***442***	***3,793***	***1,650***	***315***
Comparison to Proposed Project	***106%***	***112%***	***111%***	***111%***	***111%***
Change from Proposed Project	*6%*	*12%*	*11%*	*11%*	*11%*
Comparison to Business as Usual	***89%***	***74%***	***70%***	***64%***	***65%***
Reduction from Business as Usual	*-11%*	*-26%*	*-30%*	*-36%*	*-35%*
All Development Sites (Business as Usual)					
Area[a]	631	125	97	5	5
Motor Vehicles	485	476	5,292	2,561	481
All Sources (Business as Usual)	***1,117***	***601***	***5,389***	***2,566***	***486***
Comparison to R&D Variant	***112%***	***136%***	***142%***	***155%***	***154%***

SOURCE: PBS&J, 2009. Based on URBEMIS 2007 Version 9.2.4.

Daily emissions of ROG and NO_X were calculated under Summer conditions when ambient ozone concentrations are highest. Daily emissions of CO, PM_{10}, and $PM_{2.5}$ were calculated under winter conditions when associated ambient concentrations are highest.

* Area emissions are from sources located on the project site, such as natural gas combustion for heating/cooling, maintenance equipment, consumer product use, etc.

Page IV-34, beginning with first paragraph

In terms of human health risks associated with vehicle emissions, vehicle trips and thereby vehicle emissions along local roadways would increase with development of the R&D Variant (Variant 1), similar to the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the R&D Variant (Variant 1) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential

health risks on receptors attributed to vehicle emissions from the R&D Variant (Variant 1). ~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the R&D Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~ Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of *San Francisco* and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 μg/m^3 ~~threshold~~ action level.[1187] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1187] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-37, second paragraph

As with the Project, development at HPS Phase II with the R&D Variant (Variant 1) would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible as contributors to the California Register of Historic Resources (CRHR)–eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. …

Page IV-49, Table IV-9 (Citywide Number of Police Officers and Estimated R&D Variant [Variant 1] Demand) has been revised

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-9 Citywide Number of Police Officers and Estimated R&D Variant (Variant 1) Demand [Revised]

		Population	*Police Officers*
Citywide (2005)			
Residents		799,302	
Employees		552,167	
	Total	***1,351,469***	***2,033***
Ratio (officer to population)		1:665	
Project (~~2029~~2032)			
Residents		24,465	

Table IV-9 Citywide Number of Police Officers and Estimated R&D Variant (Variant 1) Demand [Revised]

		Population	*Police Officers*
Employees		16,635	
	Total	***41,100***	***62*** [a]
Ratio (officer to population)		1:663	
	Project Total		***53***

SOURCES: The population and households data reported for San Francisco is 2005 data provided in a Memorandum from John Rahaim, Director of Planning, San Francisco Planning Department to Michael Carlin, Deputy General Manager, San Francisco Public Utilities Commissions, *Projections of Growth by 2030*, July 9, 2009; SFPD 2005 total staffing: PSSG District Station *Boundaries Analysis*, 2008; Proposed population and employment: Section III.C.

a. The projected number of police officers for the R&D Variant is rounded up, and most closely reflects the 1:665 ratio of the Project.

Page IV-54, first paragraph

The conceptual development plan for this Variant would result in the development of residential units and parks during all of four stages of development. … As this table indicates, the park-to-population ratio would not drop below ~~12.3~~8.4 acres per 1,000 population at any time during the four stages of development, which exceeds the benchmark of 5.5 acres of parkland per 1,000 population. …

Page IV-54, Table IV-10 (R&D Variant [Variant 1] Residential Units and Park Acreage Provided during each Stage of Development) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-10 R&D Variant (Variant 1) Residential Units and Park Acreage Provided during Each Stage of Development [Revised]

Stage of Development	*Residential Units*	*Population*	*Total Parkland (ac)*	*Park-to-Population Ratio (acres per 1,000 Residents)*
Existing	256	1,113[a]	120.2	108
Phase 1	~~3,120~~3,160	~~7,270~~[b]7,363[b]	~~163.6~~135.8	~~22.5~~18.4
Phase 2	~~6,125~~5,165	~~14,271~~[b]12,034[b]	~~175.9~~147.1	~~12.3~~12.2
Phase 3	~~9,345~~7,670	~~21,774~~[b]17,871[b]	~~326.2~~150.6	~~15.0~~8.4
Phase 4	10,500	24,465[b]	327.0	13.4

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Employment, and Housing). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.

b. Calculated as 2.33 people per residential unit.

Page IV-61, second full paragraph

The City has issued a Request for Qualifications to solicit bids for a new contract to accommodate the City's disposal capacity beyond the expiry of the current agreement. … Demolition activities, which

generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point and in ~~2021~~2023 at HPS Phase II, ~~a minimum of five years~~ one year before the landfill is expected to close. …

Page IV-68, last paragraph

As stated above, overall construction impacts of the R&D Variant (Variant 1) with respect to climate change and GHG emissions would be similar to the Project. …The GHG emissions associated with the construction activities are short-term in duration and ~~will~~ would be a total of ~~105,587~~129,274 tonnes CO_2e. When this is distributed over an anticipated time schedule of ~~16~~20 years, approximately ~~6,600~~6,464 tonnes per year ~~will~~ would be emitted. …

F.24 Changes to Section IV.C (Variant 2: Housing Variant [No Stadium—Relocation of Housing])

Page IV-79, last paragraph

Residential development at HPS Phase II would begin in ~~2017~~2012 with completion in ~~2021~~2023. …

Page IV-82, last paragraph

The Housing Variant (Variant 2) proposes infill development, centered on nodes of commercial and retail activity at Candlestick Point and HPS Phase II with no physical divisions. Residential and non-residential infill around these nodes of activity would provide a more continuous land use pattern and street grid, provide new services and community amenities in the Bayview Hunters Point neighborhood, allow better access to parks and recreational facilities (which would be improved under the Housing Variant), and remove existing barriers to circulation and access. There are five privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one block on Jamestown Avenue in the Jamestown District (currently vacant) and four contiguous parcels in the Candlestick Point North District (either vacant or containing an RV park). If these private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development under this variant would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the Housing Variant would result in the same overall development level as proposed by the Applicant. The Housing Variant (Variant 2) would not divide an established community; therefore, no impact would occur, similar to the Project.

Page IV-84, first full paragraph

With the Housing Variant (Variant 2), the first phase of construction is scheduled for completion ~~beginning~~ in ~~the Year 2017~~2019, extending through ~~the Year 2029~~2031, a period of approximately 12 years. …

Page IV-87, first paragraph

Overall, the Housing Variant would not increase the total amount of development compared to the Project but would relocate approximately 1,350 housing units from Candlestick Point to HPS Phase II. Therefore, 4,000 residential units (rather than 2,650 residential units) would be developed at HPS Phase II. The Housing Variant would include all uses proposed with the Project with the exception of the stadium, which would be replaced by the relocated housing units. … There would be no football stadium. Therefore, the Housing Variant would not have game day or other stadium event transportation impacts associated with the Project. ~~The Housing Variant would have the same arena-related transportation effects as with the Project.~~ …

Page IV-87, sixth paragraph

The Housing Variant would have similar project and cumulative effects at most study intersections as would occur with the Project; only cumulative impacts at the intersections of Cesar Chavez/Evans and Bayshore/Oakdale would worsen as compared to the Project. Section III.D~~,~~ discusses traffic effects at those intersections~~,~~ and the feasibility of mitigation measures. As noted in Impact TR-3, Impact TR-4, Impact TR-5, Impact TR-6, and Impact TR-8, Project intersection impacts would be significant and unavoidable. Those conclusions would apply as well to the Housing Variant. Like the R&D Variant, the Housing Variant would contribute to cumulative traffic in the 2030 condition at Cesar Chavez/Evans and cause intersection operating conditions at Bayshore/Oakdale to worsen in the PM peak hour from LOS C under 2030 conditions to LOS E. No feasible mitigation exists for either intersection and the Housing Variant's contribution to cumulative impacts would be significant and unavoidable.

Page IV-89, the following text is inserted after the second paragraph

… Therefore, the parking shortfall would not result in significant parking impacts, and Housing Variant impacts on parking would be less than significant.

The Housing Variant would have the same arena-related transportation effects as with the Project, that is, significant and unavoidable impacts on traffic and transit operations, except that, like the R&D Variant, the impact to transit operations would be caused by traffic congestion (as for the Project) and by possibly added transit demand. As for the R&D Variant, this possible effect would be reduced by having SFMTA 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 having the arena operator provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light-rail route. Implementation of this mitigation and MM TR-23.1 would reduce but not avoid significant impacts on transit operations. Also as for the Project and the R&D Variant, implementation of mitigation measure MM TR-41 (Transportation Management Plan for the arena) would reduce but not avoid significant impacts on traffic.

Page IV-90, first paragraph

As noted above, construction impacts of the Housing Variant (Variant 2) on the visual character of the area would be similar to the Project because construction practices and activities would be similar for similar types of construction. Construction of the housing on the proposed stadium site would occur later in the ~~19~~20-year building period than construction of the stadium under the Project. Construction activities would occur throughout the 702-acre Housing Variant site over the build-out period, ending in ~~2029~~2031.

Page IV-96, fourth full paragraph

As stated above, overall construction impacts of the Housing Variant (Variant 2) with respect to air quality would be similar to the Project. Construction activities would occur throughout the 702-acre Housing Variant site over the approximately 20-year build-out period ending in ~~2029~~2031, with the construction of the additional dwelling units occurring between ~~2017~~2019 and ~~2021~~2023.

Page IV-100, beginning with fourth paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways would shift location with development of the Housing Variant (Variant 2), as some residential units will be relocated from Candlestick Point to HPS Phase II. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Housing Variant (Variant 2) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Housing Variant (Variant 2). ~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the Housing Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~ Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1220] ~~As c~~Concentrations would not exceed the ~~SFDPH's threshold~~ action level, and as such, impacts would be less than significant, similar to the Project.

[1220] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-104, second full paragraph

As with the Project, development at HPS Phase II with the Housing Variant (Variant 2) would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible as contributors to the California Register of Historic Resources (CRHR)–eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. …

Page IV-117, Table IV-25 (Citywide Number of Police Offices and Estimated Housing Variant [Variant 2] Demand) has been revised

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-25 Citywide Number of Police Officers and Estimated Housing Variant (Variant 2) Demand [Revised]

		Population	*Police Officers*
Citywide (2005)			
Residents		799,302	
Employees		552,167	
	Total	***1,351,469***	***2,033***
Ratio (officer to population)		1:665	
Project (~~2029~~2032)			
Residents		24,465	
Employees		10,378	
	Total	***34,843***	***52*** [a]
Ratio (officer to population)		1:665	

SOURCE: The population and households data reported for San Francisco is 2005 data provided in a Memorandum from John Rahaim, Director of Planning, San Francisco Planning Department to Michael Carlin, Deputy General Manager, San Francisco Public Utilities Commissions, *Projections of Growth by 2030*, July 9, 2009; SFPD 2005 total staffing: PSSG District Station *Boundaries Analysis*, 2008; Proposed population and employment: Section III.C.

a. The projected number of police officers for the R&D Variant is rounded up, and most closely reflects the 1:665 ratio of the Project.

Page IV-130, third paragraph

As noted, at current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029. Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point and in ~~2021~~2023 at HPS Phase II, ~~a minimum of five years~~ one year before the landfill is expected to close. …

Page IV-136, last paragraph

As stated above, overall construction impacts of the Housing Variant with respect to climate change and GHG emissions would be similar to the Project. Construction activities would occur from the use of construction equipment, workers commuting, and soil hauling activities. The GHG emissions associated with the construction activities are short-term in duration and ~~will~~ would be a total of ~~105,587~~129,274 tonnes CO_2e. When this is distributed over an anticipated time schedule of ~~16~~20 years, approximately ~~6,600~~6,464 tonnes per year ~~will~~ would be emitted. Since these emissions are short in duration and small in comparison to the overall construction and mining emissions for the San Francisco Bay Area Air Basin GHG emission inventory, the Housing Variant GHG emissions for construction would be less than significant, similar to the Project.

F.25 Addition of Section IV.Ca (Variant 2A: Housing/R&D Variant [No Stadium—Relocation of Housing; Additional R&D]) [New Section]

The following text in its entirety is inserted following Page IV-139. Although this text is new, for readability, it is not underlined.

IV.Ca VARIANT 2A: HOUSING/R&D VARIANT (NO STADIUM—RELOCATION OF HOUSING; ADDITIONAL R&D)

IV.Ca.1 Overview

An option to Variant 2 (Housing Variant)—Variant 2A (Housing/R&D Variant)—has been identified that would allow for additional R&D on the stadium site, along with housing, in the event the 49ers do not choose to develop a stadium in the HPS Phase II area. As compared to the Housing Variant (Variant 2), described on pages IV-72 through IV-81 of the Draft EIR), the Housing/R&D Variant (Variant 2A) would relocate 275 residential units from Candlestick Point to HPS Phase II and redistribute 50 residential units within other districts on Candlestick Point. The Housing/R&D Variant (Variant 2A) would not develop the uses in the Jamestown District that would occur under the Housing Variant (Variant 2). If the parcels on the privately owned block in the Jamestown District and the four additional blocks in Candlestick Point North District (currently vacant or developed with an RV park) are not acquired by the Project Applicant, the property owners could develop their property under the BVHP Redevelopment Plan via an Owner Participation Agreement or continue the current non-conforming use. The total amount of residential development would remain at 10,500 units, the same as for the Project and the Housing Variant (Variant 2).

An additional 500,000 sf of R&D use would be constructed on the stadium site as compared to the Housing Variant (Variant 2), for a total of 3,000,000 sf of R&D at the HPS Phase II site. The Project includes 2,500,000 sf of R&D, the R&D Variant (Variant 1) includes 5,000,000 sf of R&D, and the Housing Variant (Variant 2) analyzes 2,500,000 sf of R&D; therefore, the 3,000,000 sf of R&D under the Housing/R&D Variant (Variant 2A) would fall within the range of development programs analyzed by the R&D Variant (Variant 1), the Project, and the Housing Variant (Variant 2).

The total amount of park acreage with the Housing/R&D Variant (Variant 2A) would be 326.6 acres, which represents a decrease of approximately 9.8 acres as compared to the Project (which would provide 336.4 acres), about 22.8 acres less than the Housing Variant (Variant 2), which would provide 349.4 acres, and 0.4 acre less than the R&D Variant (Variant 1), which would provide 327.0 acres, because of increased development on the stadium site. However, the decrease in park acreage would not reduce park acreage below the identified threshold of 5.5 acres of park per 1,000 residents, as further described in this section.

Table IV-19a (Housing/R&D Variant [Variant 2A] Land Use Summary) presents the land use summary for the Housing/R&D Variant. Figure IV-7a (Housing/R&D Variant [Variant 2A] Land Use Plan) illustrates the proposed Housing/R&D Variant (Variant 2A) land uses.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-19a Housing/R&D Variant (Variant 2A) Land Use Summary [New]

Land Use	*Candlestick Point*	*HPS Phase II*	*Total*
Residential[a]			
Residential Density Range I (15 to 75 units per acre)	940	1,320	2,260
Residential Density Range II (50 to 125 units per acre)	3,855	2,185	6,040
Residential Density Range III (100 to 175 units per acre)	270	460	730
Residential Density Range IV (175 to 285 units per acre)	1,160	310	1,470
Total (units)	***6,225***[b]	***4,275***[c]	***10,500***
Retail			
Regional Retail (gsf)	635,000	N/A	635,000
Neighborhood Retail (gsf)	125,000	125,000	250,000
Total (gsf)	***760,000***	***125,000***	***885,000***
Office (gsf)	150,000	N/A	150,000
Research & Development	***N/A***	***3,000,000***	***3,000,000***
Hotel (gsf)	150,000	N/A	150,000
Rooms	220	N/A	220
Artists' Studios/Art Center (gsf)	N/A	255,000	255,000
Community Services (gsf)[d]	50,000	50,000	100,000
Parks & Open Space			
New Parks (acres)	8.1	150.9	159.0
New Dual-Use Sports Fields/Multi-Use Lawn and Stadium Parking and Waterfront Recreation (acres)	N/A	70.9	70.9
New and Improved State Parkland (acres)	96.7	N/A	96.7
Total (acres)	***104.8***	***221.8***	***326.6***
Marina (slips)	N/A	300	300
Performance Venue/Arena (gsf)	75,000	N/A	75,000
Seats	10,000	N/A	10,000
Parking (spaces)			
Residential (structured)	6,225	4,275[e]	10,500
Commercial (structured)	2,346	4,428	6.774
General and Commercial (on-street)	1,360	1,428	2,788

Table IV-19a Housing/R&D Variant (Variant 2A) Land Use Summary [New]

Land Use	*Candlestick Point*	*HPS Phase II*	*Total*

SOURCE: Lennar Urban, 2010.

a. The number of residential units in each district may be adjusted depending on market demand; however, the total of housing units for Candlestick Park would not exceed 6,225 units and the total number of housing units for HPS Phase II would not exceed 4,275 units.
b. 1,625 units less than the Project (moved to HPS Phase II).
c. 1,625 units more than the Project (moved from Candlestick Point).
d. Community facilities parcels are intended to provide the existing BVHP community and the future Project community with dedicated land for uses designed to provide, preserve, and leverage such critical local resources as social services, education, the arts, other community services (including public safety facilities such as fire and police stations), and facilities for the benefit of senior citizens. Additional uses proposed for the community facilities parcels such as retail, services, offices, and R&D space, beyond the 100,000 proposed for community facilities, would be absorbed within the retail or R&D program proposed in HPS Phase II. Total uses would not exceed those amounts identified in this table.
e. Residential parking at HPS Phase II would be increased compared to the Project to provide parking for the additional residential units and R&D.

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 (Variant 1), or the Housing Variant (Variant 2) as a result of the modification presented by the Housing/R&D Variant (Variant 2A). An environmental analysis of these modifications, with associated illustrative graphics, is contained in this section.

IV.Ca.2 Project Objectives

The objectives for the Housing/R&D Variant (Variant 2A) would be the same as for the Project. A full list of Project objectives is provided in Section II.D of this EIR. In particular, the Housing/R&D Variant (Variant 2A) was prepared to address the following portion of Objective 1:

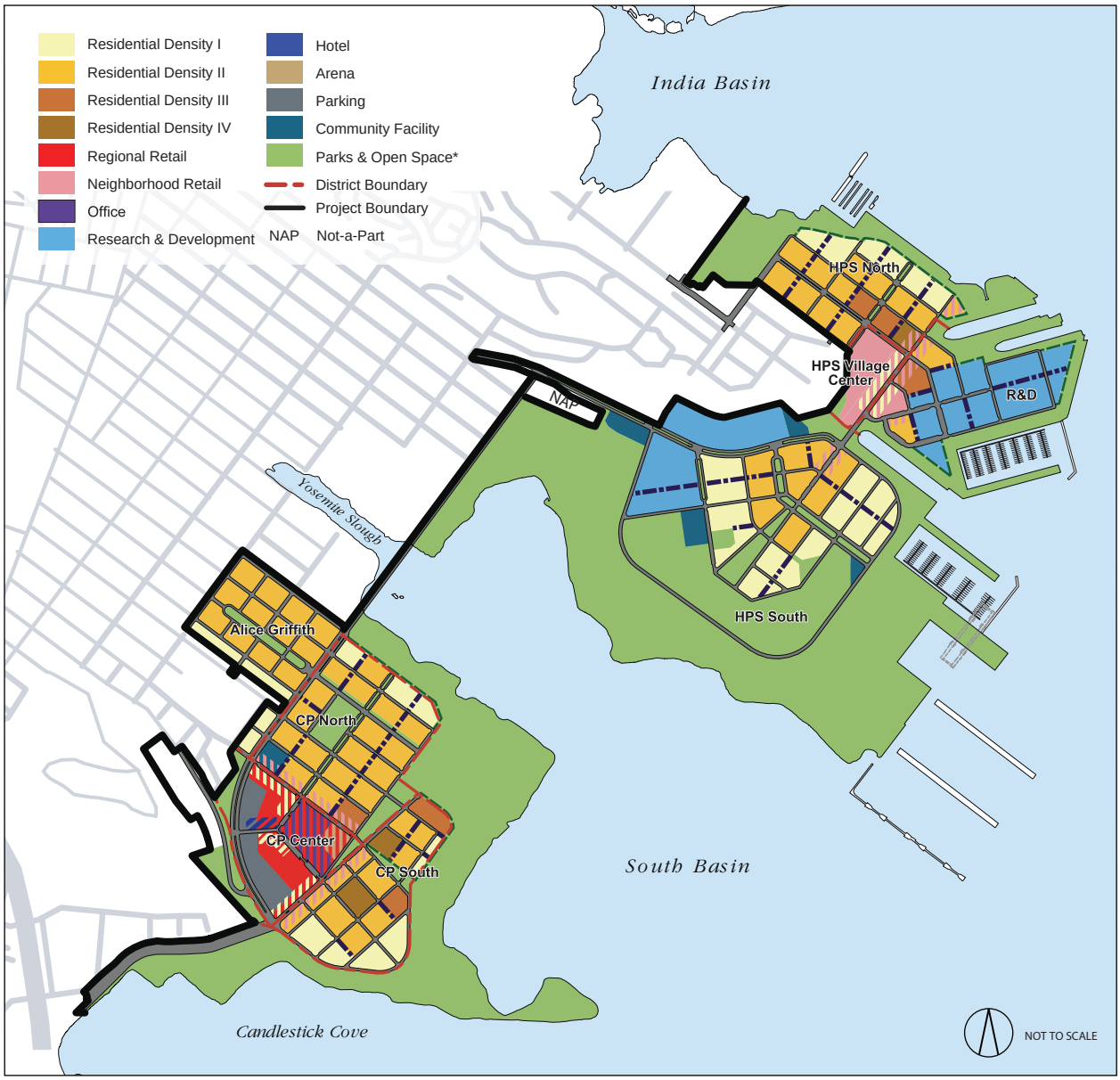
- Implement the CP-HPS Development Plan with public benefits, whether or not the 49ers decide to remain in San Francisco, including developing alternate uses for the stadium site on the Shipyard Property that are consistent with the overall CP-HPS Development Plan objectives.

IV.Ca.3 Characteristics

Section II.E outlines the Project's land use plan, parks and open space plan, transportation improvements, infrastructure plan, community benefits, and green building concepts. While many of these components of the Project would also apply to this variant, the discussion below outlines the principal differences.

Land Use Plan

The land use program outlined in Chapter II (Project Description) for Candlestick Point would generally be the same for this Housing/R&D Variant (Variant 2A) as for the Project, with the exception that 1,625 residential units that would have been constructed on Candlestick Point would be relocated to HPS Phase II. The total number of residential units to be developed would remain the same at 10,500. The discussion below is focused on the changes that would occur at HPS Phase II, relative to the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).



SOURCE: Lennar Urban, 2010.

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FIGURE IV-7a

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A) LAND USE PLAN

The changes proposed with the Housing/R&D Variant (Variant 2A) compared to the Project include residential, R&D, and neighborhood commercial land uses for the HPS South district and the same small reductions in neighborhood commercial uses in other HPS Phase II districts as noted for the Housing Variant (Variant 2). One thousand, six hundred and twenty-five residential units would be relocated to HPS Phase II from Candlestick Point compared to the Project, but the overall total number of residential units would remain the same (i.e., 10,500) as under the Project. The Housing/R&D Variant (Variant 2A) would include 3,000,000 sf of R&D, which is 500,000 sf more when compared to the Project and the Housing Variant (Variant 2) and 2,000,000 sf less than under the R&D Variant (Variant 1). All other land uses within the HPS Phase II districts would be the same as the Project, as described in detail in Chapter II (Project Description). A summary of the development in HPS Phase II proposed with the Housing/R&D Variant (Variant 2A) is provided in Table IV-20a (Housing/R&D Variant [Variant 2A] HPS Phase II Land Use Summary). Figure IV-8a (Housing/R&D Variant [Variant 2A] Maximum Building Heights) illustrates the maximum building heights for Variant 2A.

With the Housing/R&D Variant (Variant 2A), the 69,000-seat NFL stadium proposed with the Project would not be constructed in the HPS South district. Instead, the Housing/R&D Variant would result in construction of 1,625 dwelling units at Density Ranges I and II and 1,000,000 sf of R&D in the HPS South district. The Project includes no residential or R&D in this district. In addition, with the Housing/R&D Variant, the HPS South district would develop 25,000 gsf of neighborhood retail, while the Project would not develop any neighborhood retail adjacent to the stadium.

Parks and Open Space at HPS Phase II

The Housing/R&D Variant (Variant 2A) parks and open space on Candlestick Point would be the same as for the Project; this discussion focuses on HPS Phase II changes. The Housing/R&D Variant (Variant 2A) would include additional parks and would reconfigure the design and sizes of parks and open space areas at HPS Phase II compared to the Project. As presented in Table IV-21a (Housing/R&D Variant [Variant 2A] HPS Phase II Parks and Open Space), HPS Phase II would have 221.8 acres of parks and open space compared to the 230 acres on HPS Phase II under the Project. The Sports Field Complex proposed with the Housing/R&D Variant (Variant 2A) would be 39 acres, which is approximately 20 acres less than proposed with the Project. The 2.0-acre Hunters Point South Park, 0.7-acre Hunters Point Mini Park, 0.9-acre Hunters Point Neighborhood Park, and 3.1-acre Hunters Point Wedge Park would be constructed in the HPS South district, which is not included in the Project. Table IV-21a presents the proposed park and open space at HPS Phase II in the Housing/R&D Variant (Variant 2A).

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-20a Housing/R&D Variant [Variant 2A] HPS Phase II Land Use Summary [New]

District	*Net Acres[a]*	*Dwelling Units[b,c]*	*Density*	*Neighborhood Retail (gsf)*	*Artist Space (gsf)*	*R&D (gsf)*	*Community Services (gsf)*	*Total Commercial (gsf)*
Hunters Point Shipyard North	26.88	2,090	I, II, III, IV	18,000[d]	0	0	0	18,000
Hunters Point Shipyard Village Center	7.69	125	I, II, III	20,000[e]	255,000	0	0	275,000
Research & Development	26.75	435	II, III	62,000[f]	0	2,000,000	0	2,062,000
Hunters Point Shipyard South	61.24[g]	1,625[h]	I, II	25,000[i]	0	1,000,000	50,000	1,075,000
Total	***122.56***	***4,275[h]***	***N/A***	***125,000***	***255,000***	***3,000,000***	***50,000***	***3,430,000***

SOURCE: Lennar Urban, 2009.

a. Net Acreage excludes the street network.

b. 1,320 Residential Density Range I (15 to 75 units per net acre)
2,185 Residential Density Range II (50 to 125 units per net acre)
460 Residential Density Range III (100 to 175 units per net acre)
310 Residential Density Range IV (175 to 270 units per net acre)
4,275 Total units

c. The number of residential units in each district may be adjusted depending on market demand; however, the total of housing units for HPS Phase II would not exceed 4,275 units.

d. 7,000 gsf less than the Project.

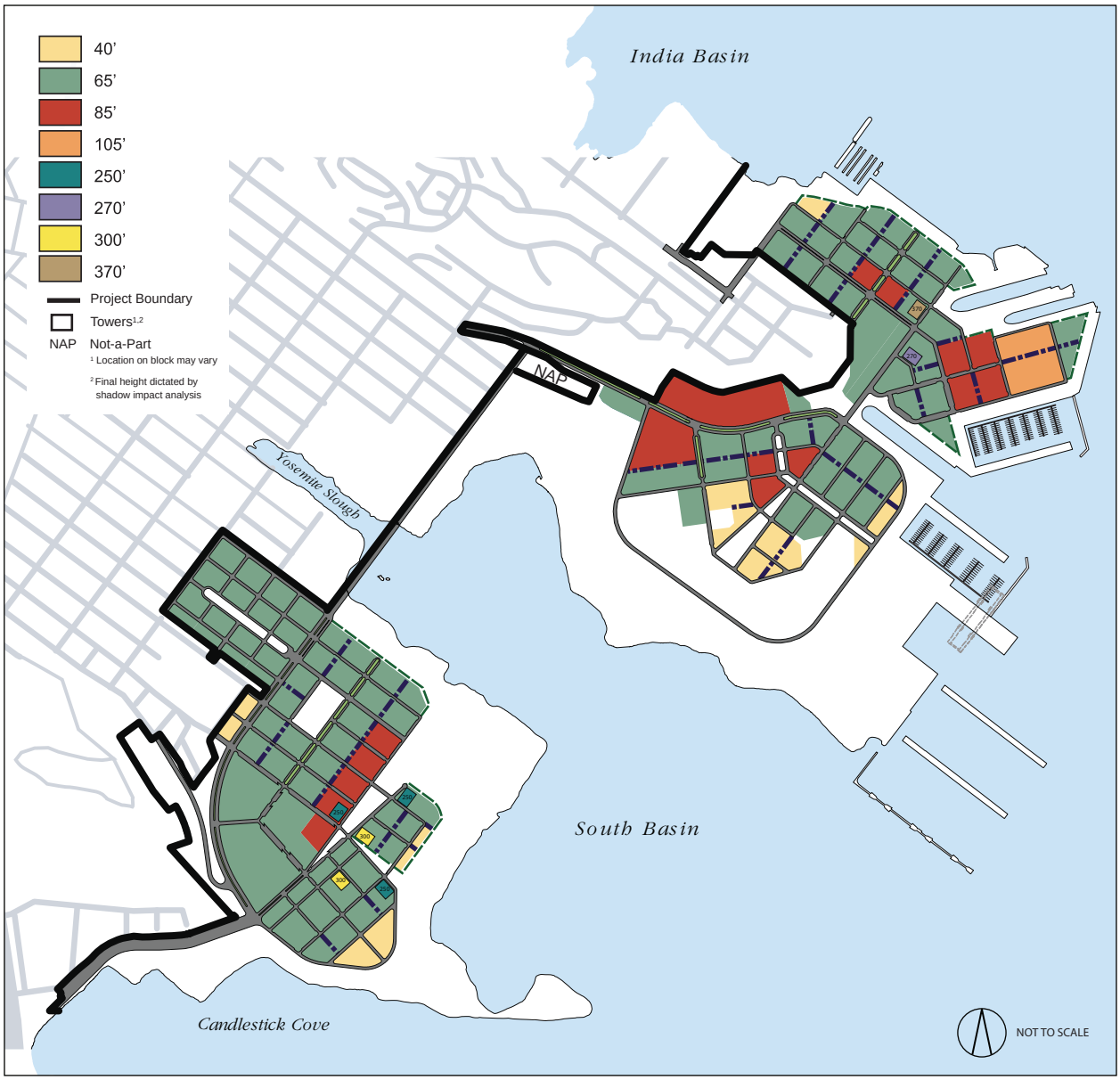
e. 5,000 gsf less than the Project.

f. 13,000 gsf less than the Project.

g. The net acreage of the HPS South district would be increased compared to the Project (32.26 acres with stadium).

h. 1,625 units more than the Project.

i. 25,000 more than the Project.



SOURCE: Lennar Urban, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
MAXIMUM BUILDING HEIGHTS

FIGURE IV-8a

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-21a Housing/R&D Variant (Variant 2A) HPS Phase II Parks and Open Space [New]

Park/Open Space		*Acres*
New Parks		
Northside Park		12.8
Waterfront Promenade		32.4
Heritage Park		15.6
Grasslands Ecology Park at Parcel E		45.2
Grasslands Ecology Park at Parcel E-2		38.2
Hunters Point Wedge Park		3.1
Hunters Point South Park		2.0
Hunters Point Neighborhood Park		0.9
Hunters Point Mini Park		0.7
	Subtotal	*150.9*
New Sports Fields and Active Urban Recreation		
Sports Field Complex		39.0
Multi-Use Lawn		25.2
Waterfront Recreation & Event Pier		6.7
	Subtotal	*70.9*
	Total	***221.8***

SOURCE: Lennar Urban 2010.

Figure IV-9a (Housing/R&D Variant [Variant 2A] Parks and Open Space) illustrates the location of the proposed parks and open space. Figure IV-10a (Housing/R&D Variant [Variant 2A] Building and Park Construction Schedule) provides phasing and construction information for development of the buildings and parks under Variant 2A.

Transportation and Circulation

The transportation and circulation plan under the Housing/R&D Variant (Variant 2A) would be the same as proposed for the Housing Variant (Variant 2).

Infrastructure

The location of major infrastructure improvements under the Housing/R&D Variant (Variant 2A) would be the same as that proposed for the Housing Variant (Variant 2).

SOURCE: Lennar Urban, RHAA, 2010.

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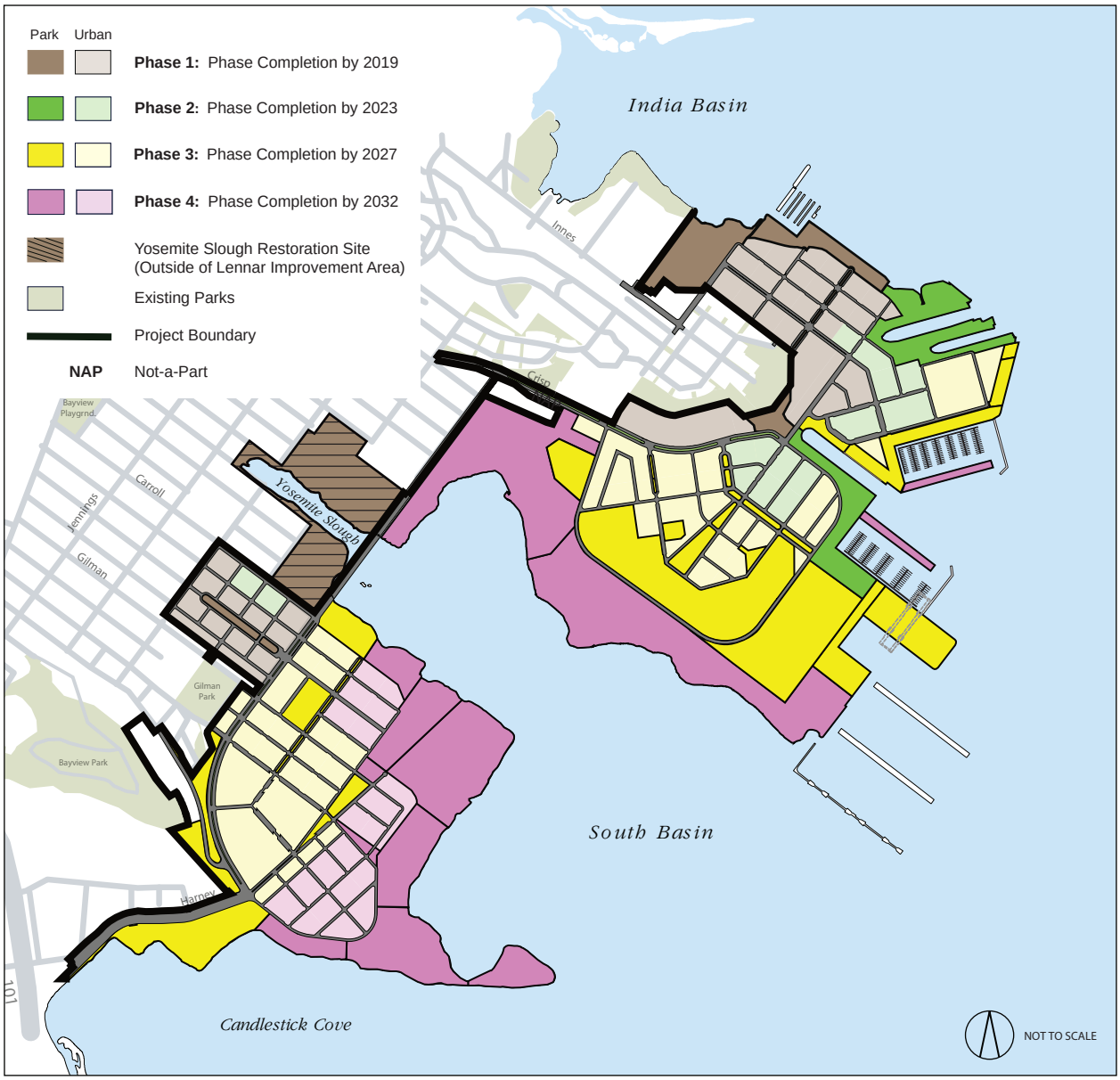
Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A) PARKS AND OPEN SPACE

FIGURE IV-9a



SOURCE: Lennar Urban, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

FIGURE IV-10a

HOUSING/R&D VARIANT (VARIANT 2A)
BUILDING AND PARK CONSTRUCTION SCHEDULE

Implementation

Build-out of the housing and R&D uses at HPS Phase II would begin in the first phase of development and would be completed by 2027. Figure IV-10a illustrates the overall sequence of development for the Housing/R&D Variant (Variant 2A).

IV.Ca.4 Potential Environmental Effects

Analytic Method

The Housing/R&D Variant (Variant 2A) represents a modification of the Housing Variant (Variant 2) and also includes components of the R&D Variant (Variant 1). The R&D Variant (Variant 1) analyzes 5,000,000 sf of R&D on the stadium site and the Housing/R&D Variant (Variant 2A) contemplates 3,000,000 sf of R&D on the stadium site. The Housing Variant (Variant 2) proposes relocating 1,350 residential units to HPS Phase II, and the Housing/R&D Variant (Variant 2A) contemplates relocating 1,625 residential units to HPS Phase II.

For environmental resources that are dependent on types of land uses, rather than size, (Land Use and Plans, Hazards and Hazardous Materials, and, to some extent, Utilities and Energy) it would be appropriate to compare the impacts of the Housing/R&D Variant (Variant 2A) to those impacts analyzed for the R&D Variant (Variant 1) and/or the Housing Variant (Variant 2) to demonstrate that the impacts from the Housing/R&D Variant (Variant 2A) are "bracketed" within the range of impacts already analyzed.

The footprint of development for Variant 2A is approximately the same as that of the R&D Variant (Variant 1) but slightly less than that of the Project.[148] The Housing/R&D Variant (Variant 2A) would result in a total of 46.8 percent area of impervious surface (an indicator of development footprint) on HPS; the Project would result in total impervious surface area on HPS of 48.4 percent; and the R&D Variant (Variant 1) would have total impervious surface area on HPS of 46.7 percent. For environmental resources whose impacts depend on the extent or intensity of development and extent of ground disturbance (Cultural/Paleontological Resources, Hazards and Hazardous Materials, Geology and Soils, Hydrology and Water Quality), it would be appropriate to compare the impacts of the Housing/R&D Variant (Variant 2A) to the Project, as the Project's development "footprint" is slightly greater than the footprint of the Housing/R&D Variant (Variant 2A). The location of development would remain the same under the Housing/R&D Variant (Variant 2A) and the impact conclusions made for the Project that also depend on the specific location of development (Biological Resources and Cultural/Paleontological Resources) would also apply to Variant 2A. Thus, the impacts of the Housing/R&D Variant (Variant 2A) have been bracketed by the impacts analyzed for the Project with respect to Cultural Resources and Paleontological Resources, Hazards and Hazardous Materials, Geology and Soils, Hydrology and Water Quality, and Biological Resources. Impacts of the Housing/R&D Variant (Variant 2A) that are dependent on intensity of development or extent of land disturbance would be substantially the same as the impacts for the development proposed for the Project.

[148] IBI Group, April 8, 2010.

With respect to Wind and Shadow impacts, which are dependent on the heights and massing of structures, building heights and massing for the Housing/R&D Variant (Variant 2A) would be substantially similar to the Project, and within the height limits established by the Project districts. Therefore, the impacts of the Housing/R&D Variant (Variant 2A) for these topics would be appropriately compared to the impacts of the Project.

For Transportation and Circulation, Aesthetics, Air Quality, Noise, Recreation, and Greenhouse Gas Emissions, the combination of housing and R&D on the stadium site and development schedule modifications require a somewhat more comprehensive analysis to determine the impacts of the Housing/R&D Variant (Variant 2A) compared to the Project, the R&D Variant (Variant 1), or the Housing Variant (Variant 2).

Therefore, the impacts of the Housing/R&D Variant (Variant 2A) are analyzed in the following sections compared to the impacts of the Project, Variant 1, and/or Variant 2, whichever is the most appropriate for the particular resource, to demonstrate that the impacts of Variant 2A would be bracketed by one or more of the analyses previously provided in the EIR.

Construction Impacts

Potential construction-related environmental effects of the Housing/R&D Variant (Variant 2A) would be approximately the same as those analyzed for the R&D Variant (Variant 1), as it would include approximately the same intensity of development. Therefore, all construction-related environmental effects of the Housing/R&D Variant (Variant 2A) are the same as contained in the analysis of the R&D Variant on pages IV-12 through IV-71 of the EIR.

Depending on the phasing of the additional development, the Housing/R&D Variant (Variant 2A) may result in fewer construction traffic impacts between future years 2012 and 2017, when the new stadium would be constructed, and somewhat greater impacts in the years the housing and additional R&D would be constructed. Implementation of a Construction Traffic Management Program (the same as described for the Project in mitigation measure MM TR-1) would help minimize the Housing/R&D Variant's contribution to cumulative construction-related traffic impacts. However, localized construction-related traffic impacts would remain significant and unavoidable, similar to the Project, and would be bracketed by the analysis for the Project.

With regard to air quality, construction activities would occur over the same construction period and would be essentially the same as those identified for the Project and the R&D Variant (Variant 1). Any project within the City of San Francisco, including the Housing/R&D Variant, would be required to comply with *San Francisco Health Code* Article 22B, Construction Dust Control, which requires the preparation of a site-specific dust control plan, (with mandatory mitigation measures similar to the BAAQMD's) for construction projects within 1,000 feet of sensitive receptors (residence, school, childcare center, hospital or other health-care facility or group-living quarters). Implementation of mitigation measure MM HZ-15, which identifies specific mitigation that would be used to reduce emissions associated with construction. As the development footprint of the Housing/R&D Variant (Variant 2A) would be substantially similar to and have been "bracketed by" the analyses for the Project and the R&D Variant (Variant 1), impacts would be less than significant as previously identified in the analyses of construction air quality impacts for the

Project and the R&D Variant (Variant 1), and would be bracketed by the impact analysis for the Project and the R&D Variant (Variant 1).

With respect to airborne human health risks, construction measures MM AQ-2.1 and MM AQ-2.2 would be implemented for the Housing/R&D Variant (Variant 2A), reducing diesel particulate matter (DPM) and dust or particular matter (PM_{10}) to less than significant. As construction emissions associated with the Housing/R&D Variant (Variant 2A) are expected to be lower than those associated with construction of a stadium in the same location (e.g., Project), the Housing/R&D Variant (Variant 2A) would have reduced impacts compared to the Project. Refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010). The Health Risk Assessment (HRA) performed for the Project (Appendix H3 to the EIR) concluded that the inhalation cancer risk at the Maximum Extent of Impact (MEI) for the Project would be 4.5 in one million. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the BAAQMD threshold. The Housing/R&D Variant (Variant 2A) is not anticipated to exceed Project impacts and, therefore, would not exceed the BAAQMD CEQA threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.01, which is below the BAAQMD's HI significance threshold of 1.0. Therefore, this impact would be bracketed by the impact analyzed in the Project, and would similarly be less than significant.

The HRA for the Project analyzed the potential for construction activities to generate toxic air contaminants (TACs) associated with soil-PM_{10} and evaluated the potential concentrations of airborne soil-PM_{10} at numerous receptors on site (residents at the Alice Griffith Public Housing units) and off site (adult and child residents, workers, and schoolchildren) in the Project vicinity. The inhalation cancer risk at the point of maximum impact or MEI as a result of construction activities at the Project site would be 0.04 in one million and would not exceed the BAAQMD threshold, similar to the Project. In addition, the HRA concluded the maximum non-cancer HI to be 0.03, which would be below the BAAQMD's significance threshold of 1.0. The impacts of the Housing/R&D Variant (Variant 2A) would be bracketed by the analysis for the Project.

All construction-related mitigation measures outlined for the Project would also apply to the Housing/R&D Variant (Variant 2). These include: MM TR-1, MM AE-2, MM AQ-2.1, MM AQ-2.2, MM NO-1a.1, MM NO-1a.2, MM NO-2a, MM CP-1b.1, MM CP-2a, MM CP-3a, MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-5a, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM GE-2a, MM GE-3, MM GE-4a.1, MM GE-4a.2, MM GE-4a.3, MM GE-5a, MM GE-6a, MM GE-10a, MM GE-11a, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM HY-6a.1, MM HY-12a.1, MM HY-12a.2, MM HY-14, MM BI-4a.1, MM BI-4a.2, MM BI-5b.1, MM BI-5b.3, MM BI-5b.4, MM BI-6a.1, MM BI-6a.2, MM BI-6b, MM BI-9b, MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, MM BI-12b.2, MM BI-14a, MM PS-1, MM UT-3a, and MM UT-5a. (Refer to Table ES-2.)

Operational Impacts

Land Use and Plans

The Housing/R&D Variant (Variant 2A) would develop 3,000,000 sf of R&D on the HPS Phase II site, which is 2,000,000 less square footage than the R&D Variant (Variant 1). However, 1,625 additional housing units and 500,000 additional sf of R&D compared to the R&D Variant (Variant 1) would be constructed on HPS Phase II on the stadium site. The impacts of the types of land uses proposed for the stadium site under the Housing/R&D Variant (Variant 2A) have been analyzed in both the R&D and Housing Variant analyses contained on pages IV-12 through IV-139 of the Draft EIR.

The Housing/R&D Variant (Variant 2A) would not introduce any new land uses that were not analyzed in the R&D and Housing Variants. The residential units and R&D would be located on the stadium site, the same as for the R&D and Housing Variants, and would not divide an established community. The Housing/R&D Variant (Variant 2A) would not conflict with any policies of applicable land use plans or result in urban decay, as analyzed for the R&D and Housing Variants, as the proposed uses and densities are within the range of development analyzed for the R&D and Housing Variants. The impacts would be less than significant, similar to the R&D and Housing Variants.

Population, Housing, and Employment

The Housing/R&D Variant (Variant 2A) would result in construction of the same number of dwelling units as the Project (10,500), with the same resulting resident population increase. The Housing/R&D Variant (Variant 2A) would generate 11,629 jobs,[149] less than the 16,635 jobs estimated for the R&D Variant (Variant 1), but more than for the Project. Therefore, impacts related to population, housing, and employment would be bracketed by the analysis for the Project and Variant 1, and would be similarly less than significant.

Transportation and Circulation

Overall, the Housing/R&D Variant (Variant 2A) would not increase the total amount of residential development compared to the Project, but would relocate approximately 1,625 housing units from Candlestick Point to HPS Phase II, and would add 500,000 gsf of R&D to HPS Phase II. Therefore, 4,275 residential units (rather than 2,650 residential units as under the Project) and 3,000,000 gsf (rather than 2,500,000 gsf as under the Project) of R&D would be developed at HPS Phase II. The Housing/R&D Variant (Variant 2A) would include all uses proposed with the Project with the exception of the stadium, which would be replaced by the relocated housing units and additional R&D. There would be no football stadium. Therefore, the Housing/R&D Variant (Variant 2A) would not have game day or other stadium event transportation impacts associated with the Project. The Housing/R&D Variant (Variant 2A) would have the same roadway, transit, bikeway, and Bay Trail improvements proposed with the Project, including the Yosemite Slough bridge. However, as with all non-stadium variants, the bridge would be narrower than the bridge with the Project, with a 41-foot-wide right-of-way to accommodate two BRT lanes, a sidewalk, and a Class I bicycle path.

[149] Utilizing generation factor of one job for every 4,000 sf.

As with the Project, the Housing/R&D Variant (Variant 2A) would implement a Transportation Demand Management plan as described in Project mitigation measure MM TR-2 and a Transit Operating Plan as described in Project mitigation measure MM TR-17.

A transportation analysis was conducted for the Housing/R&D Variant (Variant 2A) and key conclusions are presented below. The analysis is provided as Appendix T6 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Project Variant 2A, March 15, 2010) to this document.

Trip Generation

The Housing/R&D Variant (Variant 2A) would have 220,323 total daily person trips, slightly more than the trips generated with the Project (219,651), but less than the R&D Variant (236,291). Similarly, the Housing/R&D Variant (Variant 2A) would generate slightly more peak hour person trips during both the AM and PM peak hours (14,042 weekday AM trips, 20,727 weekday PM trips, and 18,240 Sunday PM trips) than the Project (13,558 weekday AM trips, 20,412 weekday PM trips, and 18,128 Sunday PM trips), but fewer peak hour trips than the R&D Variant (16,253 weekday AM trips, 22,586 weekday PM trips, and 19,719 Sunday PM trips). Thus, the impacts from the Housing/R&D Variant (Variant 2A with respect to trip generation have been bracketed by the analysis for the Project and the R&D Variant (Variant 1).

Intersection LOS

There are three intersections—Cesar Chavez/Evans, Crisp/Palou, and Bayshore/Oakdale—where the Housing/R&D Variant (Variant 2A) would result in a greater impact than as identified for the Project. The intersections of Crisp/Palou and Bayshore/Oakdale would have a project-level significant impact that does not occur under the Project. At these same two intersections, however, the R&D Variant (Variant 1) was identified to have a significant and unavoidable impact, with greater levels of delay (although same level of service) when compared to the Housing/R&D Variant (Variant 2A). Therefore, for these two intersections, the impacts have been bracketed by the analysis for the Project and for the R&D Variant (Variant 1).

For the intersection of Cesar Chavez/Evans, the Housing/R&D Variant (Variant 2A) would make a significant contribution to cumulative impacts as well as a project-level significant impact compared to the no significant contribution and no significant project-level impact under the Project. For the same intersection, the analysis for the R&D Variant (Variant 1) concluded that there would be a significant contribution and a significant project-level impact, and the contribution from the R&D Variant (Variant 1) would be greater for the R&D Variant (Variant 1) than for the Housing/R&D Variant (Variant 2A). The average delay at this intersection would be less under the Housing/R&D Variant (Variant 2A) than under the R&D Variant (Variant 1). Therefore, for this intersection, the impacts have been bracketed by the analysis for the Project and the R&D Variant (Variant 1).

Freeway Conditions

The Housing/R&D Variant (Variant 2A) would generate more trips than the Project but fewer than the R&D Variant (Variant 1), as noted, above. The Housing/R&D Variant (Variant 2A) effects on freeway mainline sections and freeway ramp junctions would be greater compared to the Project, but less than with the R&D Variant (Variant 1). The Housing/R&D Variant (Variant 2A) ramp queuing effects would be similar to Project effects. The Housing/R&D Variant (Variant 2A) would result in significant impacts with

respect to ramp queuing at the same off-ramp locations as the Project, with one exception. With the Housing/R&D Variant (Variant 2A), the US-101 northbound off-ramp to Harney Way would not be likely to experience queues extending back to the mainline in the PM peak hour. However, the Housing/R&D Variant's contribution to other off-ramps expected to experience significant traffic impacts associated with queuing under Project conditions would be the same as the Project. As described for Project impacts, no feasible mitigation measures have been identified for the freeway off-ramps expected to experience significant impacts. Impacts of the Housing/R&D Variant (Variant 2A) on freeway conditions would be significant and unavoidable, the same as for the Project and the R&D Variant (Variant 1), except for the one off-ramp location noted where the impact of the Housing/R&D Variant (Variant 2A would be less than significant, compared to the significant and unavoidable impact on this off-ramp under both the Project and the R&D Variant (Variant 1). Thus, the impacts of the Housing/R&D Variant (Variant 2A) with respect to freeway conditions would be bracketed by the impact analysis for the Project and the R&D Variant (Variant 1) as contained in the EIR.

Transit Impacts

The Housing/R&D Variant (Variant 2A), as with the Project, would include extended and new transit services; transit trips with the Housing/R&D Variant (Variant 2A) would be accommodated within the capacity of these services. The Housing/R&D Variant (Variant 2A), as with the Project, would have a less-than-significant impact with mitigation (i.e., implementation of MM TR-27—the Transit Operating Plan) on local and regional transit capacity. However, as with the Project, transit impacts would occur from traffic congestion delay. Overall, those transit delay conditions with the Housing/R&D Variant (Variant 2A) would affect the same lines as with the Project as presented in Section III.D, Impact TR-21 to Impact TR-30. Project mitigation measures MM TR-21 to MM TR-30 would also apply to the Housing/R&D Variant (Variant 2A), but, as concluded in Section III.D of the EIR, the feasibility or implementation of the measures is uncertain, and the transit delay effects would remain significant and unavoidable. The Housing/R&D Variant (Variant 2A) would require a similar number of additional vehicles on the same routes as the Project to mitigate transit congestion delays. Impacts associated with the Housing/R&D Variant (Variant 2A) would be more extensive than those for the Project and the Housing Variant (Variant 2), but less than the R&D Variant (Variant 1), and would be significant and unavoidable.

Bicycle Impacts

The Housing/R&D Variant (Variant 2A) bicycle trips would be accommodated within the proposed street and network, and impacts on bicycle circulation would be less than significant.

As with the Project, potential significant impacts on bicycle travel on Palou Avenue would occur under Housing/R&D Variant. Project mitigation measure MM TR-32 would reduce impacts on bicyclists; however, because a feasibility study would be required, the implementation of Project mitigation measure MM TR-32 is uncertain, and, therefore, the Housing/R&D Variant (Variant 2A) impacts on bicycle circulation would remain significant and unavoidable, the same as for the Project.

Pedestrian Impacts

The Housing/R&D Variant (Variant 2A) would be accommodated within the proposed sidewalk and pedestrian network, and impacts on pedestrian circulation would be less than significant.

Parking Impacts

The Housing/R&D Variant (Variant 2A) would result in a demand for about 21,776 spaces, compared with a maximum permitted supply of about 17,274 spaces; therefore, the maximum off-street parking supply would be about 4,502 spaces fewer than the estimated peak demand. The Project would have a demand for 21,233 spaces and maximum supply of 16,874 spaces, about 4,360 spaces fewer than estimated peak demand. Due to parking supply constraints and accessibility to transit, future Housing/R&D Variant (Variant 2A) parking demand may be somewhat lower than estimated, and, therefore, the parking space shortfall would also be less than the number of spaces that would be required in order to accommodate all the vehicles anticipated if the proposed parking supply were unconstrained. Since the parking supply would be constrained, the actual parking demand would be expected to be less. As discussed in Section III.D, peak parking demand would not occur simultaneously; public parking facilities, such as the one proposed in Candlestick Point, and on-street parking spaces can usually be shared efficiently among many destinations, and the Housing/R&D Variant (Variant 2A) would include a Travel Demand Management program that includes a number of parking strategies to make auto use and ownership less attractive, as well as strategies to encourage alternative modes.

As noted for the Project, it is possible that some drivers may seek available parking in adjacent Bayview residential areas to the west. The potential increase in parking demand in adjacent neighborhoods would likely spill over to streets with existing industrial uses in the vicinity, which could, in turn, increase demand for parking in nearby Bayview residential areas. Parking supply is not considered a permanent physical condition, and changes in the parking supply would not be a significant environmental impact. The loss of parking may cause potential secondary effects, which would include cars circling and looking for a parking space in neighboring streets. The secondary effects of drivers searching for parking is typically offset by a reduction in vehicle trips due to some drivers who are aware of constrained parking conditions in a given area shifting to other modes. Hence, any secondary environmental impacts that may result from a shortfall in parking would be minor. Therefore, the parking shortfall would not result in significant parking impacts, and Housing/R&D Variant (Variant 2A) impacts on parking would be less than significant.

The Housing/R&D Variant (Variant 2A) would have less-than-significant effects on other transportation conditions (loading, air traffic, and emergency access).

Arena Impacts

As with the R&D Variant (Variant 1), since the amount of background transit demand under the Housing/R&D Variant (Variant 2A) would be higher than the Project, it is possible that the added transit demand associated with a sold-out arena event would create demand for transit service greater than the capacity of the transit supply to the arena. Project mitigation measure MM TR-51 (Transportation Management Plan for the arena) and MM TR-23.1 (Maintain the proposed headways of the 29-Sunset) would apply to the Housing/R&D Variant (Variant 2A) and would help minimize the impacts. This mitigation requires that SFMTA increase frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena and convert one of the two automobile travel lanes in each direction into a transit-only travel lane on Gilman Avenue between Arelious Walker Drive and Third Street. Additionally, westbound Paul Avenue, between Third Street and Bayshore Boulevard, provides one westbound travel lane and on-street parking. Additional shuttle service

to key regional transit destinations, such as BART, Caltrain, and the T-Third light rail route would also be provided by the arena operator. With implementation of the mitigation measure, the Housing/R&D Variant's impacts to transit service would be reduced, but not to less-than-significant levels. In addition, traffic impacts during events at the arena would not be mitigated, and would impact transit operations. Because transit demand would be greater under the Housing/R&D Variant (Variant 2A) compared to the Project and less than the demand under the R&D Variant (Variant 1), the impacts of the Housing/R&D Variant (Variant 2A) have been bracketed in the analysis contained in the EIR for the Project and the R&D Variant (Variant 1).

Aesthetics

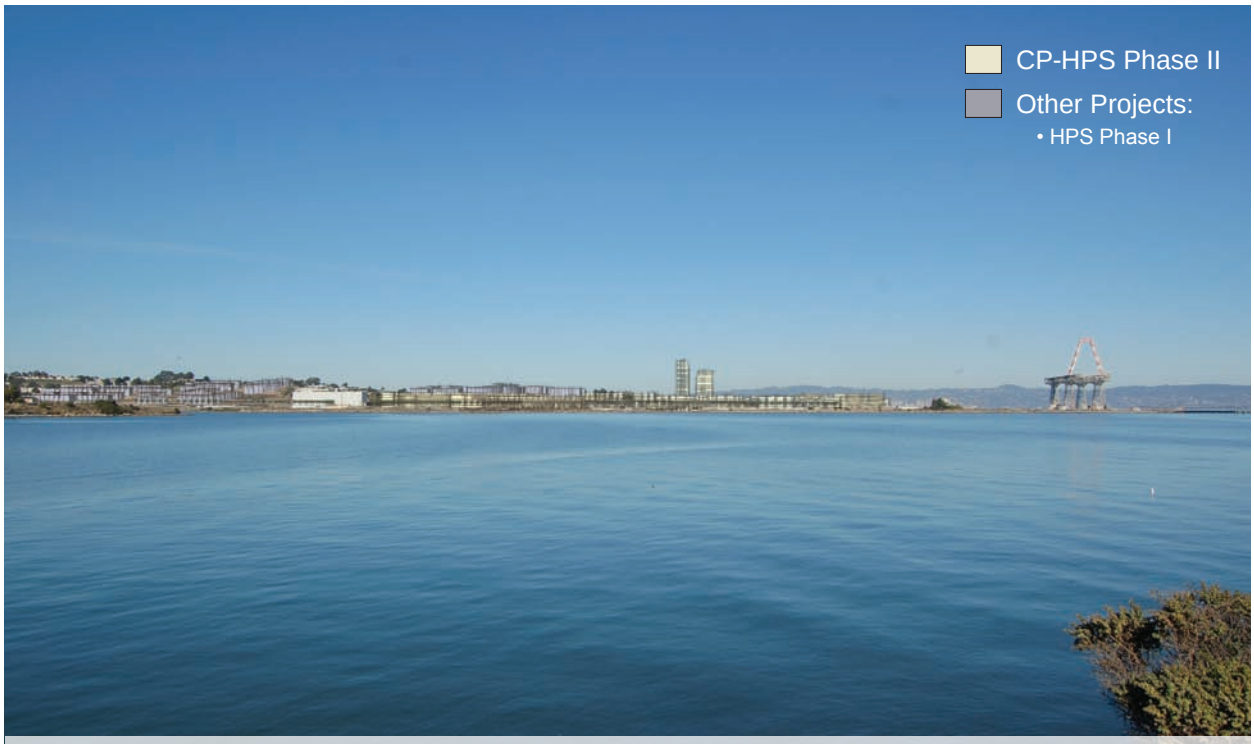
Compared to the R&D Variant (Variant 1) and Housing Variant (Variant 2), building heights and massing would appear substantially similar to what was analyzed for those variants. All other urban design and building forms with the Housing/R&D Variant, and resulting effects, would be similar to conditions with the R&D and Housing Variants. Building heights and massing would remain within the parameters analyzed for the R&D and Housing Variants. Building heights would be maintained within the height limits established for the Project districts (refer to Figure IV-8a). There would be new development along the south side of Crisp, which would not occur under the Project, Variant 1, or Variant 2. However, as illustrated in Figure IV-7a and Figure IV-8a, the structures proposed south of Crisp under Variant 2A would not exceed 85 feet in height or be taller than proposed buildings farther east. The area where additional structures (compared to the Project) would be constructed would be limited to a small portion of the site.

The Housing/R&D Variant (Variant 2A) would not introduce new land uses or types of structures that were not previously considered and analyzed with respect to effects on scenic resources. Similarly, as the Housing/R&D Variant (Variant 2A) would develop the same mix of uses on the same site, the impacts to visual character or quality would be the same as analyzed for the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).

Figure IV-10b through Figure IV-10d provide visual simulations of the general appearance, height, bulk, and location of structures proposed under Variant 2A. Figure III.E-10 (Viewpoint Locations) also identifies Views 16a and 18a. As can be seen, the overall appearance of Variant 2A would be substantially similar to the Project and the other variants. No long- or mid-range views would be blocked and no scenic resources would be affected, similar to the Project and the other variants. As the amount of development would be within the development envelope analyzed for the Project, Variant 1, and Variant 2, and with implementation of the same mitigation measures identified for the Project, impacts from light and glare would be less than significant.

Therefore, the impacts on scenic vistas, scenic resources, visual character, and from light and glare would be less than significant, similar to the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).

Existing



Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10b

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 17: NORTHEAST FROM CPSRA

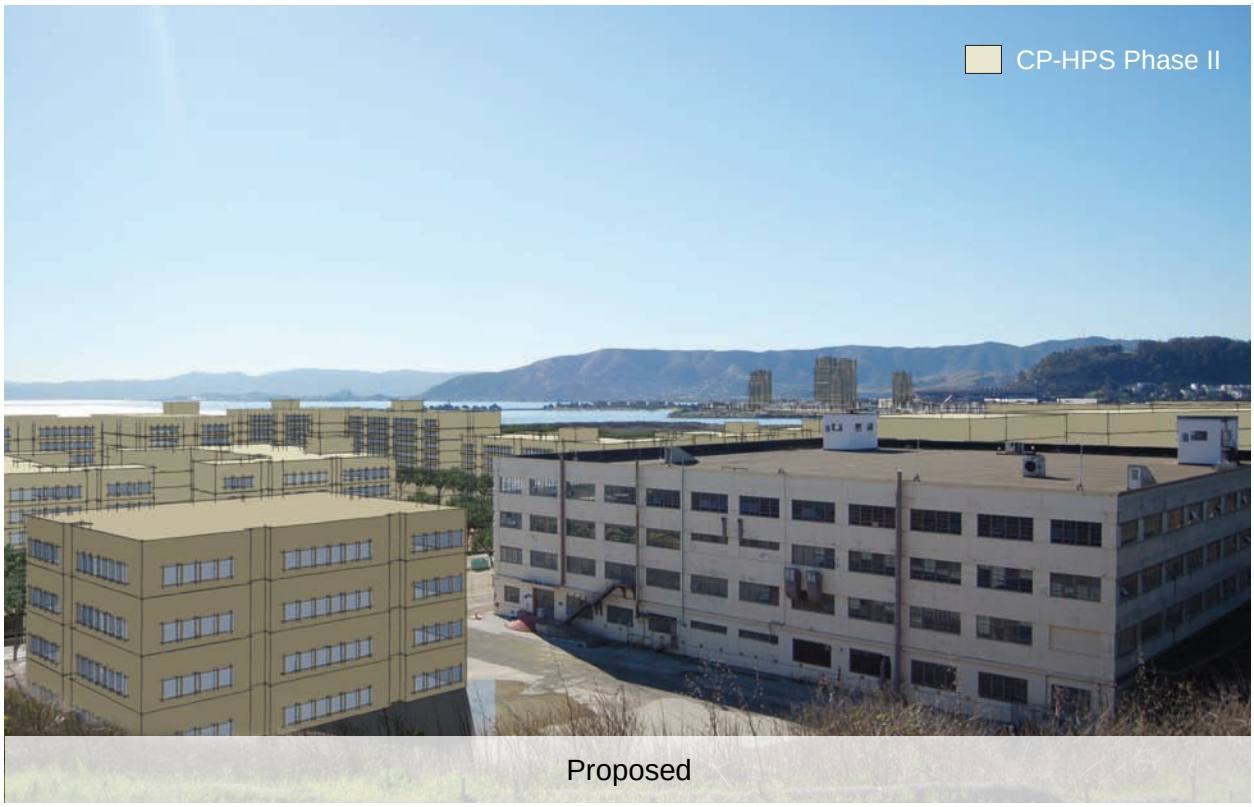
SOURCE: Lennar Urban, 2010.

PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10c

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 18: SOUTH FROM HILLTOP OPEN SPACE



SOURCE: Lennar Urban, 2010.

PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10d

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 16a: SOUTHWEST FROM CRISP ROAD

Shadow

The buildings proposed under the Housing/R&D Variant (Variant 2A) on the stadium site would be lower in height than those analyzed for the Project; none of the buildings proposed on the stadium site would be greater than the 156-foot height of the proposed stadium as analyzed for the Project. Therefore, shadow impacts of the Housing/R&D Variant (Variant 2A) would be less than the Project and less than significant.

Wind

Maximum building heights would be subject to the same height limitations as the Project. Heights of the R&D and residential structures would be less than the 156-foot height of the stadium structure, and there would be no new structures of 100 feet or greater. The impacts would be less than significant, similar to the Project.

Air Quality

Other than the stadium site and removal of housing units in the Jamestown District on Candlestick Point, land uses provided with the Housing/R&D Variant (Variant 2A) would be the same as the Project. The additional R&D and housing on the stadium site were evaluated considering the 350-foot restriction (buffer) required by the HPS Redevelopment Plan.[150] The Housing/R&D Variant (Variant 2A) was also evaluated to update the traffic $PM_{2.5}$ and cumulative analyses presented in the technical memoranda prepared by ENVIRON as Appendix H4 (Community Hazards and San Francisco Health Code Article 38 Analyses Candlestick Point–Hunters Point Shipyard Phase II Redevelopment Project, May 2010) and as Appendix T4 ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010).

Operational impacts to regional and local air quality would be substantially similar to the Project, less in most respects but slightly greater for PM_{10}. Under the Housing/R&D Variant, the football stadium proposed under the Project would be replaced with 1,625 residential units redistributed from Candlestick Point to HPS Phase II as well as 500,000 sf of R&D. Due to the redistribution of uses under this variant, approximately 672 additional vehicle trips over that of the Project would occur and would result in a somewhat higher level of daily VMT than the Project. As such, the level of certain emissions anticipated under the Housing/R&D Variant (Variant 2A) would be slightly greater than the Project. As shown in Table IV-23a (Housing/R&D Variant [Variant 2A] Operational Criteria Pollutant Emissions [Year 2030]), the difference in daily emissions of ROX, NO_X, CO, and $PM_{2.5}$ would decrease under this variant compared to the Project by 1 to 6 percent, while PM_{10} emissions would increase by 1.6 percent. Compared to the R&D Variant (Variant 1), because Variant 1 would have substantially greater trips and VMT, the Housing/R&D Variant (Variant 2A) emissions would be less than under the R&D Variant (Variant 1) during operation.

[150] The HPS Redevelopment Plan states, "No Laboratory, Life Sciences, Light Industrial, and/or Green Technology uses containing a facility that emits regulated toxic air contaminants shall be permitted within 350 feet of any residential use south of Crisp Road in Hunters Point South."

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-23a Housing/R&D Variant (Variant 2A) Operational Criteria Pollutant Emissions (Year 2030) [New]

Scenario/Emission Source	*ROG (lbs/day)*	*NO_X (lbs/day)*	*CO (lbs/day)*	*PM_{10} (lbs/day)*	*$PM_{2.5}$ (lbs/day)*
Hunters Point Shipyard (Variant 2A)					
Area[a]	261	54	38	0	0
Motor Vehicles (External)	107	96	1,062	508	96
Subtotal	*368*	*150*	*1,100*	*508*	*96*
Candlestick Point (Variant 2A)					
Area[a]	358	58	38	0	0
Motor Vehicles (External)	207	188	2,049	1,006	186
Subtotal	*564*	*246*	*2,087*	1,006	*186*
All Sources (Variant 2A)	***932***	***396***	***3,187***	***1,514***	***282***
All Development Sites (Proposed Project)					
Area[a]	616	108	83	5	5
Motor Vehicles (External)	308	278	3,177	1,466	276
Motor Vehicles (Internal)	30	13	229	45	9
All Sources (Proposed Project)	***945***	***394***	***3,406***	***1,490***	***285***
Comparison to Proposed Project	***99%***	***99.5%***	***94%***	***101.6%***	***99%***
Change from Proposed Project	*-1%*	*0.5%*	*-6%*	*1.6%*	*-1%*
All Sources (R&D Variant)	***997***	***442***	***3,793***	***1,650***	***315***
Comparison to Proposed Project	***106%***	***112%***	***111%***	***111%***	***111%***
Change from Proposed Project	*6%*	*12%*	*11%*	*11%*	*11%*
All Development Sites (Business as Usual)					
Area[a]	616	108	83	5	5
Motor Vehicles	485	476	5,292	2,561	481
All Sources (Business as Usual)	***1,101***	***585***	***5,375***	***2,566***	***486***
Comparison to Proposed Project	***116.5%***	***148%***	***158%***	***172%***	***170.5%***
Comparison to R&D Variant	***110%***	***132%***	***142%***	***155%***	***154%***
Comparison to Variant 2A to Business as Usual	***84%***	***67%***	***59%***	***58%***	***59%***
Reduction from Business as Usual	*-16%*	*-33%*	*-41%*	*-42%*	*-41%*

SOURCE: PBS&J, 2010. Based on URBEMIS 2007 Version 9.2.4; model input/output in included in Appendix H1.
Daily emissions of ROG and NO_X were calculated under Summer conditions when ambient ozone concentrations are highest. Daily emissions of CO, PM_{10}, and $PM_{2.5}$ were calculated under winter conditions when associated ambient concentrations are highest.
* Area emissions are from sources located on the project site, such as natural gas combustion for heating/cooling, maintenance equipment, consumer product use, etc.

All variants and the Project would result in fewer emissions during the operation of their respective land uses compared to a similar level of development without the energy and transportation considerations

discussed in this EIR. The Housing/R&D Variant (Variant 2A), similar to the Project and the other variants, would incorporate features intended to reduce motor vehicle trips, designed as a dense, compact development with a mix of land uses that would facilitate pedestrian, bicycle, and transit travel. The Housing/R&D Variant's transportation analysis estimates that a similar housing development that did not include the trip reduction features of the Housing/R&D Variant (Variant 2A) would generate 220,323 daily external motor vehicle trips (about 0.6 percent more than the Project, which would generate 219,651 daily trips and 6.8 percent less than the R&D Variant [Variant 1], which would generate 236,291 daily trips). The comparison of the Housing/R&D Variant (Variant 2A) to a similar level of development under "business as usual" conditions shows a 16 to 42 percent reduction in criteria pollutant emissions.

Nonetheless, criteria pollutant emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with land uses anticipated under the Housing/R&D Variant (Variant 2A) would exceed existing BAAQMD thresholds. Under BAAQMD's current thresholds, impacts are considered significant if daily emissions of criteria pollutants exceed 80 lbs/day of ROG, NO_X, and PM_{10}. Similar to the Project and the R&D Variant (Variant 1), no additional feasible mitigation measures are available to would reduce the Housing/R&D Variant's operational criteria emissions below the BAAQMD thresholds. This would be a significant and unavoidable impact. It should be noted that, as stated above, although the significance under this variant would be similar to the Project and the R&D Variant (Variant 1), all criteria pollutant emissions, with the exception of PM_{10}, and a slight increase of NO_X associated with the operation of uses under the Housing/R&D Variant (Variant 2A) would be less than the Project, and all criteria pollutant emissions would be less than with the R&D Variant (Variant 1), as stated in Table IV-23a.

With respect to airborne human health risks, emissions associated with operation activities under the Housing/R&D Variant (Variant 2A) would increase the levels of two potential human health risks: (1) TACs and (2) vehicle emissions ($PM_{2.5}$). Under the Housing/R&D Variant, dwelling units would be relocated from CP to the HPS Phase II area.

The Housing/R&D Variant (Variant 2A) continues to include R&D facilities at HPS Phase II, which are situated partly on the stadium site to the west of the proposed housing on the stadium site and the remainder on a peninsula extending to the east of the proposed additional housing and south of other proposed residential areas. As the predominant winds are out of the west, some on-site receptors would be downwind from some of these R&D areas, particularly the R&D area on the stadium site. As such, a health risk analysis (HRA) was conducted to determine the potential impacts from a variety of TAC sources in the R&D areas for the Housing/R&D Variant, similar to those discussed for the Project and R&D Variant (Variant 1). Details regarding this assessment can be found in a technical memorandum prepared by ENVIRON on April 26, 2010.[151]

The HRA estimated the excess lifetime cancer risk and chronic noncancer HI due to the combined TAC emissions from the R&D areas at any surrounding receptor location. The HPS Redevelopment Plan states "no Laboratory, Life Sciences, Light Industrial, and/or Green Technology uses containing a facility that emits regulated toxic air contaminants shall be permitted within 350 feet of any residential use south of Crisp Road in Hunters Point South." Though the Housing/R&D Variant (Variant 2A) has residential areas

[151] ENVIRON, *Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 (Tower Variant D), Alternative 2, and Subalternative 4A*, April 26, 2010.

immediately adjacent to the R&D on the stadium site, with the provision in the HPS Redevelopment Plan, the estimated cancer risks for long-term residential exposure not exceed 10 in one million in the residential areas. The estimated health risks would be above BAAQMD thresholds for all residential receptor locations as a result of implementation of the Variant without the following mitigation measure. Impacts from this Variant would be less than significant with implementation of MM AQ-6.1 and MM AQ-6.2, developed for the Project.

In terms of human health risks associated with vehicle emissions, vehicle trips and thereby vehicle emissions along local roadways would increase with development of the Housing/R&D Variant, similar to the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Housing/R&D Variant were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Housing/R&D Variant.

Several roadway segments were chosen based on whether Variant-related traffic would use these streets to access neighboring freeways and other areas of *San Francisco* and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the Housing/R&D Variant (Variant 2A), no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of the 0.2 $\mu g/m^3$ action level.[152] Concentrations would not exceed the action level, and as such, impacts would be less than significant, similar to the Project.

Overall, the operational emissions generated by the Housing/R&D Variant (Variant 2A) would be bracketed by the amounts generated by the Project and the R&D Variant (Variant 1).

Noise and Vibration

As with the Project, construction activities for the Housing/R&D Variant (Variant 2A) would create a substantial temporary increase in ambient noise levels on the site and in existing residential neighborhoods adjacent to the site. Construction activities would need to comply with the San Francisco Noise Ordinance, which prohibits construction between 8:00 P.M. and 7:00 A.M. and limits noise from any individual piece of construction equipment (except impact tools) to 80 dBA at 100 feet. Implementation of mitigation measures MM NO-1a.1 and MM NO-1a, which would require implementation of construction best management practices to reduce construction noise and the use of noise-reducing pile driving techniques, would reduce any potentially significant impacts to less-than-significant levels, similar to the Project.

[152] ENVIRON, *Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 (Tower Variant D), Alternative 2, and Subalternative 4A*, April 26, 2010.

Construction activities could also create excessive ground-borne vibration levels in existing residential neighborhoods adjacent to the site and at proposed on-site residential uses, should the latter be occupied before construction activity on adjacent parcels is complete. Implementation of MM NO-1a.1, MM NO-1a.2, and MM 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 under the Housing/R&D Variant, 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, the CP Center, and South Districts when occupied; therefore, this impact would remain significant and unavoidable, similar to the Project.

Daily operation of a Housing/R&D Variant, such as mechanical equipment and delivery of goods, would not expose noise-sensitive land uses on or off site to noise levels that exceed the standards established by the City of San Francisco. This impact would be less than significant, similar to the Project. Operation activities associated with a Housing/R&D Variant, such as delivery trucks, would not generate or expose persons on or off site to excessive groundborne vibration. This impact would also be less than significant, similar to the Project.

Operation of a Housing/R&D Variant (Variant 2A) 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. Noise level increases associated with the Housing/R&D Variant (Variant 2A) are shown in Table IV-24a (Housing/R&D Variant (Variant 2A) Modeled Traffic Noise Levels along Major Project Site Access Roads). Impacts would be significant along Carroll Avenue, Gilman Avenue, and Jamestown Avenue, similar to the Project. However, the Housing/R&D Variant (Variant 2A) would have slightly lower noise levels than the Project along Carroll Avenue and Gilman Avenue but would still be significant, as shown in the table. Measures available to address significant traffic noise increases in these residential areas are limited. As the ultimate feasibility and implementation of the noise insulation measures that would be required to reduce roadway noise levels to below the threshold of significance would be dependent on factors that would be beyond the control of the City/Agency as the Lead Agency or the Project Applicant to guarantee. Therefore, this impact would remain significant and unavoidable, as with the Project.

Because the Housing/R&D Variant (Variant 2A) would not include a football stadium, noise impacts identified for the Project from football games and concerts would not occur with implementation of the Housing/R&D Variant (Variant 2A).

The Housing/R&D Variant (Variant 2A) site is not located within an airport land use plan area or near a private airstrip. Furthermore, the Housing/R&D Variant (Variant 2A) does not include an aviation component. Therefore, the Housing/R&D Variant (Variant 2A) would not result in the exposure of people to excessive aircraft noise levels. Impacts would be less than significant, similar to the Project.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-24a Housing/R&D Variant (Variant 2A) Modeled Traffic Noise Levels along Major Project Site Access Roads [New]

Roadway	Land Use	Existing Noise Level	2030 Without Project	2030 With Project	2030 With Housing/R&D Variant	Variant-Related Increase	Allowable Increase	Significant Impact?
Innes north of Carroll Avenue	Residential	53.3	60.9	60.9	60.9	0	2	No
3rd Street south of Carroll Avenue	Residential	62.8	67.3	68.3	67.4	0.1	1	No
Cesar Chavez Boulevard west of 3rd Street	Residential	59	63.5	63.5	63.6	0.1	2	No
Palou Avenue east of 3rd Street	Residential	56.8	61.6	62.1	61.7	0.1	2	No
Ingalls Street north of Carroll Avenue	Residential	56.7	61.7	63.1	62.7	1.0	2	No
Carroll Avenue east of 3rd Street	Commercial	**52.6**	**53.8**	**58.1**	**57.3**	**3.5**	**3**	**Yes**
Gilman Avenue east of 3rd Street	Residential	**57.7**	**60.6**	**64.6**	**63.0**	**2.4**	**2**	**Yes**
Jamestown Avenue north of Harney Way	Residential	51.4	55.5	61.2	59.2	3.7	5	No
Harney Way west of Jamestown Avenue	Residential	52.6	59.0	59.6	59.7	0.7	3	No
Bayshore Boulevard north of Visitacion	Residential	65.1	68.5	68.6	67.9	-0.6	1	No

SOURCE: PBS&J, 2010

Cultural Resources and Paleontological Resources

As the Housing/R&D Variant (Variant 2A) would have a smaller footprint than the Project and would develop in the same location, the impact analysis for the Project to cultural and paleontological resources would be applicable to the Housing/R&D Variant (Variant 2A). The same significant and unavoidable impact to historic resources would occur with demolition of Buildings 211, 224, 231, and 253. Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing all other cultural/paleontological resource impacts to less than significant, the same as the Project.

Hazards and Hazardous Materials

As the Housing/R&D Variant (Variant 2A) would have the same types and mix of land uses and slightly less ground disturbance as the Project, the impact analysis for the Project with regard to hazards and

hazardous materials would be applicable to the Housing/R&D Variant (Variant 2A). The Housing/R&D Variant (Variant 2A) would not introduce any uses that would handle or transport hazardous materials, other than routine household-type and landscaping chemicals, the risk of which was analyzed in the Draft EIR for the Project. There would be similar amounts of grading and excavation, with similar risks as the Project, of exposure to hazardous materials. The same structures would be demolished during site preparation. The introduction of housing and R&D on the stadium site would not be different from the significance conclusions set forth for the Project. All mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project. Therefore, the impact analysis for hazards and hazardous materials for the Housing'/R&D Variant (Variant 2A) would be bracketed by the impact analysis for the Project.

Geology and Soils

As the Housing/R&D Variant (Variant 2A) would have a smaller development footprint than the Project, and would place development in the same locations as the Project, the impact analysis for the Project with regard to geology and soils would apply to the Housing/R&D Variant (Variant 2A). In some areas of the stadium site, slightly different portions would be covered by structures (e.g., west of the stadium footprint); however, there are no geologic conditions in the portion of the stadium site that would be developed under the Housing/R&D Variant (Variant 2A) that would differ from the geologic conditions on the portion of the site where the stadium would be constructed. The potential impact from rock fragmentation at the Jamestown District under the R&D Variant (Variant 1) and Housing Variant (Variant 2) would not occur under the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project. The impacts of the Housing/R&D Variant (Variant 2a) with respect to geology and soils would be bracketed by the analysis for the Project.

Hydrology and Water Quality

The Housing/R&D Variant (Variant 2A) would have slightly less impermeable surface area than the Project, as noted, above. The same type and mix of land uses would be developed under Variant 2A as the Project. Therefore, the impact analysis for the Project with regard to Hydrology and Water Quality would also apply to the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

Biological Resources

The Housing/R&D Variant (Variant 2A) would disturb slightly less surface area than the Project, as noted, above. The locations of development are substantially the same as under the Project. Development would not occur on any portion of the site that has not been previously analyzed, except for a small portion on the south side of Crisp Road that would now contain structures. However, there are no sensitive species or habitat in this location that would be adversely affected by development. Therefore, the impact analysis for the Project with regard to biological resources would apply to the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

Public Services

Public Services impacts are based on adequacy of service provided to the population. The Housing/R&D Variant (Variant 2A) would result in the same number of residents as the Project, as the number of dwelling units would be the same. The Housing/R&D Variant (Variant 2A) would generate 11,629 jobs, less than the 16,635 jobs estimated for the R&D Variant. Therefore, the impacts on Public Services analyzed for the R&D Variant (Variant 1) would also apply to the Housing/R&D Variant (Variant 2A), as the population and employment generated are within the maximums previously analyzed under the R&D Variant (Variant 1). The impacts would be less than significant, bracketed within the analysis for the Project and the R&D Variant (Variant 1). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

Recreation

The Housing/R&D Variant (Variant 2A) would provide 326.6 acres of parkland, which is 9.8 acres less than the Project. The conceptual development plan for this Variant would result in the development of residential units and parks during all stages of development. Table IV-26a (Housing/R&D Variant [Variant 2A] Residential Units and Park Acreage Provided during Each Stage of Development) outlines the number of residential units and the acreage of parkland provided during each stage of development, as well as the resulting park-to-population ratio for residents of the Project site (even if developed under the Housing/R&D Variant). As this table indicates, the park-to-population ratio would not drop below 13.3 acres per 1,000 population at any time during the four stages of development, which exceeds the benchmark of 5.5 acres of parkland per 1,000 population.

Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-26a Housing/R&D Variant (Variant 2A) Residential Units and Park Acreage Provided during Each Stage of Development [New]

Stage of Development	*Residential Units*	*Population*	*Total Parkland (ac)*	*Park-to-Population Ratio (acres per 1,000 Residents)*
Existing	256	1,113[a]	120.2	108
Phase 1	3,160	7,363[b]	136.0	18.5
Phase 2	4,410	10,275[b]	162.5	15.8
Phase 3	7,785	18,139[b]	246.7	13.6
Phase 4	10,500	24,465[b]	326.6	13.3

SOURCE: Lennar Urban, 2010.

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Employment, and Housing). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.

b. Calculated as 2.33 people per residential unit.

Utilities

A supplemental Water Demand Memo (refer to Appendix Q2 [Arup, Amendment to Water Demand Memorandum #16—Variant 2A (Housing/R&D Variant), April 28, 2010]) was prepared to calculate the water demand for the Housing/R&D Variant (Variant 2A). As shown in Table IV-27a (Housing/R&D Variant [Variant 2A] Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance [mgd]), total demand for potable water would be 1.73 mgd, which is less than the 1.99 mgd calculated for the R&D Variant (Variant 1). Calculating wastewater generation based on land use (residential, football stadium, and performance venue calculated at 95 percent of water demand; all other land uses calculated at 57 percent of water demand), the total wastewater generated by the Housing/R&D Variant (Variant 2A) would be 1.23 mgd (refer to Table IV-28a [Housing/R&D Variant [Variant 2A] Wastewater Generation]), which is less than the 1.35 mgd calculated for the R&D Variant (Variant 1). Mitigation measures identified for the Project and the R&D Variant (Variant 1) would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-27a Housing/R&D Variant (Variant 2A) Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance (mgd) [New]

Land Use	*Candlestick Point*	*Hunters Bay Shipyard*	*Total*
Residential	0.48	0.35	0.83[a]
Hotel	0.05	0.00	0.05
Office	0.04	0.00	0.04
Artists Studios	0.00	0.01	0.01
R&D	0.00	0.43	0.43
Neighborhood Retail	0.02	0.02	0.03[a]
Regional Retail	0.08	0.00	0.08
Community Uses	0.01	0.01	0.02
Football Stadium	0.00	0.00	0.00
Performance Venue	0.01	0.00	0.01
Subtotal	*0.70[a]*	*0.82[a]*	*1.52[a]*
Parks and Open Space	0.06	0.15	0.22
Total Demand	***0.76[a]***	***0.97[a]***	***1.73***

SOURCE: Arup, Candlestick Point–Hunters Point Shipyard Phase II Water Demand Memorandum, April 2010.

a. Numbers are rounded according to standard rounding practices and may not add up due to hidden decimals used in this table. These entries are correct and are consistent with Table 13 of the Water Demand Memorandum.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-28a Housing/R&D Variant (Variant 2A) Wastewater Generation [New]

Land Use	*Estimated Wastewater Generation Expressed as % of Water Demand (or as otherwise specified)*	*Candlestick Point (mgd)*	*Hunters Point (mgd)*	*Total Housing Variant (mgd)*
Residential	95%	0.46	0.33	0.79
Hotel	95%	0.03	0.00	0.03
Office	57%	0.02	0.00	0.02
Artists Studios	57%	0.00	0.01	0.01
R&D	57%	0.00	0.25	0.25
Neighborhood Retail	57%	0.01	0.01	0.02
Regional Retail	57%	0.05	0.00	0.08
Community Uses	57%	0.01	0.01	0.02
Football Stadium	95%	0.00	0.00	0.00
Performance Venue	95%	0.01	0.00	0.01
Total		***0.59***	***0.61***	***1.23***

SOURCE: Arup, March 31, 2010.

With regard to solid waste generation, Table IV-30a (Housing/R&D Variant (Variant 2A) Solid Waste Generation) shows that the total amount of solid waste that would result from implementation of the Housing/R&D Variant (Variant 2A) would be 20,036 tons per year, 2,189 tons less than under the R&D Variant (Variant 1), which would generate 22,225 tons (refer to Table IV-14 [R&D Variant Solid Waste Generation] on page IV-62 of the EIR). Therefore, the analysis of solid waste for the Housing/R&D Variant (Variant 2A) would be bracketed by the analysis for the R&D Variant (Variant 1). Similar to the R&D Variant (Variant 1), solid waste generated by the Housing/R&D Variant (Variant 2A) could be accommodated by the remaining landfill capacity with implementation of the strategies for diversion of waste as described in Section III.Q (Utilities) of the EIR. Mitigation measures identified for the Project and the R&D Variant (Variant 1) would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-30a Housing/R&D Variant (Variant 2A) Solid Waste Generation [New]

		Candlestick Point			*HPS Phase II*			*Total*		
Use	*Generation Factor (per day)*	*Area or Units*	*Tons per Day or Event*	*Tons per Year*	*Area or Units*	*Tons per Day or Event*	*Tons per Year*	*Area or Units*	*Tons per Day or Event*	*Tons per Year or per Total Number of Events*[a]
Residential	5.653 lbs/unit	6,225	17.6	6,422	4,275	12.1	4,410	10,500	29.7	10,832
Retail	0.02600411 lbs/sf	760,000 sf	9.9	3,613.5	125,000 sf	1.6	584.0	885,000 sf	11.5	4,197.5
Office	0.006 lbs/sf	150,000 sf	0.5	182.5	0	0	0	150,000 sf	0.5	182.5
Hotel	0.0108 lbs/sf	150,000 sf	0.8	292.0	0	0	0	150,000 sf	0.8	292.0
R&D	0.006 lbs/sf	0	0	0	3,000,000 sf	9	3,285	3,000,000 sf	9	3,285
Performance Venue	2.23 lbs/seat	10,000 seats	5.6[b]	836.3[c]	0	0	0	10,000 seats	5.6	836.3[c]
Stadium	2.23 lbs/seat	0	0	0	0	0	0	0	0	0
Artist Studios/Art Center	0.006 lbs/sf	0	0	0	255,000 sf	0.8	292	255,000 sf	0.8	292.0
Community Facilities	0.006 lbs/sf	50,000 sf	0.15	54.8	50,000 sf	0.15	54.8	100,000 sf	0.3	109.6
Total				***13,082***			***6,954***			***20,036***

SOURCE: PBS&J 2010; Generation Factors from Arup, *Carbon Footprint Report*, March 24, 2009.

a. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.
b. The Performance venue is projected to be 50 percent attendance.
c. Assumes 150 events per year at 50 percent attendance.

Energy

As shown below in Table IV-31a (Housing/R&D Variant [Variant 2A] Electricity Demand from Building Envelopes [MWh]), the Housing/R&D Variant (Variant 2A) would be expected to result in an electricity demand of approximately 33,105 Megawatt hours (MWh). This represents a 21 percent decrease in electrical consumption compared to the R&D Variant (Variant 1). Therefore, as the electricity demand for Variant 2A would be less than what has been analyzed for Variant 1, the impacts have been bracketed by the analysis for the R&D Variant (Variant 1) and would be similarly less than significant. Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

Greenhouse Gas Emissions

A greenhouse gas emissions analysis was conducted for the Housing/R&D Variant (Variant 2A) and the analysis is provided in Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010).

Operational impacts to climate change and GHG emissions would be substantially similar to the Project. Under the Housing/R&D Variant (Variant 2A), as shown in Appendix T5, the operational GHG emissions for the Housing/R&D Variant (Variant 2A) would be higher than the Project GHG emissions by 7,013 tonnes of CO_2e per year. As noted in Table IV-17 on page IV-69 of the Draft EIR, the R&D Variant (Variant 1) would emit 178,651 tonnes of CO_2e per year, 14,488 tonnes more than the Housing/R&D Variant (Variant 2A). All mitigation measures and improvements in electricity carbon intensity and energy efficiency of the buildings under the Project and the R&D Variant (Variant 1) would be implemented with the Housing/R&D Variant (Variant 2A). This would result in substantially similar reductions of GHG emissions as the Project and, like the Project and the R&D Variant (Variant 1), the Housing/R&D Variant (Variant 2A) would make a less-than-significant contribution to the cumulative impacts of climate change and GHG emissions. For the same reasons as stated for the Project, the Housing/R&D Variant (Variant 2A) would not impede the achievement of San Francisco's GHG emission reduction ordinance nor the statewide emission reductions required under AB 32, which is also called the *California Global Warming Solutions Act of 2006*.

BAAQMD Draft GHG Thresholds

With mitigation, the Housing/R&D Variant-related operational emissions of 161,596 tonnes per year result in 4.6 tonnes CO_2e per service population per year based on a service population of 35,498 (this accounts for 23,869 net new residents [based on 2.33 residents per household and accounting for existing units on site] and all 11,629 jobs). The operational emissions of the Project were identified as totaling 4.5 tonnes CO_2e per year, and emissions of the Housing Variant (Variant 2) were identified as totaling 4.6 tonnes CO_2e per year. As the Housing/R&D Variant (Variant 2A) would result in a substantially similar amount of CO_2e per year as the Project and the Housing Variant (Variant 2), previously analyzed, like the Project and the Housing Variant (Variant 2), the Housing/R&D Variant (Variant 2A) would result in a less-than-significant impact on climate change.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-31a Housing/R&D Variant (Variant 2A) Electricity Demand from Building Envelopes (MWh) [New]

		Candlestick Point			HPS Phase II			Project Site Total			
Type of Use	*Electricity Use Factor, 2008 Title 24 Standards (MWh/gsf or unit)[a]*	*Development Program[b]*	*MWh Consumed Annually, 2008 Title 24 Standards[c]*	*MWh Consumed Annually, with 15% Reduction*	*Development Program[b]*	*MWh Consumed Annually, Title 24 Standards[c]*	*MWh Consumed Annually, with 15% Reduction*	*Development Program*	*MWh Consumed Annually, Title 24 Standards*	*MWh Consumed Annually, with 15% Reduction*	*Percent of Total Electricity by Land Use*
Residential Units	1.7350[d]	6,225	10,800	9,180	4,275	7,417	6,304	10,500	18,218	15,485	47%
Retail	0.0027	635,000	1,715	1,457	—	0	0	635,000	1,715	1,457	4%
Neighborhood Retail	0.0027	125,000	338	287	125,000	338	287	250,000	675	574	2%
Office	0.0052	150,000	780	663	—	0	0	150,000	780	663	2%
R&D	0.0052	—	0	0	3,000,000	15,600	13,260	3,000,000	15,600	13,260	40%
Hotel	0.0027	220	1	1	—	0	0	220	1	1	0%
Artist Studios/ Center	0.0052	—	0	0	255,000	1,326	1,127	255,000	1,326	1,127	3%
Community Space	0.0052	50,000	260	221	50,000	260	221	100,000	520	442	1%
Arena	0.0015	75,000	113	96	—	0	0	75,000	113	96	0.3%
Total			***14,007***	***11,905***		***24,941***	***21,200***		***38,948***	***33,105***	***100%***

SOURCES:

Housing/R&D Variant (Variant 2A) electricity demand was estimated based on the Applicant's commitment to achieve 15 percent energy reductions below Title 24 standards and use ENERGY STAR appliances in all residential units.

a. The energy use factor cited for residential units is from: ENVIRON International Corporation, *Climate Change Technical Report: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, October 2009, Table 3-8 (Appendix S to this EIR). The factor was derived by subtracting the "Plug-in" factor from the "Electricity Delivered, Total" column (in the "15 percent Better than Title 24 2008 and ENERGY STAR Appliances" row). The factor was converted from kWh to MWh (1 MWh = 1,000 kWh).

b. Based on buildout floor areas provided in Table IV-3 of this EIR.

c. Calculated by multiplying energy use factor by number of units or gsf.

d. The electricity factors cited for non-residential uses are from: ENVIRON International Corporation, *Climate Change Technical Report: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, October 2009, Table 3-16 (Appendix S to this EIR). The factors are in the "Non-Title 24" column. The factors were converted from kWh to MWh.

e. Numbers are rounded according to standard rounding practices and may not add up due to hidden decimals.

F.26 Changes to Section IV.D (Variant 3: Candlestick Point Tower Variants)

Page IV-140, first paragraph

The Candlestick Point Tower Variants (Tower Variants) would have different locations and heights and bulk of residential towers at Candlestick Point. The ~~three~~ four Candlestick Point Tower Variants (Tower Variants A, B, ~~and~~ C, and D) would have the same overall land use program as the Project. …

Page IV-140, add new fourth bullet

- **Tower Variant D** would reduce a 37-story tower to 31 stories within Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; and one residential tower at Candlestick Point North would be lowered to 24 stories, or three fewer floors. This Variant would have an additional 24-story residential tower at Candlestick Point Center. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project. The floor plate area of the residential towers would be increased to 12,500 sf compared to the 10,000 sf analyzed for the Project, which would result in slightly greater tower bulk. However, the larger floor plates would be accommodated on the existing podium design and, therefore, the building footprint would not increase.

Page IV-140, fifth paragraph, new Figure IV-16a (Tower Variant D) has been added

As shown in Figure IV-13 through Figure IV-16a (Tower Variant D), the Tower Variants' overall street and block plan would be same as that of the Project. All other features of the Tower Variants would also be the same as the Project.

SOURCE: Lennar Urban, IBI Group, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16a

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D

Page IV-145, add new fourth section after Tower Variant C discussion

Tower Variant D

Tower Variant D is based on height, bulk and massing requirements for vertical development within the Project site as described in the Design For Development. The Design For Development identifies specific locations for certain towers and allows towers in certain "tower zones." Where the Design For Development allows placement of towers within a "tower zone," the Tower Variant D analysis assumes a specific tower location within proposed tower zones, which in some instances could potentially increase new shading on existing open space owned by or under the jurisdiction of the San Francisco Recreation and Park Department (SFRPD). Figure C&R-1 (Tower Variant D Tower Zones Map) indicates where the Design For Development identifies tower zones and the assumed location of towers within those zones for purposes of the Tower Variant D analysis.

Tower Variant D would reduce one 37-story tower to 31 stories, or six fewer floors, in Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as with Tower Variants A and C; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; one residential tower at Candlestick Point North and one residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors, as with Tower Variant A. This Variant would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variants B and C. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

The residential tower floor sizes with Tower Variant D would be a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. All other features of Tower Variant D would be the same as the Project, with the same land uses, the same total amount of development, and the same development footprint. With Tower Variant D, the two residential towers at HPS Phase II proposed with the Project would also have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project.

Page IV-147, last paragraph

The pattern and scale of buildings at Candlestick Point with the Tower Variants would be similar to the Project. All Tower Variants would have 10 or ~~11~~12 towers, compared to 11 towers with the Project. As shown in Figure IV-14 to Figure IV-16a, the Tower Variants would include at least ~~nine~~ six of the 11 residential towers proposed with the Project in the identical location, with differences in the number floors of four of the towers (Tower Variant A); or would relocate a tower from Candlestick Point North to Candlestick Point Center and reduce the number floors of three other towers (Tower Variant B); or relocate a tower from Candlestick Point North to Candlestick Point Center, remove another tower from Candlestick Point North and reduce the number floors of two other towers, and add 10 floors at one tower (Tower Variant C and D); Tower Variant D would relocate a 37-story tower and reduce total floors to 31 stories within Candlestick Point South; one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North; one 22-story tower and one 17-story tower would be relocated within Candlestick

Point North; and one additional 24-story residential tower would be added at Candlestick Point Center. Tower Variant D would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

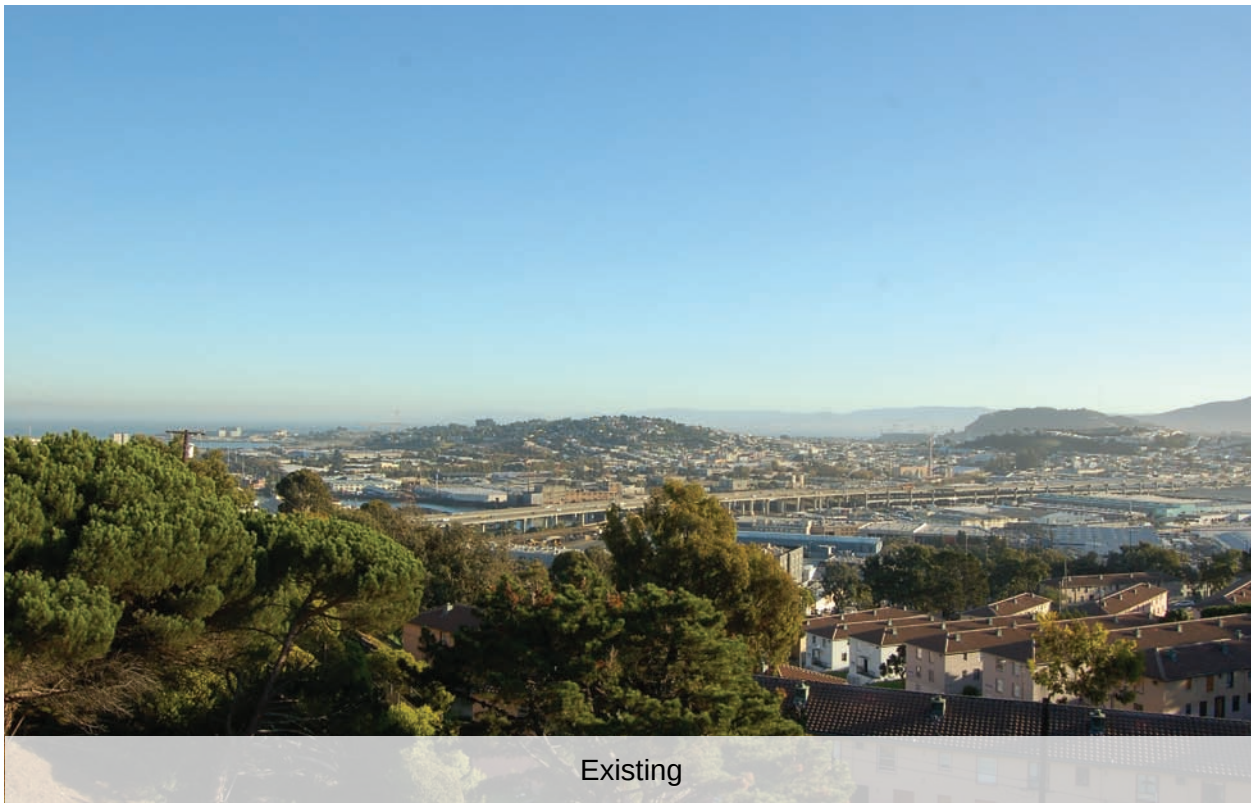
Tower Variant D would have maximum floor sizes of 12,500 square feet, compared to 10,500 square foot maximum floor sizes with the Project. Tower Variant D dimensions and visibility would be slightly greater than with the Project; overall visual effects would be similar to the Project.

Page IV-148, first paragraph and adding Figure IV-16b through Figure IV-16k

Views of Candlestick Point from long-range vantage points to the north and south or from nearby locations at CPSRA would be similar to views with the Project. Some the towers would have different heights compared to the Project, depending upon the Variant. Views of the relocated 24-story tower with Tower Variant B, ~~or~~ C, or D would be apparent from locations to the south, but Tower Variant B or C would also remove one or two towers from Candlestick Point North near Candlestick Point North Neighborhood Park, and views of residential towers from near that proposed park would vary from those with the Project. The towers at Candlestick Point would range from 220 feet to 420 feet in height. Tower Variant D would relocate one 32-story tower farther from CPSRA and would reduce the height of three towers adjacent to CPSRA (two by three stories and one by six stories), compared to the Project (see Figure IV-16a. Those changes would reduce the visibility of towers from CPSRA open space. Among the Tower Variants, Tower Variant D would have the most changes, compared to the Project, in terms total numbers of towers and larger maximum floor sizes. Therefore, the text below provides more detailed discussion of the visual quality effects of Tower Variant D.

Figure IV-16b (Tower Variant D, View 4: South from Potrero Hill) through Figure IV-16k (Tower Variant D, View 19: East from Hunters Point Hill Open Space) include visual simulations of Tower Variant D from 10 of the 20 viewpoints provided in Section III.E (Aesthetics). Figure III.E-11 (View 1: Southeast from Twin Peaks) through Figure III.E-30 (View 20: Southeast from Heron's Head Park). Figure IV-16b through Figure IV-16k can be compared to the corresponding visual simulations for the Project from those ten locations. The ten locations provide representative information of visual effects of Candlestick Point Tower Variant D (refer to Figure III.E-10 [Viewpoint Locations], page III.E-23).

Figure IV-16b (Tower Variant D, View 4: South from Potrero Hill) illustrates the long-range view from Potrero Hill to the south and the Bay beyond that would include Tower Variant D residential towers at Candlestick Point, between Hunters Point Hill and Bayview Hill, ranging from 240 feet to a maximum 420 feet in height, as with the Project. The towers would replace distant existing views of Candlestick Park stadium and surrounding parking areas. The towers would appear similar to conditions with the Project, as shown in Figure III.E-14 (View 4: South from Potrero Hill). The Tower Variant would be visible from this location, against San Francisco Bay as a background, and the residential towers at Candlestick Point would be a new built element between Bayview Hill and Hunters Point Hill. As with the Project, views of the Bay or the East Bay hills would be partially blocked, but a substantial portion of the view would remain. HPS Phase II would also be a new element seen against the Bay and the East Bay hills.



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16b

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 4: SOUTH FROM POTRERO HILL

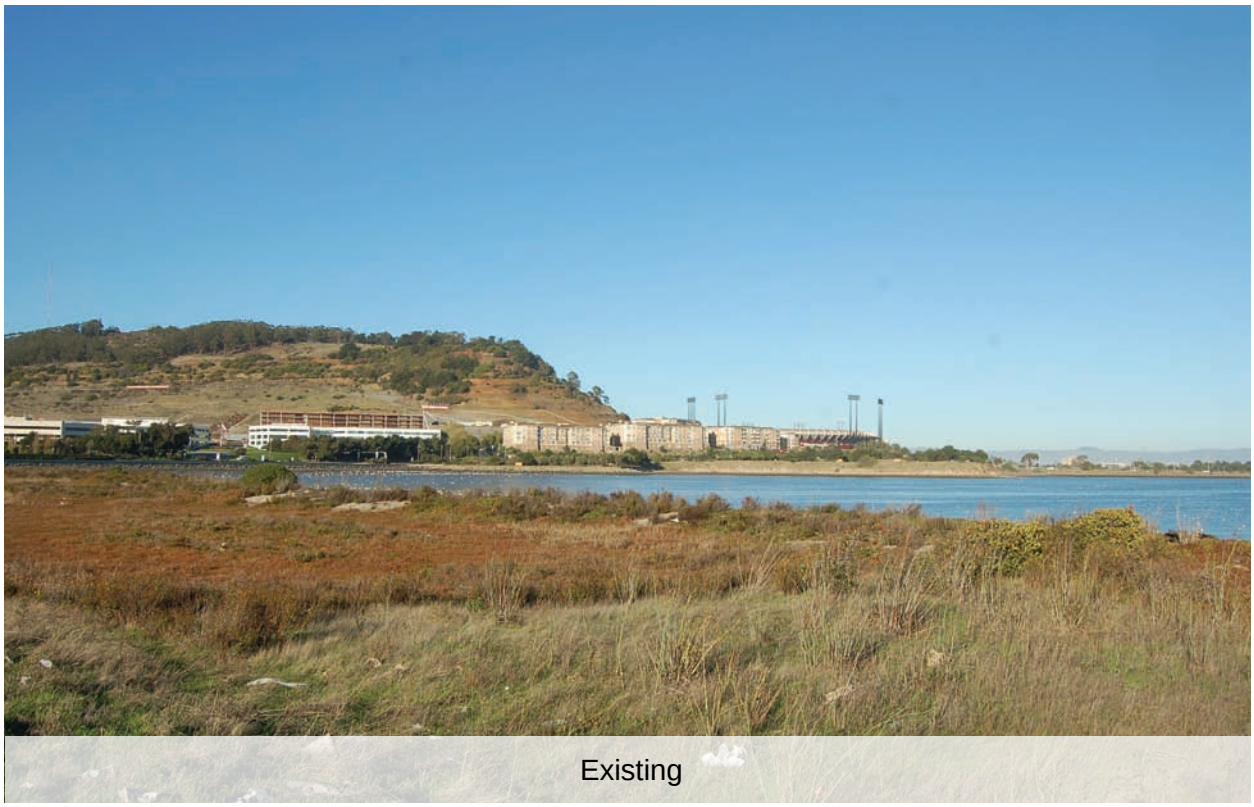
SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16c

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 5: NORTHEAST FROM NORTHBOUND US-101



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16d

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 6: NORTHEAST FROM US 101 AT HARNEY WAY OFF-RAMP

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16e

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 7: NORTHEAST FROM SAN BRUNO MOUNTAIN

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16f

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 9: NORTH FROM CPSRA SOUTH OF HARNEY WAY

Existing

Proposed

SOURCE: Lennar Urban, 2010.

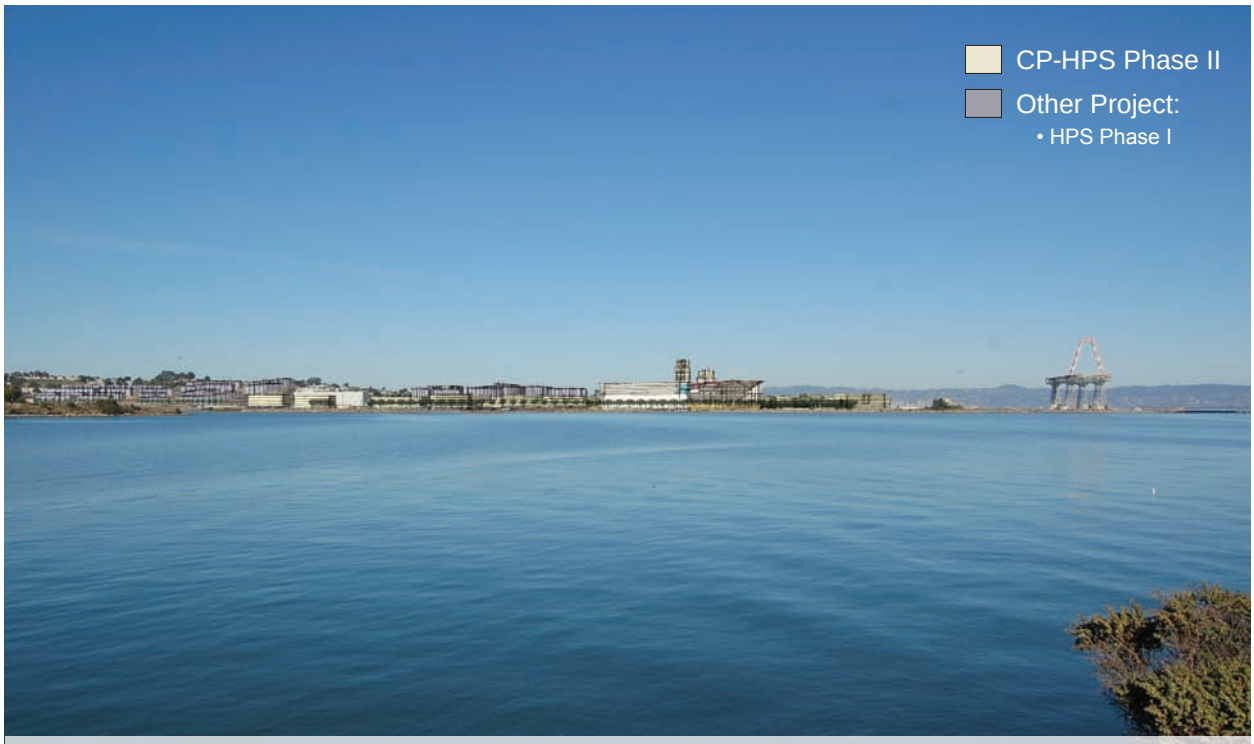
PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16g

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 11: NORTHWEST FROM CPSRA

Existing



Proposed

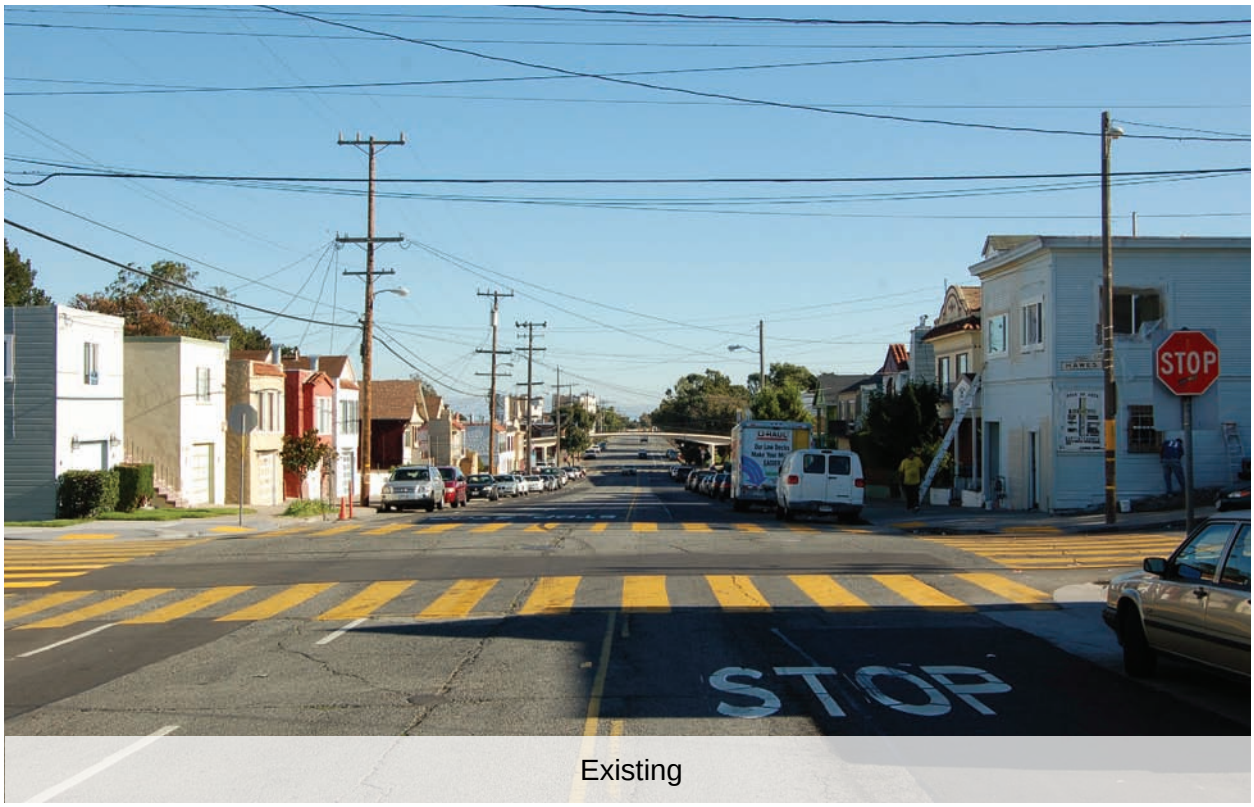
SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16h

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 17: NORTHEAST FROM CPSRA



Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16i

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 12: SOUTHEAST FROM GILMAN AVENUE

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16j

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 16: SOUTHWEST FROM MARINER VILLAGE

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16k

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 19: EAST FROM HUNTERS POINT HILL OPEN SPACE

Figure IV-16c (Tower Variant D, View 5: Northeast from Northbound US-101) illustrates the long-range view with Tower Variant D high-rise structures that would be visible on the Candlestick Point portion of the site, ranging from 240 feet to a maximum 420 feet in height, with lower-scale development to the west. Tower Variant D would include an additional 240-foot tower at Candlestick Point Center, visible east of Bayview Hill in Figure IV-16c The towers would appear relatively clustered, compared to conditions with the Project shown in Figure III.E-15 (View 5: Northeast from Northbound US-101). The high-rise buildings would be prominent, but would not obstruct views of Bayview Hill. As with the Project, the easterly towers in this view would be on land that was formerly part of the CPSRA. The shoreline of CPSRA would be visible as the foreground. Bayview Hill would continue as a landmark and the Bay would continue as foreground in this view.

As shown in Figure IV-16d (Tower Variant D, View 6: Northeast from US-101 at Harney Way Off-Ramp), Tower Variant D would introduce high-rise structures that would be visible on the Candlestick Point portion of the site, ranging from 240 feet to a maximum 420 feet in height, with lower-scale development to the west. The high-rise buildings would be prominent, but would not obstruct views of Bayview Hill. Two 32-story towers in Candlestick Point North would be visible east of Bayview Hill. The easterly towers in this view would be on part of the land exchanged with the CPSRA. Conditions would be similar to those with the Project, shown in Figure III.E-16 (View 6: Northeast from US-101 at Harney Way Off-Ramp). The proposed residential development at Executive Park (not a part of the Project), west of Candlestick Point, would be visible against the background of Bayview Hill. The Bay would continue to be visible in the foreground. Bayview Hill would continue as a key visual feature in this view.

As shown in Figure IV-16e (Tower Variant D, View 7: Northeast from San Bruno Mountain), Tower Variant D would introduce high-rise buildings, ranging from 240 feet to a maximum 420 feet in height, at Candlestick Point, and views of the 49ers Stadium, the new marina, and two towers up to 240 feet to 370 feet high at HPS Phase II. Two 32-story towers in Candlestick Point North would be visible east of Bayview Hill. From this viewpoint, the Tower Variant and the Project would have similar effects, as shown in Figure III.E-17 (View 7: Northeast from San Bruno Mountain). The panoramic view of the Bay would still be held from this viewpoint. The shoreline of CPSRA would be visible as the foreground.

Figure IV-16f (Tower Variant D, View 9: North from CPSRA South of Harney Way) is a short-range view from CPSRA towards Candlestick Park stadium, the upper sections of which are visible in the existing setting. The planted areas in the foreground are within the CPSRA. With Tower Variant D and the Project, Candlestick Park stadium would be demolished and residential towers would be visible. From this location in the western part of CPSRA, short- and mid-range views of the stadium would be replaced with Tower Variant development, including the additional 24-story tower at Candlestick Point Center, and the 31-story (reduced from 37 stories) towers in Candlestick Point South. Compared to Project conditions viewed at this location, as shown in Figure III.E-19 (View 9: North from CPSRA South of Harney Way), Tower Variant D would include views of more new development. From other locations in CPSRA, however, views of new development would be reduced, because one tower would be relocated farther away from CPSRA, and three towers adjacent to CPSRA would be reduced in height by three to six stories.

As shown in Figure IV-16g (Tower Variant D, View 11: Northwest from CPSRA), the Tower Variant would introduce residential towers and other structures at Candlestick Point, as seen beyond the shoreline of the CPSRA, and would obstruct the view of portions of Bayview Hill. West of Candlestick Point, existing

and approved residential development at Executive Park would be visible. The Candlestick Point towers, including the additional 24-story tower at Candlestick Point Center, and the 31-story (reduced from 37 stories) towers in Candlestick Point South, ranging from 220 feet to a maximum 420 feet in height, would be a substantial change in the existing low-scale pattern in this view, and would block distant views of neighborhoods to the north. The shoreline of CPSRA would be visible as the foreground. As with Project conditions viewed at this location, shown in Figure III.E-21 (View 11: Northwest from CPSRA), Tower Variant D would include views of new development clustered near Bayview Hill. Views of Candlestick Point development to east would also be similar with Tower Variant D and the Project. The larger, 12,500-square-foot maximum floor sizes with Tower Variant D would be apparent in this view, compared to the 10,500-square-foot maximum floor sizes with the Project; the overall change in views would be similar.

Figure IV-16i (Tower Variant D, View 12: Southeast from Gilman Avenue) shows the residential streetscape on Gilman Avenue looking southeast toward the Candlestick Point site. Tower Variant D would introduce two buildings up to 320 feet in height on the north side of Gilman Avenue visible in the distance. The Project would also have two towers at that location; Tower Variant D would increase the height of one tower closer to the viewpoint from 22 stories to 32 stories. As with the Project, the Tower Variant would include roadway and streetscape improvements, also illustrated in Figure IV-16h. Compared to Project conditions viewed at this location, as shown in Figure III.E-22 (View 12: Southeast from Gilman Avenue), Tower Variant D would have more limited views of 31-story (reduced from 37 stories) towers in Candlestick Point South.

Figure IV-16j (Tower Variant D, View 16: Southwest from Mariner Village) shows a view south from Mariner Village on LaSalle Avenue on Hunters Point Hill. The existing foreground includes undeveloped areas of the Shipyard south of Crisp Road. The existing buildings south of Crisp are UCSF facilities that are not part of the HPS Phase II site. With Tower Variant D, Candlestick Point towers, ranging from 220 feet to 420 feet in height, would be a substantial change in the existing low-scale pattern in this view. The shoreline of CPSRA would be visible as the foreground. Other Candlestick Park development would be visible to the north and on Jamestown Avenue at the base of Bayview Hill. The view would also include the Yosemite Slough bridge, improved open space at HPS Phase II, and buildings on Crisp Road. Compared to Project conditions viewed at this location, as shown in Figure III.E-26 (View 16: Southwest from Mariner Village), Tower Variant D would have similar effects.

Figure IV-16h (Tower Variant D, View 17: Northeast from CPSRA) includes the Bay in the foreground and existing buildings at the Shipyard. Views of Tower Variant D development at the Shipyard would include 49ers Stadium, the new marina, and Research & Development buildings. A residential tower, up to 370 feet in height, would be visible beyond the stadium. As noted in the description of Tower Variant D, above, the only change at HPS Phase II would the maximum 12,500-square-foot residential tower floor sizes, compared to the 10,500-square-foot maximum floor sizes with the Project. As shown in this view, the change in floor sizes with Tower Variant D would not alter visual conditions compared with the Project, illustrated by Figure III.E-27 (View 17: Northeast from CPSRA).

Figure IV-16k (Tower Variant D, View 19: East from Hunters Point Hill Open Space) shows a view from open space on Northridge Road on Hunters Point Hill towards the southeast. Tower Variant D would replace the existing structures in the mid ground with mid-rise and two residential towers, up to 270 feet to 370 feet in height. New open space at the Shipyard would be visible at the base of the hill. To the south,

the approved HPS Phase I development, not part of the Project and currently under construction, would be visible. As noted in the description of Tower Variant D, above, the only change at HPS Phase II would the maximum 12,500-square-foot residential tower floor sizes, compared to the 10,500-square-foot maximum floor sizes with the Project. As shown in this view, the change in floor sizes with Tower Variant would not alter visual conditions with the Project in Figure III.E-29 (View 19: East from Hunters Point Hill Open Space).

Page IV-148, fourth paragraph

Development of a Tower Variant would not substantially degrade the existing visual character or quality of the site or its surroundings. Each of the Tower Variants would change the heights of some the towers or relocate ~~or remove one or two towers residential tower, or would change the location of a tower~~ up to five towers. Tower Variant D would have a maximum 12,500-square-foot residential tower floor size, compared to the 10,500-square-foot maximum floor size with the Project. The Tower Variants' effects on visual character would vary from Project effects, with more potential clustering of towers in Candlestick Point, and changes in visibility of some towers from locations in CPSRA. The change in tower floor sizes would not change the visual effects at HPS Phase II, compared with the Project. ~~Thus, the Project area would still be developed with mixed land uses and buildings of various heights, including towers between 220 and 420 feet in height.~~ The Tower Variants, as with the Project, would have a less-than-significant effect on aesthetics, visual character, scenic resources, or scenic vista, As discussed in Section III.E, Draft EIR pages III.E-56 to 57, overall, development of the Project would not block publicly accessible views of the Bay or other scenic vistas. Public access areas, both City and State parks, would maintain views from the Project site toward the East Bay and the Bay. While development of the Project would include several high-rise towers, these towers are not clustered, and would not substantially obstruct, alter, or degrade the quality of views of the Bay or beyond from any long-range viewpoints.

Pages IV-148 to -152, "Shadows"

A Tower Variant would include one additional residential tower and could change the location of one ~~or two~~ to three towers, depending on the Variant. The introduction of a new tower, the increased or decreased height of some towers, the change in maximum floor sizes from 10,500 square feet to 12,500 square feet, and the changed location of some towers would modify shadow impacts compared to the Project effects.

Construction

As with the Project, construction activities of the Tower Variant would not result in shadow effects on open space.

Operation

Development of a Tower Variant would result in new structures over 40 feet in height ranging up to 420 feet in height and would extend well above surrounding buildings and cast shadows on nearby public open spaces. Tower Variant A would add ten stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as shown in Figure IV-14. Three other residential towers at Candlestick Point South would have three to four fewer floors. Tower Variant B would have an additional 24-story residential tower at Candlestick Point Center. One 17-story tower at Candlestick Point

North would be removed as shown in Figure IV-15. Three other towers at Candlestick Point South would have would have two to four fewer floors. Tower Variant C would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variant B, as shown in Figure IV-16. Tower Variant C would also add ten stories to one of the 22-story residential towers at Candlestick Point North, as with Tower Variant A, resulting in a 32-story residential tower; one 17-story tower and one 22-story at Candlestick Point North would be removed and at Candlestick Point South, one tower would have would have two fewer floors and one would have six fewer floors. Tower Variant D would reduce one 37-story tower to 31 stories, or six fewer floors, in Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as with Tower Variants A and C; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; one residential tower at Candlestick Point North and one residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors, as with Tower Variant A. This Variant would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variants B and C. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

Project plans have identified the locations of towers, but tower designs are preliminary. The length and duration of shadows cast would be influenced by elements of building design, such as building height, shape, massing, and setbacks. Potential impacts to shade-sensitive locations, such as parks and open space, would be influenced by the location of shade-sensitive uses within the parks and open spaces. The increase in height of one residential tower, from ~~240~~220 to 320 feet (per Variant A, ~~and~~ Variant C, and Variant D) and the inclusion of one new residential tower (with a height of 240 feet) and the relocation of towers (per Variant B, ~~and~~ Variant C, and Variant D), would increase potential shading impacts on existing parks and open spaces—Gilman Park—and proposed parks and open spaces—Candlestick Point Neighborhood Park; Bayview Gardens/Wedge Park; and Mini Wedge-Park—and in CPSRA areas near the additional towers. The Tower Variants would also remove one or two residential towers (per Variant B and Variant C), and would reduce the number of stories on up to three towers (all Tower Variants).

As discussed in Section III.F (Shadows), *Planning Code* Section 295 prohibits the issuance of building permits for structures over 40 feet in height that would cast shade or shadow on property with the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission between one hour after sunrise to one hour before sunset at any time of year, unless the Planning Commission determines that the shade or shadow would have an insignificant adverse impact on the use of such property.

As required by *Planning Code* Section 295, the Recreation and Park Commission and the Planning Commission have adopted criteria for the review of shadow effects. For parks for which "shadow budgets" have not been adopted, the current criteria allow an additional new shadow budget of 0.1 percent for parks larger than 2 acres with annual shadow loads between 20 and 40 percent, expressed in available square-foot-hours of sunlight compared to square-foot-hours of shade. For larger parks with existing shadow loads less than 20 percent, an additional new shadow budget of 1.0 percent would be allowed. The increase is based on calculations of the "Annual Available Sunlight" (AAS) for that park, expressed in square-foot-hours of sunlight (during each day an hour after sunrise to an hour before sunset summed over the course

of a year, ignoring shadow from any surrounding structures, and from clouds, fog, and solar eclipses). The shadow impact of the Project is defined as the shadow in square-foot-hours cast by the Project divided by the AAS, expressed as a percentage.

To evaluate potential effects, a shadow modeling study of Tower Variants C and D was completed by CADP, Inc.[153] Figure IV-17 (Candlestick Point: Tower Variant C Year-Round Shadow Trace) and Figure IV-17a (Candlestick Point: Tower Variant D Year-Round Shadow Trace) are the "shadow fan" or "shadow trace" identifying the maximum extent of all Project-related shadows from one hour after sunrise to one hour before sunset over an entire year, which is the time period specified in *Planning Code* Section 295. The year-round shadow trace is further over-inclusive in that it includes shadow from all buildings within the Project site, including those that would not exceed 40 feet in height and, therefore, would not be subject to the requirements of Section 295. The shadow trace shows that Tower Variant C and Tower Variant D, ~~with an additional residential tower in Candlestick Point North,~~ compared to the Project plans, would shade Gilman Park during the hours specified in Section 295. (As discussed in Section III.F, the Project would add shadows to Gilman Park, but those effects would be from potential 40-foot-high Project buildings south of the park, which are not considered to be adverse effects under Section 295.)

Gilman Park, at 4.4 acres, is a larger park without an adopted shadow budget, and an existing shadow load of less than 20 percent. Therefore, under Section 295, an annual increase of 1.0 percent would be permitted and would not be considered to create a significant effect on the park.

The CADP study also evaluated the Tower Variant C and Tower Variant D effects on Gilman Park with respect to AAS. CADP used computer models to calculate the net increase in square feet, and square-foot-hours, of shade on the park, from one hour after sunrise to one hour before sunset, at 15-minute intervals, at one-week increments, for six months of the year. The calculations are converted to a total annual increase in square-foot-hours of shade, compared to total theoretical square-foot-hours of sun in the park. Because the streets adjacent to the park are bounded by parking lots and low-rise buildings, the analysis conservatively assumed there is no existing shadow load on the park, and that the Tower Variant effects would be net new conditions. The analysis also does not account for existing shading from trees or the service building within the park. On the basis of available observations of Gilman Park, the park is used during mid-day and afternoon periods, by neighborhood residents, and students at adjacent Bret Harte Elementary School. The park is relatively less patronized in morning hours.

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[153] This shadow analysis evaluated Tower Variant C and Tower Variant D, which would include ~~both~~ a 24-story tower at a location near Gilman Park, up to three relocated towers and the additional stories on a tower at Candlestick Point North. Variants C and D would have the greatest differences in increased shadow effects, compared to those with the Project. Tower Variant D would have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. (CADP, Inc., Gilman Park Shadow Calculations, Variant C, October 2009; CADP, Inc., Gilman Park Shadow Calculations, Variant D, March 2010.)

SOURCE: Lennar Urban, RHAA, CADP, 2010.

Clement Designs 4-9-10

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CANDLESTICK POINT: TOWER VARIANT D YEAR-ROUND SHADOW TRACE

FIGURE IV-17a

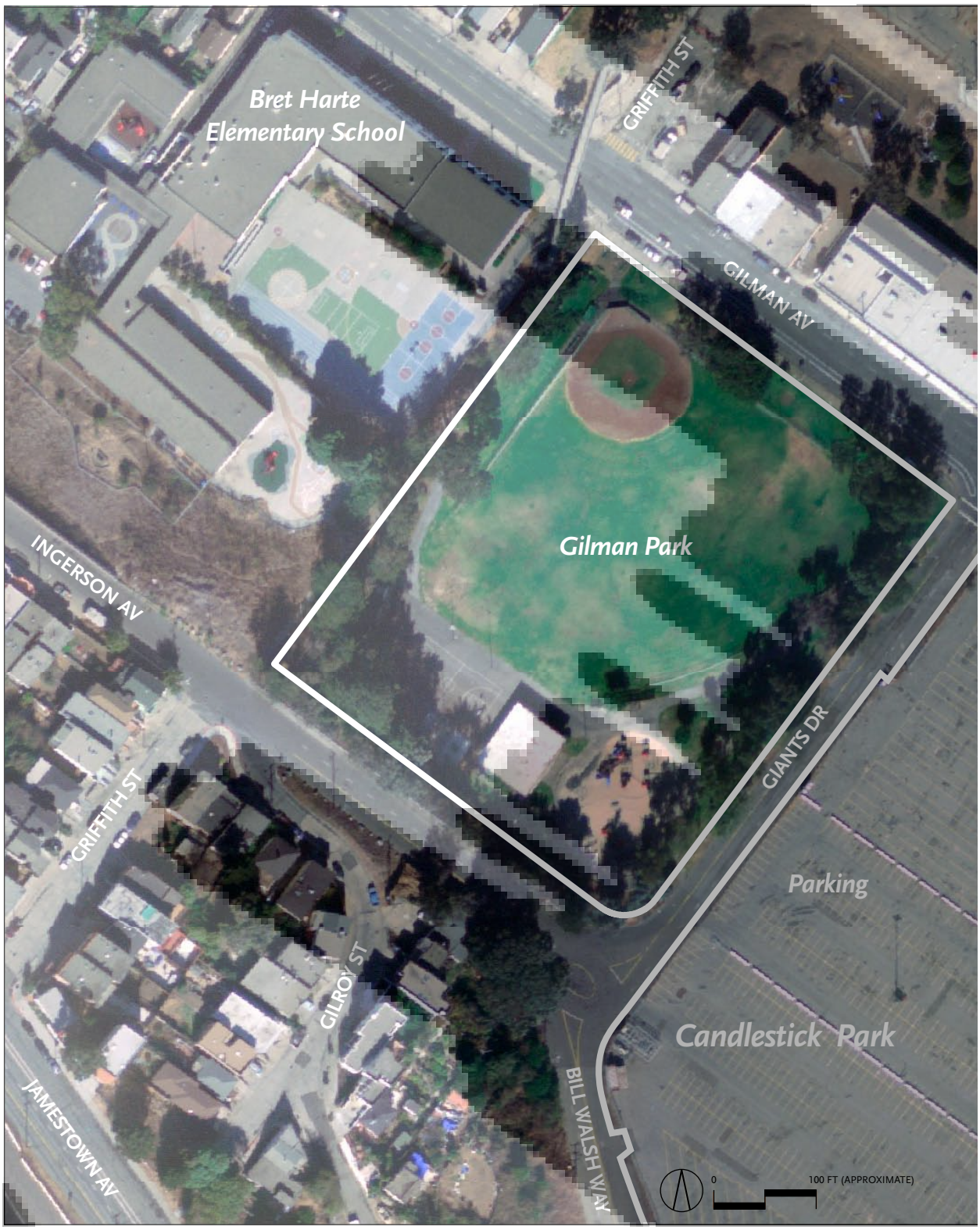
Tower Variant C and Tower Variant D would shade a portion of Gilman Park from morning to mid-day periods throughout the year, in the first ~~75 minutes~~ three to four hours after the sunrise plus one-hour cutoff specified by Section 295.[154] There would be no new shadow from the Tower Variant after about 12:30 P.M. on any day of the year. The effects would vary by season. On June 21, new shadow would occur between about 6:45 A.M. PDT (1 hour after sunrise), and would cover about 21 percent of the park to about 9:45 A.M. on less than 1 percent of the park. On September 21 and March 21, new shadow would occur between about 8:00 A.M. PDT (~~one~~ 1 hour after sunrise), on about 32 percent of the park, to about 11:30 A.M., on less than 1 percent of the park. On December 21, new shadow would occur between about 8:~~15~~00 A.M. PST (1 hour after sunrise), on about 54 percent of the park (Tower Variant C) or 44 percent (Tower Variant D), to about 12:15 P.M. on less than 1 percent of the park. Overall, while those effects would occur for up to four hours after the sunrise plus one-hour cutoff time, in spring, summer, and fall months, the new shade would affect 10 percent or less of Gilman Park by 9:00 A.M. or earlier. In December, the new shade would affect 10 percent or less of Gilman Park by about 10:15 A.M.

Figure IV-18 (Gilman Park—Existing Conditions) is an aerial view showing existing features of Gilman Park. Figure IV-19 (Gilman Park: Tower Variant C Shadows—November 29 [8:05 A.M.]) and Figure IV-20 (Gilman Park: Tower Variant C Shadows—December 20 [8:20 A.M.]) illustrate Tower Variant C shadow at periods of maximum shadow impact, at one hour after sunrise in late fall and winter. Figure IV-20a (Gilman Park: Tower Variant D Shadows—November 8 [7:45 A.M.]) and Figure IV-20b (Gilman Park: Tower Variant D Shadows—December 20 [8:20 A.M.]) illustrate Tower Variant D shadow at periods of maximum shadow impact, at one hour after sunrise in late fall and winter.

Gilman Park is 191,631 square feet (4.4 acres). Tower Variant C would add approximately 21,847,927 new annual square-foot-hours of shadow to the potential of approximately 696,493,920 square-foot-hours of sun, increasing shade square-foot-hours by 3.1 percent. Tower Variant D would add approximately 21,666,526 new annual square-foot-hours of shadow, also increasing shade square-foot-hours by 3.1 percent. This would be greater than the 1.0 percent permitted as new shadow on parks larger than two acres with existing shadow loads less than 20 percent, under current Planning Department criteria.

Therefore, the Tower Variant 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 park. While Tower Variant A would not add shade after late morning or midday periods at any time of year, and the park would not be affected in afternoon periods of use, the shadow effect is conservatively considered to be a significant and unavoidable impact of Tower Variants C and D.

[154] The sunrise plus one hour cutoff on days when the Tower Variant would cast a shadow on the park would range from about 6:50 A.M. PDT on June 20 to about 8:15 A.M. PST on December 20.



SOURCE: Lennar Urban, RHAA, CADP, 2010.

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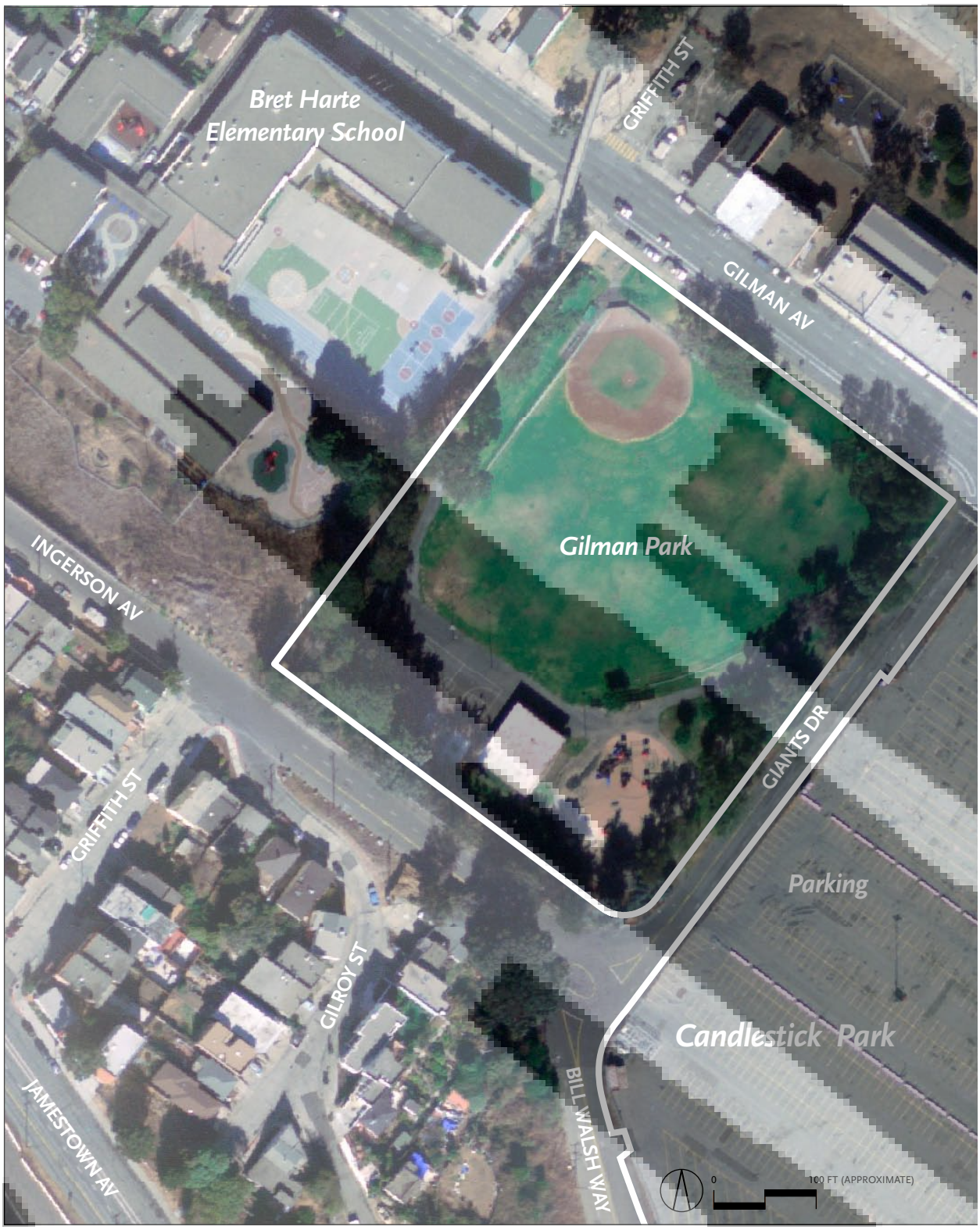
GILMAN PARK: TOWER VARIANT D SHADOWS — NOVEMBER 8 (7:45 AM PST)

FIGURE IV-20a



SOURCE: Lennar Urban, RHAA, CADP, 2010.

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FIGURE IV-20b

- **GILMAN PARK: TOWER VARIANT D SHADOWS — DECEMBER 20 (8:20 AM PST)**

As with the Project, the Tower Variants would shade an area of Bayview Park, owned by the SFRPD, that does not provide any active uses and is relatively steep. The Tower Variants would only shade Bayview Park during the first hour after sunrise in spring, summer, and fall months, and would not create any new shadow by 10:00 A.M. at any time of year. This would not be considered a significant adverse shadow impact on SFRPD open space.

~~Other shadow conditions with the Tower Variants would be as described for the Project in Section III.F. The~~ Tower Variant effects on shadows on the CPSRA would be similar or slightly reduced compared to the Project~~, as~~ depending upon the variant: towers near the CPSRA would be ~~two~~ three to six stories shorter, ~~depending upon the variant.~~

As with the Project, the CPSRA would be affected by new shade in the afternoons, but most areas would experience limited to no new shadow from the Project. Other areas of the CPSRA would largely continue to remain in sun throughout the year. Tower Variant D shadow would not interfere with the public's use or enjoyment of the CPSRA. Activities in these areas, such as windsurfing launching, walking, jogging, and fishing, would not be affected by the new shade.

Shadows cast by Tower Variant D, as with the Project, on proposed new neighborhood parks at Candlestick Point throughout the year would range from little or no shading to large areas of certain parks receiving new shade, particularly in the late afternoon during the vernal and autumnal equinoxes. The orientation of the relatively narrow Alice Griffith Neighborhood and Mini-Wedge Parks with respect to the path of the sun and the close proximity of Tower Variant buildings along the parks' southwestern boundaries combine to make them most susceptible to new shade. Tower Variant D, because of changes in tower locations and height, would shade different areas of proposed open space compared to the Project effects. Overall, given the heights, layouts, and orientations of the Tower Variant buildings, the neighborhood parks would experience variable levels of shading throughout the day, generally receiving some new shade from morning until noon in spring, summer, and fall with a lesser increase in the afternoons in winter, spring, and fall. Public use of these proposed new parks would not be expected to be adversely affected by the shade conditions.

Tower Variant D would not change any tower locations or heights at HPS Phase II; the two residential towers at HPS Phase II would have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. Shadow effects at HPS Phase II with this change in tower dimension would be similar to the Project and would be less than significant, as shown Figure III.F-15 (Hunters Point Shipyard Phase II: Proposed Project Year-Round Shadow Trace) through Figure III.F-27 (Hunters Point Shipyard Phase II: Shadow Patterns—September 21 [3 PM PDT]) for shadow conditions at HPS Phase II with the Project at 10:00 A.M., noon, and 3:00 P.M. Pacific Standard Time (PST) on December 21 and March 21, and Pacific Daylight Time (PDT) on June 21 and September 21, and discussed on pages III.F-26 through -40 of the Draft EIR.

With appropriate design of the proposed parks and open space, to minimize the installation of shade-sensitive uses at locations that would receive the greatest amount of shading, adverse shadow impacts would be minimized, and Tower Variant impacts to proposed new parks would be less than significant.

Pages IV-156, third paragraph

As with the Project, all ~~three~~ four Tower Variants would have the potential to create potentially significant pedestrian-level wind impacts that exceed the identified threshold of 26 miles per hour (mph) equivalent wind speed for a single hour of the year. Implementation of mitigation measure MM W-1a (wind modeling), which would require a ~~design review process~~ wind analysis for buildings greater than 100 feet in height, and if determined to be necessary, would require inclusion of a design criteria to reduce pedestrian-level impacts below the threshold, would reduce impacts to a less-than-significant level, similar to the Project.

Page IV-159, beginning with second full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the Tower Variant (Variant 3) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Tower Variant (Variant 3) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Tower Variant (Variant 3).~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the Tower Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1252,1252a] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1252] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.
[1252a] ENVIRON, *Updated Air Quality Analysis, Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3D, Alternative 2, and Subalternative 4A*, April 26, 2010.

F.27 Changes to Section IV.E (Variant 4: Utilities Variant)

Page IV-192, third full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the Utilities Variant (Variant 4) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Utilities Variant (Variant 4) were estimated at selected roadways ~~with the addition of future traffic volumes, including the traffic associated with the Utilities Variant (which were assumed to be similar to Project traffic), were estimated~~ and compared against ~~SFDPH thresholds~~ the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Utilities Variant.

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1265] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1265] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

F.28 Changes to Section IV.F (Variant 5: San Francisco 49ers and Oakland Raiders Shared Stadium at Hunters Point Shipyard)

Page IV-214, first paragraph

The San Francisco 49ers and Oakland Raiders Shared Stadium at Hunters Point Shipyard Variant (49ers/Raiders Shared Stadium Variant) assumes that development would occur exactly as proposed for the Project, except that the new stadium would be home to both the San Francisco 49ers and the Oakland Raiders. … For the purposes of this analysis, 20 football games and 20 other events per year were assumed. This assumption assumes a conservative, but possible scenario. It includes two pre-season and eight regular season games, and the possibility that either team could host up to two post-season playoff games. However, a~~A~~ maximum of four post-season games would only occur at the proposed stadium if (1) both teams were in separate conferences (American Football Conference or National Football Conference), (2) each team hosted and won either a first round wild-card playoff game or a second round divisional

playoff game, and (3) each team then hosted a conference championship game. The likelihood of four post-season games occurring is remote; therefore, this EIR analysis only assumes up to two playoff games per year total, for a total of 20 games annually, the same as for the Project.

Page IV-223, second full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the 49ers/Raiders Shared Stadium Variant (Variant 5) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations ~~at select roadways with the addition of future traffic volumes, including the~~ from traffic associated with the 49ers/Raiders Shared Stadium Variant (Variant 5) ~~(which were assumed to be similar to Project traffic as an annual average),~~ were estimated compared against ~~SFDPH thresholds~~ the 0.2 μg/m^3 action level to determine the potential health risks on receptors attributed to vehicle emissions from the 49ers/Raiders Shared Stadium Variant (Variant 5).

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 μg/m^3 ~~threshold~~ action level.[1273] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1273] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-225, last paragraph

Similar to the Project, development with the 4934s/Raiders Shared Stadium Variant would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which …

F.29 Changes to Chapter V (Other CEQA Considerations)

Page V-1, third paragraph

Table ES-~~1~~2 (Summary of Environmental Effects and Project Requirements/Mitigation Measures), which is contained in the Executive Summary chapter of this EIR, and Section III.A through Section III.S of this EIR provide a comprehensive identification of the Project's environmental effects, including the level of significance both before and after mitigation.

Page V-18, first full paragraph

While the first new retail may open as early as ~~2015~~2019, full build-out is expected to be completed in ~~2029~~2027 ~~such that many Project retailers are likely to open and to have a first full year of operations in 2030~~. …

F.30 Changes to Chapter VI (Alternatives)

Page VI-4, second bullet

- **Alternative 4: Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge**— … This alternative includes preservation of ~~three~~ five potentially historic structures at HPS Phase II.[1318a] This alternative does not include construction of a bridge over Yosemite Slough.

  This alternative was selected to include historic preservation of the five eligible structures on HPS and to provide a reduced development alternative to the Project. This alternative would reduce the area subject to development and would avoid significant impacts to historic resources at HPS Phase II. …

[1318a] Since publication of the Draft EIR, the Project has been revised to incorporate preservation of Building 208.

Page VI-5, the following is inserted above the bulleted item (Alternative 5 description)

> **Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation**—This subalternative to Alternative 4 retains all of the historic buildings, but includes the same land use plan as described for the Project rather than a reduced development plan as under Alternative 4. The Project's land use plan would be implemented under this alternative in terms of total square footage of land uses and district locations. However, unlike the Project, Buildings 211, 224, 231, and 253 would be retained. The R&D square footage that, under the Project, would be built at the location of Buildings 211, 224, 231, and 253 would be distributed throughout other areas of the HPS Phase II development. Consequently, under this subalternative, the total floor area for R&D would remain the same as the Project, at 2,500,000 sf. However, the building heights in the R&D District on HPS Phase II would increase to accommodate the displaced square footage. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of Interior's Standards to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. Building 224, the air raid shelter, would be rehabilitated to provide museum space.
>
> Subalternative 4A would also retain existing grades, allowing railroad spurs and other historic elements to remain. A wave protection berm is proposed to accommodate a 36-inch sea level rise. The Bay Trail would run on top of the berm, which would be designed to include seat steps. All other components of Subalternative 4A would remain the same as under the Project.

Page VI-6, Table VI-1 (Summary of Project Alternatives) has been revised

[NOTE: This table has been revised to correct typographical errors as well as to include detailed land use information concerning Subalternative 4A.]

Table VI-1 Summary of Project Alternatives [Revised]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Candlestick Point							
Residential (units)	7,850	0	7,850	1,210	5,495	7,850	6,500
Retail (gsf):							
Regional Retail	635,000	0	635,000	0	444,500	635,000	635,000
Neighborhood Retail	125,000	0	125,000	0	87,500	125,000	125,000
Retail Subtotal (gsf)	*760,000*	*0*	*760,000*	*0*	*532,000*	*760,000*	*760,000*
Community Services (gsf)[a]	50,000	0	50,000	0	50,000	50,000	50,000
Hotel (gsf)[b~~a~~]	150,000	0	150,000	0	105,000	150,000	150,000
Office (gsf)	150,000	0	150,000	0	105,000	150,000	150,000
10,000-seat Arena (gsf)	75,000	0	75,000	0	75,000	75,000	75,000
Football Stadium (seats)	0	70,000	0	70,000	0	0	70,000
HPS Phase II							
Residential (units)	2,650	1,800[c~~b~~]	2,650	4,000	1,855	2,650	4,000
Neighborhood Retail (gsf)	125,000	570,000	125,000	125,000	87,500	125,000	125,000
Research & Development (gsf)	2,500,000	1,087,000	2,500,000	2,500,000	1,750,000	2,500,000	2,500,000
Artists' Studios (gsf):							
1:1 Studio Renovation and Replacement (gsf)[d~~c~~]	225,000	225,000	225,000	225,000	225,000	225,000	225,000
New Artist Center (gsf)	30,000	0	30,000	30,000	30,000	30,000	30,000
Artist Studio Sub-Total (gsf)	*255,000*	*225,000*	*255,000*	*255,000*	*255,000*	*255,000*	*255,000*
Community Services (gsf)[b]	50,000	0	50,000	50,000	50,000	50,000	50,000
Football Stadium (seats)	69,000	0	69,000	0	0	69,000	0
Mixed-Use	0	580,000	0	0	0	0	0
Cultural and Education	0	330,600	0	0	0	0	0
Marina (slips)	300	0	300	300	0	300	300
Other Elements							
Yosemite Slough bridge	Bridge	No bridge	No bridge	BRT/Pedestrian bridge	No bridge	Bridge	No bridge

Table VI-1 Summary of Project Alternatives [Revised]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Shoreline Improvements	Yes	No	Yes	Yes	Yes	Yes	Yes
State Parks Agreement/ total acres of State Parkland	Yes/96.7	No/120.2	Yes/96.7	Yes/117.2[~~e~~d]	Yes/96.7	Yes/96.7	No/120.2

SOURCE: Lennar Urban, PBS&J, 2009.

~~a. Community Services have not been precisely defined but could include uses such as library, educational facility, police station/substation, or fire station.~~

~~b~~a. Hotel uses include 220 rooms at the proposed Regional Retail Center.

~~c~~b. 1,800 housing units on the entire Shipyard including the Phase I site.

~~d~~c. Existing artist studios would be replaced at a one-to-one ratio under all alternatives.

~~e~~d. Limited exchange of 3.03 acres to construct BRT/pedestrian only Yosemite Slough bridge and Alice Griffith Public Housing

Page VI-10, "Construction Impacts"

Construction activities associated with Alternative 1 would be reduced compared to the Project, depending on the phasing of the development. Localized construction-related traffic impacts would ~~therefore remain significant and unavoidable~~ be less than significant under Alternative 1.

Page VI-30, fourth and fifth paragraphs

Under Alternative 2, ~~motorized~~ transit and non-motorized traffic would be required to circumnavigate Yosemite Slough because no bridge would be constructed. On game days, motorized and non-motorized traffic, which would travel across Yosemite Slough Bridge under the Project, would also be required to circumnavigate Yosemite Slough because no bridge would be constructed under Alternative 2. Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) illustrates the proposed route. The rest of the street network at Candlestick Point and HPS Phase II would be the same as the Project.

Similar to the Project, under Alternative 2, ~~T~~the primary roadway connection for automobiles and other vehicular traffic between Candlestick Point and HPS Phase II would be west on Carroll Avenue to Ingalls Street, north along Ingalls Street to Thomas Avenue, and east on Thomas Avenue to Griffith Street. Ingalls Street would remain an industrial mixed-use street with two auto lanes and parking and loading zones on its northern and southern sides. The width of sidewalks on that portion of Ingalls Street from Carroll Avenue to Yosemite Avenue would be decreased from 16 feet to 11 feet to create a uniform street width to accommodate the auto lanes, parking, and loading.

Page VI-31, Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) has been revised

[NOTE: The figure has been revised to show the Alternative 2 BRT route following the RR ROW where the ROW is south of Ingalls Street.]

Existing RR ROW

BRT Path: Using RR ROW for portion of route around Slough

Auto Route Alignment

0 500 Feet

SOURCE: SFMTA, 2010.

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FIGURE VI-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

ALTERNATIVE 2 CIRCULATION PLAN RAILROAD RIGHT-OF-WAY FOR BUS RAPID TRANSIT

Page VI-33, third full paragraph

Alternative 2 would be the same as the Project, except it would not include the Yosemite Slough bridge. Because vehicular traffic could not use the bridge on non-game days, ~~T~~the main roadway connection between Candlestick Point and HPS Phase II would be the same as with the Project, via Ingalls Street. The bus rapid transit (BRT) route would be along Carroll Avenue, Hawes Street, Armstrong Avenue, and the abandoned railroad right-of-way to provide access between Candlestick Point and HPS Phase II. Alternative 2 would otherwise have the same transportation improvements as proposed with the Project.

Generally, travel demand associated with all Variants and Alternatives studied would be similar with or without the Yosemite Slough bridge. Because the Yosemite Slough bridge would not accommodate auto travel on non-game days, the traffic circulation patterns are expected to be the same under Alternative 2 as the Project. Similarly, since auto traffic would only use the bridge on game days for any Alternative or Variant considered, the typical non-game day travel patterns for any of the Alternatives or Variants that include the bridge would be the same under conditions without the bridge.

Without the bridge across Yosemite Slough, the proposed new BRT route traveling between Balboa Park BART Station and the Hunters Point Shipyard Transit Center would follow a different alignment than under the Project. Instead of a direct route across Yosemite Slough, the BRT route would travel west along Carroll Avenue, north along Hawes Street, and then west on Armstrong Avenue, where it would join the Navy railroad right-of-way. The BRT route would travel in the railroad right-of-way around Yosemite Slough, rejoining the existing roadway network at Shafter Avenue. The route would continue east on Shafter Avenue to Arelious Walker, where it would reassume the same alignment as the Project.

This additional travel distance and travel time would have a notable effect on passengers who use the BRT to travel to or from the Hunters Point Shipyard (the analysis indicates a reduction of 15 percent for these trips). However, because this represents a relatively small portion of overall Project-generated transit riders, the overall change in transit ridership and auto trip generation is negligible. This conclusion applies to any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough.

Operation of the BRT within the rail right-of-way would not affect study intersection operations. Therefore, the traffic impacts associated with Alternative 2 would be the same as the Project. Similarly, traffic impacts associated with any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough would be the same as the equivalent Variant or Alternative without the bridge.

Page VI-33, last paragraph on page

Construction activities associated with Alternative ~~1~~2 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-34, second paragraph

During game days at the football stadium, with no Yosemite Slough Bridge, the entrance and exiting capacity for vehicles would be reduced about 40 percent compared to the Project; four out of a total of 11 exit lanes would be available without the bridge. As with the Project, a mitigation measure to implement a

Travel Demand Management Plan for stadium events would reduce but not avoid traffic impacts, which would be significant and unavoidable.

Page VI-34, fifth paragraph

Although the alternative BRT route around Yosemite Slough would be technically feasible, it would not be an optimal configuration for a BRT system. BRT service would provide direct, fast, and reliable travel in a dedicated right-of-way, typically with signal priority for ~~V~~BRT vehicles. When these elements are combined, the BRT service takes on a higher quality character than typical local bus service. The Yosemite ~~s~~Slough bridge would provide a dedicated right-of-way and the most direct route between Hunters Point Shipyard and points to the west, including Candlestick ~~p~~Point, the Bayshore Caltrain Station, and Balboa Park BART. Although the route around Yosemite Slough proposed under Alternative 2 would provide exclusive right-of-way, the route would involve a number of right-angle turns and additional signalized intersections and would not ~~accommodate the BRT route~~ provide a comparably direct route as that provided on the bridge proposed ~~with~~ by the Project.

Page VI-59, the following text is inserted after Table VI-4 (Attainment of Project Objectives Alternative 2)

Alternative 2 analyzes the full Project land use program without construction of the Yosemite Slough bridge. Generally, travel demand associated with all Variants and Alternatives studied would be similar with or without the Yosemite Slough bridge. Because the Yosemite Slough bridge would not accommodate auto travel on non-game days, the traffic circulation patterns are expected to be the same under Alternative 2 as the Project. Similarly, since auto traffic would only use the bridge on game days for any Alternative or Variant considered, the typical non-game day travel patterns for any of the Alternatives or Variants that include the bridge would be the same under conditions without the bridge. If Variants 1 (R&D Variant), Variant 2 (Housing Variant), or Variant 2A (Housing/R&D Variant) were approved, and no bridge were constructed, the impacts would not increase from those identified for Variant 1, Variant 2, or Variant 2A with the bridge. In fact, all operational and construction impacts associated with the bridge, although identified as less than significant, would be eliminated.

Without the bridge across Yosemite Slough, the proposed new BRT route traveling between Balboa Park BART Station and the Hunters Point Shipyard Transit Center would follow a different alignment than under the Project. Instead of a direct route across Yosemite Slough, the BRT route would travel west along Carroll Avenue, north along Hawes Street, and then west on Armstrong Avenue, where it would join the Navy railroad right-of-way. The BRT route would travel in the railroad right-of-way around Yosemite Slough, rejoining the existing roadway network at Shafter Avenue. The route would continue east on Shafter Avenue to Arelious Walker, where it would reassume the same alignment as the Project.

This additional travel distance and travel time would have a notable effect on passengers who use the BRT to travel to or from the Hunters Point Shipyard (the analysis indicates a reduction of 15 percent for these trips). However, because this represents a relatively small portion of overall Project-generated transit riders, the overall change in transit ridership and auto trip generation is negligible. This conclusion applies to any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough.

Operation of the BRT within the rail right-of-way would not affect study intersection operations. Therefore, the traffic impacts associated with Alternative 2 would be the same as the Project. Similarly, traffic impacts associated with any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough would be the same as the equivalent Variant or Alternative without the bridge.

Page VI-65, fourth full paragraph

Construction activities associated with Alternative ~~1~~3 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-93, first paragraph

Alternative 4 is a reduced-development alternative. … This alternative also includes preservation of ~~three~~ four potentially historic structures at HPS Phase II. …

Page VI-93, third paragraph

As stated above, retail and R&D floor area would be approximately 30 percent less under this alternative in comparison to the Project. This alternative proposes the expansion of the existing historic district at Drydocks 2 and 3 to include Drydock 4 and Buildings 208, 211, 224, 231, and 253. These buildings would be rehabilitated under Secretary of Interior Standards to accommodate a mix of uses, primarily R&D (refer to Section III.J for more information on ~~b~~Buildings 208, 211, 224, 231, and 253 as historic resources). …

Page VI-97, last paragraph

~~Without a State Parks land agreement, there would be no changes to State Parks land use within the Project site and no development would occur on the CPSRA. Therefore, because State Parks land would not be developed with any structural uses under Alternative 4, there would be no impacts to the land use character of State Parks, which would less than the Project. Also worth noting is that the land use character of the CPSRA would not benefit from the improvements as proposed under the Project. However, because all of the existing State Parks land would ultimately remain undeveloped, this is considered a lesser impact than the Project from a visual standpoint.~~

Page VI-98, last paragraph

Construction activities associated with Alternative ~~1~~4 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-102, second full paragraph

~~Without a State Parks land agreement, there would be no established funding mechanism for future maintenance of the State Parks on site from the Project Applicant, and no development or park improvements would occur in the CPSRA. The CPSRA would essentially remain in its current condition. However, increased use of the CPSRA as a result of population and employment growth associated with Alternative 4 could result in deterioration of the areas currently used by the public for recreation activities in the CPSRA. This could potentially result in a substantial adverse impact on the visual character and quality of the Project site. Without an established funding mechanism to address the increased use,~~

~~improvements and maintenance of the CPSRA would be the responsibility of CDPR. In addition, new and improved parkland in the CPSRA would not occur as proposed under the Project. Therefore, development of Alternative 4 would result in greater impacts to the visual character of CPSRA compared to the Project, unless a funding mechanism is established.~~

Page VI-103, first full paragraph

~~The State Parks agreement would not occur under Alternative 4, which would result in a reduced density of development at Candlestick Point compared to the Project because the development area would be smaller and the development program would be reduced.~~ Vertical development under Alternative 4 would have a reduced bulk and mass compared to the Project. Alternative 4 would include four towers at Candlestick Point, compared to 11 towers with the Project, and the average tower height would be similar under Alternative 4. …

Page VI-106, last paragraph

Compared to the Project, development under Alternative 4 would not result in the demolition of Buildings 211, 224, 231, and 253, which are potential historic resources in the CRHR-eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District (refer to Appendix V1 [Page & Turnbull Feasibility Report]). ~~The Project Applicant would rehabilitate these buildings in accordance with the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.~~ … The buildings occupy approximately 10 acres in the R&D district and would consist of approximately 880,000 gsf of floor area. Building 208 would be mothballed, the same as under the Project. Building ~~211~~231 would be rehabilitated to accommodate parking and Buildings ~~231~~211 and 253 would be rehabilitated to accommodate R&D uses ~~9~~(refer to Appendix ~~V2~~V1 [~~CBRE Consulting Financial Feasibility Analysis~~Page & Turnbull Hunters Point Shipyard Feasibility Study, Revised September 9, 2009]). …

Page VI-108, third full paragraph

Alternative 4 would not include construction of the Yosemite Slough Bridge, which would avoid impacts associated with disturbance of potentially radiologically impacted soils at HPS Phase II in the vicinity of Parcels E and E-2. Also, because Alternative 4 would preserve historically significant buildings on HPS Phase II proposed for demolition under the Project (Buildings 211, 224, 231, and 253), this Alternative would result in less land disturbance in the area of the site where these buildings are located as compared to the Project, thus reducing the potential for exposure to hazardous materials in soil or groundwater in this area.

Page VI-108, the following paragraph is inserted prior to the last paragraph

As part of Alternative 4, the retained historic buildings would require abatement of existing hazardous materials such as asbestos, PCBs from electric fixtures, and lead-based paint. Those abatement activities would be a typical step in a reuse and rehabilitation plan. In addition, any contaminated soil or groundwater at the site of those buildings would be remediated or encapsulated under methods subject to the various legal or administrative requirements outlined in Draft EIR Section III.K. Those remediation activities would not preclude rehabilitation or reuse of the buildings in the identified Hunters Point Commercial Dry Dock and Naval Shipyard Historic District if they have been cleared for reuse by the Navy. The Navy has identified Buildings 211 and 253 as radiologically impacted buildings. The Navy would not make a

determination as to whether these buildings can be cleared for reuse until at the earliest, fall 2010, but all required radiological remediation would be completed before the Navy transfers the property to the Agency. As noted in Draft EIR Section III.K, pages III.K-27 to -28, "Basewide Historical Radiological Assessment" section:

> The overall conclusion of the Historical Radiological Assessment (HRA) was that although low levels of radioactive contamination exist at HPS, no imminent threat or substantial risk exists to tenants, the environment of HPS, or the local community.[313] This conclusion has been reinforced by subsequent Finding of Suitability for Lease (FOSL)[314] issued by the Navy for areas in Parcel B and Building 606 in Parcel D and approved by the regulatory agencies authorizing leases for various uses involving hundreds of employees, artists, and visitors in close proximity to various "impacted" sites each day. A Basewide Radiological Work Plan was subsequently prepared, describing survey and decontamination approaches to be implemented in support of radiological release of buildings and areas.[315]

Alternative 4 would place housing in the area of the HPS Phase II site proposed for the stadium and stadium parking. …

Page VI-117, first full paragraph

Implementation of Alternative 4 would include parks and open space areas similar to the Project~~, except it would not include a State Parks land agreement, resulting in a different configuration of parks at Candlestick Point and no improvements to the CPSRA. Compared to the Project, the CPSRA would remain 120.2 acres, compared to the 23.5-acre reduction under the Project~~ and the same State Parks land agreement, which would result in improvements to the CPSRA. Construction activities associated with the proposed parks and recreational facilities are considered part of the overall development footprint. … ~~In addition, because the State Parks agreement would not occur, the improvements to the CPSRA as proposed under the Project would not be constructed. Therefore, construction activities at Candlestick Point would be reduced and c~~Construction impacts associated with development of new parks and recreational facilities would be less than significant.

At build-out of Alternative 4, the projected population within the Project site would increase from approximately 1,113 residents to approximately 17,126 residents, while employment would increase from 529 jobs to approximately 7,219 jobs. Similar to the Project, parks and open space included in Alternative 4 would provide a ratio of about ~~13.7~~20.4 acres of parkland per thousand residents, which is substantially higher than the benchmark ratio of 5.5 acres per thousand residents (refer to Section III.P). …

The following text is inserted in its entirety following page VI-126. Although this text is new, for readability, it is not underlined.

VI.C.4a Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation

Alternative 4 (Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge) analyzes a reduced-development alternative while preserving the five historic structures (Buildings 208, 211, 224, 231, and 253) that are part of the California Register of Historical Resources (CRHR)-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. Subalternative 4A includes the Project's full land use program and the historic preservation component of Alternative 4. Refer to Figure VI-3a (Subalternative 4A Land Use Plan) for an illustration of the proposed Subalternative 4A land use plan.

This subalternative, like the Project, would retain Drydocks 2 and 3 and four buildings (Buildings 140, 204, 205, and 207) previously identified as historic resources in National Register of Historic Places (NRHP)-eligible Hunters Point Commercial Drydock Historic District, This subalternative and the Project would also retain Drydock 4, considered individually eligible for the NRHP, and Building 208, part of the CRHR-eligible historic district. Like Alternative 4, Subalternative 4A would retain Buildings 208, 211, 224, 231, and 253. Building 208 would be mothballed, the same as under the Project. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Secretary's Standards) to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. The rehabilitation would occur generally as recommended by Page & Turnbull's *Hunters Point Shipyard Feasibility Study* (July 1, 2009, included in the EIR as part of Appendix J). Total floor area for R&D would remain the same as the Project, i.e., 2,500,000 gsf. Building 231 would be reused for parking. Buildings 211 and 253 would accommodate R&D uses. The feasibility study proposed parking uses for Building 231, to accommodate parking as part of the overall HPS Phase II land use program, and as a use appropriate for the large volume of Building 231. Building 224, the air raid shelter, would be retained as museum space. All mitigation measures for the Project would also be applied to Subalternative 4A except for MM CP-1b.1, which requires documentation of demolished buildings.

Because Subalternative 4A proposes the Project's land use program, except for Impact CR-1b, the impacts identified for the Project would also occur with Subalternative 4A. Preservation of these buildings would change some of the analysis in Aesthetics, Hydrology and Water Quality, and Greenhouse Gas Emissions, but not the impact conclusions in these sections. The impacts and analysis identified for the Project in the following issue areas would be the same for Subalternative 4A as identified for the Project:

- Land Use and Plans
- Population, Housing, and Employment
- Transportation and Circulation
- Air Quality
- Noise
- Paleontological Resources
- Hazards and Hazardous Materials
- Geology and Soils

- Hydrology and Water Quality (except sea level rise)
- Public Services
- Recreation
- Utilities
- Energy

The impacts and analysis identified for Alternative 4 in the following issue area would be the same for Subalternative 4A as identified for the Project, as Subalternative proposes the historic preservation component of Alternative 4:

- Cultural Resources

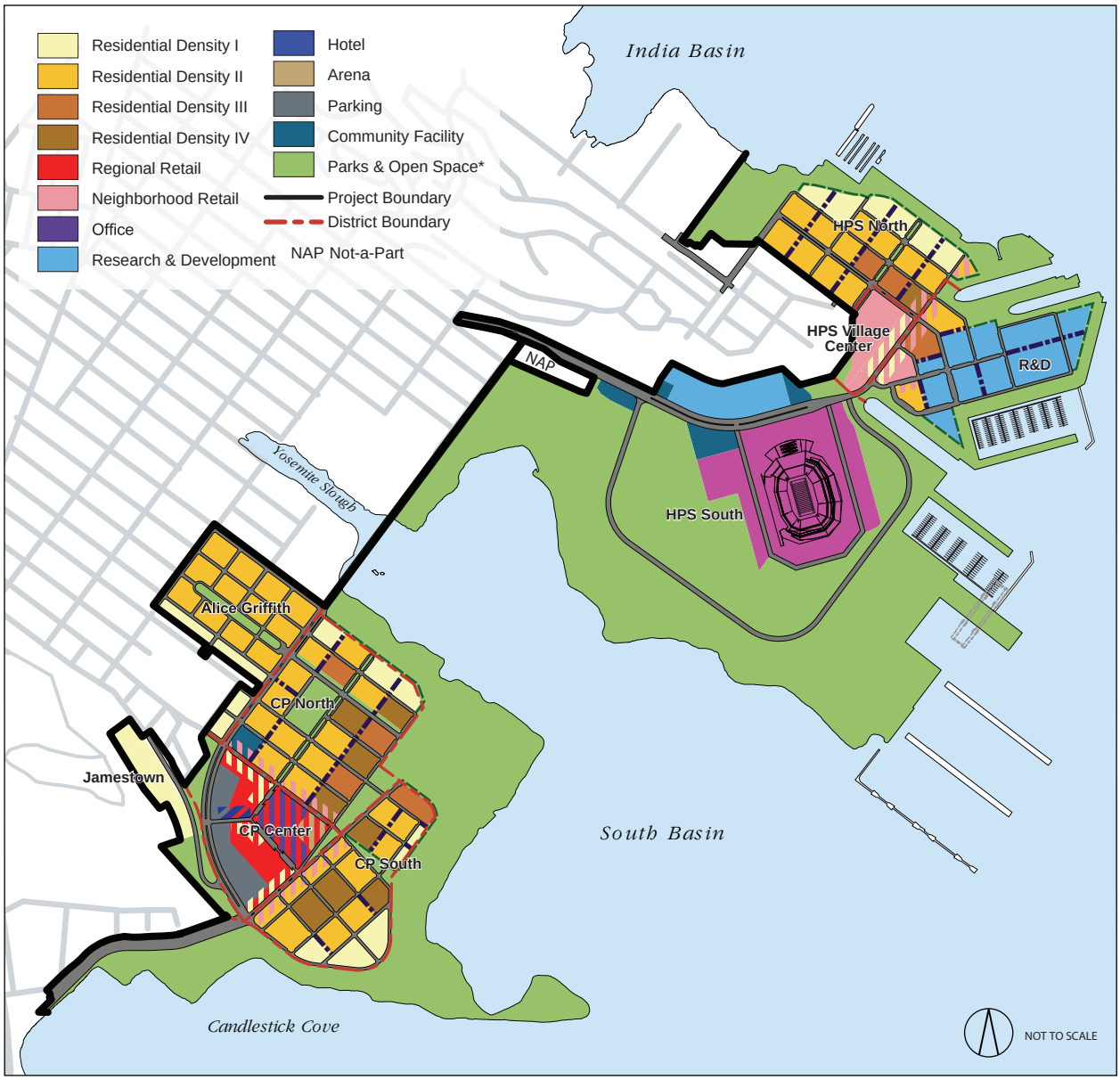
To document that there would be no change with respect to Transportation and Circulation, Air Quality, or Greenhouse Gas Emissions, refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010), Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010), and Appendix T7 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Subalternative 4A, March 15, 2010).

Revised analyses for Aesthetics, Hydrology, and Greenhouse Gases are discussed, below.

Aesthetics

To provide for the same land use program as the Project, the height of some buildings in the R&D District of HPS Phase II would be greater than that analyzed under the Project to accommodate the displaced R&D resulting from preserving Buildings 211, 224, 231, and 253. The structures in the R&D District immediately west of the buildings to be preserved would increase from 85 feet maximum with the Project to 120 feet maximum with Subalternative 4A. Refer to Figure VI-3b (Subalternative 4A Maximum Building Heights) above, showing areas that would have maximum heights of 65 feet, 85 feet, or 120 feet, compared to 65 feet to 105 feet with the Project. For reference, existing Building 211 is about 45 feet in height, Building 231 is about 80 feet, and Building 253 ranges from 70 feet to 122 feet (and to 158 feet at the top of its tower element).

Figure VI-3c (Subalternative 4A View 18a: Southeast from Hilltop Open Space) is a visual simulation of building height and massing of Subalternative 4A from a viewpoint on Hillpoint Park. As noted in this figure, the proposed building heights with Subalternative 4A would still preserve expansive Bay views. From long distances, the change would be relatively unnoticeable, and, thus, would not adversely affect scenic vistas. From mid-range views as identified for the Project, the changes in height would be noticeable, but the residential towers at HPS would remain a predominant feature in the views from and to the north. The scale of development would be similar to other areas of San Francisco, such as parts of downtown or Rincon Hill. Development of Subalternative 4A would provide a continuation of the



SOURCE: Lennar Urban, 2010.

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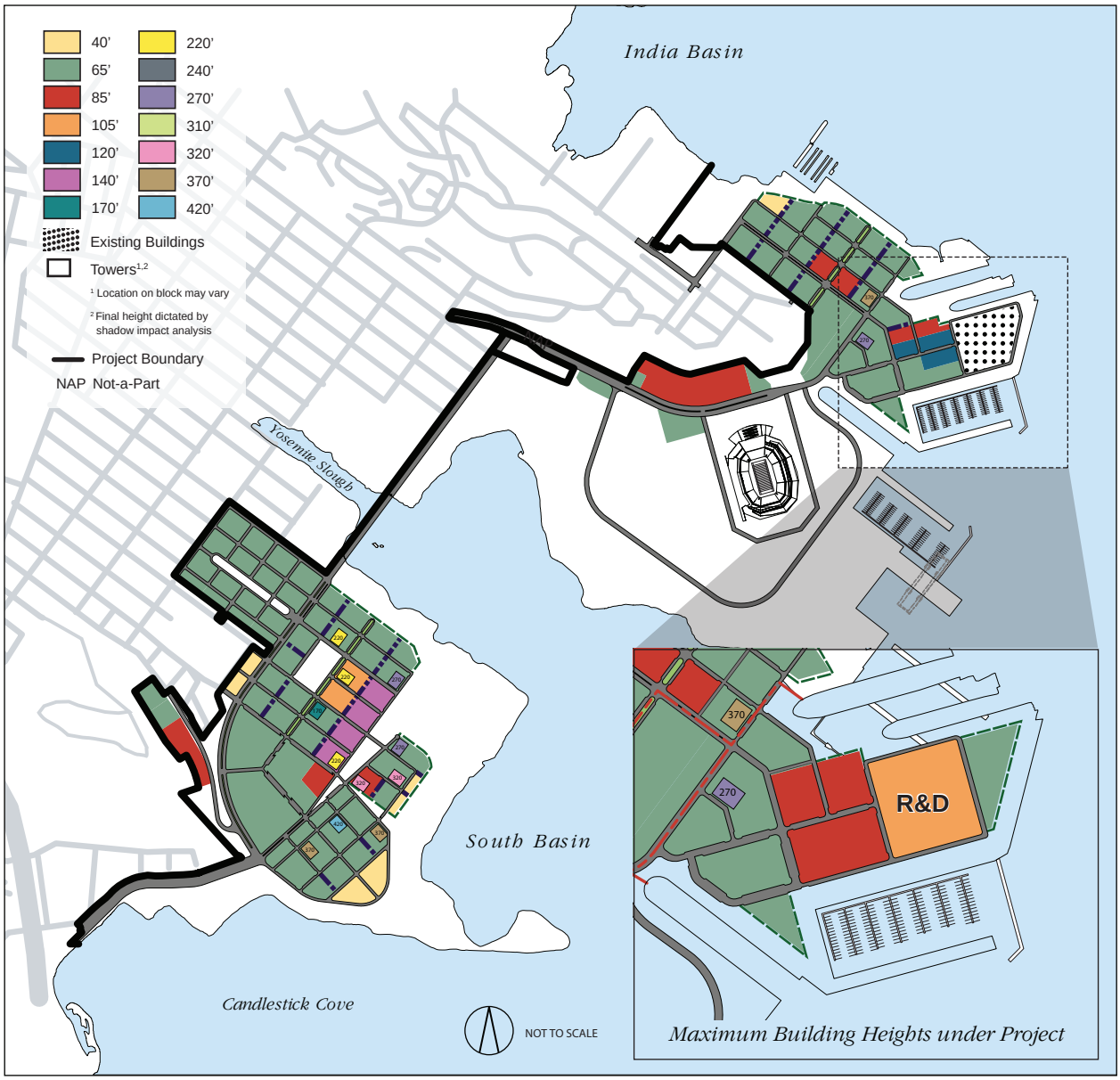
FIGURE VI-3a

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A LAND USE PLAN



SOURCE: Lennar Urban, 2010.

PBS&J 04.20.10 02056 | JCS | 10

FIGURE VI-3b

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A MAXIMUM BUILDING HEIGHTS

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE VI-3c

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A
VIEW 18a: SOUTHEAST FROM HILLTOP OPEN SPACE

existing street grid, thereby maintaining existing view corridors to the Bay and East Bay hills. Public access areas, both City and State parks, would maintain views from the Project site toward the East Bay and the Bay. Subalternative 4A would not result in additional tower clustering or other structures that would substantially obstruct, alter, or degrade the quality of views of the Bay or beyond from any long-range viewpoints. Views of Bayview Hill and Hunters Point Hill from the East Bay would be partially obstructed from Alameda and the Oakland area by Subalternative 4A structures; however, the amount of the obstruction would be minimal and not considered to be significant because of the distance across the Bay. Subalternative 4A development would not obstruct, alter, or degrade the quality of any existing views of the site from these locations. The impact on scenic vistas would remain less than significant, the same as for the Project.

With regard to impacts on scenic resources such as the Yosemite Slough, the Re-gunning crane, Double Rock, Bayview Hill, and Hunters Point Hill, the somewhat taller building heights in the R&D District are far from all of these features except the gantry crane and Hunters Point Hill. Hunters Point Hill is a prominent scenic resource west of the HPS Phase II site and would remain intact with development of Subalternative 4A. Views of Bayview Hill would not be significantly obstructed by Subalternative 4A development in HPS Phase II except from close-in vantage points. Subalternative 4A would retain structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, as well as the Re-gunning crane, a highly visible feature. The Re-gunning crane is so large and visible that an increase in some building heights of 35 feet at the center of the R&D District would have no discernable impact on this visual resource. Development of the HPS Phase II site would also include about 240 acres of new and renovated parkland with improved public access, thereby improving the scenic quality of the area. The proposed shoreline improvements and construction of the new marina would improve the aesthetic quality of the shoreline along HPS Phase II, reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline.

The CRHR-eligible historic district as part of Subalternative 4A would be bounded by new R&D development to the west and by the shoreline areas of HPS and San Francisco Bay to the north and south. Structures in the historic district, including Buildings 208, 211, 224, 231, and 253, are large-scale industrial buildings ranging from 45 feet to 122 feet, with part of Building 253 rising to 158 feet. While R&D development up to 120 feet in height would be a different design than most of the existing structures in the historic district, that new development would not alter the visual setting of the historic district such that its integrity would be impaired. In addition, the historic district would retain its waterfront setting, including the drydocks. Therefore, development at the HPS Phase II site under Subalternative 4A, as for the Project, would not have significant adverse impacts on scenic resources or other features that contribute to a scenic public setting, and the impact would be less than significant. No mitigation is required.

The height modifications in the R&D District under Subalternative 4A would not increase any impacts to visual character. The towers to be developed on HPS Phase II would remain the predominant visual element in terms of buildings, and the additional heights of some of the R&D buildings would not affect the planned urban character of the site. Subalternative 4A would replace deteriorating structures, vacant parcels, expanses of asphalt and dirt, and piles of rubble and debris with a high-quality environment that

would include a variety of architectural styles and open space. Therefore, Subalternative 4A, in replacing existing uses and structures, and in light of the analysis of changes in visual conditions presented throughout Section III.E (Aesthetics) of the EIR, would not substantially degrade the visual quality or character of the HPS Phase II site or its surroundings and the impact would be less than significant. No mitigation is required.

The wave protection berm for the historic district and the grade change from the remainder of HPS development would result in a "step-down" effect from the western portions of the R&D District to this area. The resulting visual change would be less than significant.

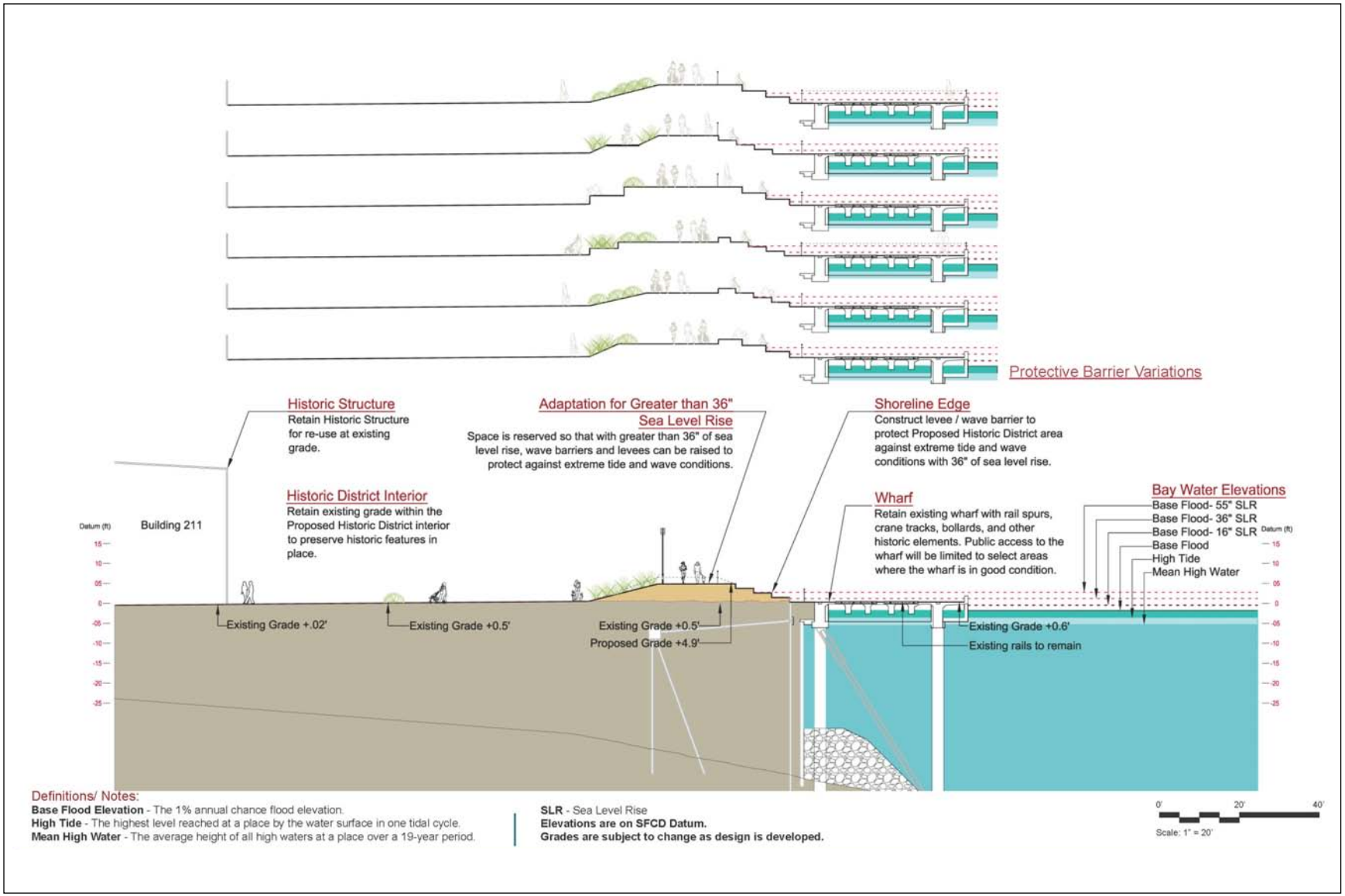
The wave protection berm would alter the view of visitors and employees in the area of the rehabilitated buildings toward the Bay, but since the berm is only 3 feet high, it would not block views. The Bay Trail would be located on top of this berm in some areas, and outside the berm in others. Refer to Figure VI-3d (Subalternative 4A: Conceptual Berm Design for Historic Preservation Area) for a conceptual drawing of the proposed berm. The impacts would be less than significant, the same as for the Project.

Hydrology and Water Quality (Sea Level Rise)

To address sea level rise, Alternative 4 would raise the grade at the site of Buildings 208, 211, 224, 231, and 253 to match the grade on the remainder of the development at HPS Phase II, i.e., 3.5 feet above the Base Flood Elevation, as required by mitigation measure MM HY-12a.1. Subalternative 4A, instead, would maintain the existing grade at the site of Buildings 208, 211, 224, 231, and 253, allowing railroad spurs and other historic elements such as bollards, to remain. To protect the historic district from potential sea level rise, a wave protection berm would be constructed around the eligible historic district to accommodate a 36-inch sea level rise, on top of which the Bay Trail would be constructed. The remainder of the site would be graded in accordance with MM HY-12a.1. The impact would be less than significant, the same as for the Project.

Greenhouse Gas Emissions

Implementation of Subalternative 4A would result in baseline GHG emissions similar to the Project and would include the GHG emission reductions associated with mitigation measures, including MM GC-1 through MM GC-4, which require the implementation of the Project Applicant's conceptual commitments to (1) reduce energy use to 15 percent below Title 24 2008 standards for all development components, and (2) use ENERGY STAR appliances for all appliances installed by builders in residential units. This subalternative would also be required to comply with the City's Green Building Ordinance, per Chapter 13C of the *Environment Code*. The existing building space may not be as energy efficient as newly built structures. Therefore, there may be a slight increase in GHG emissions compared to the Project due to this small amount of R&D building space that is contained in the historic buildings. Otherwise, there would be no difference in the greenhouse gas emissions impacts of Subalternative 4A compared to the Project.



SOURCE: RHAA, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE VI-3d

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A: CONCEPTUAL BERM DESIGN FOR HISTORIC PRESERVATION AREA

Page VI-160, second paragraph

Alternative 1 (No Project) would reduce Project impacts because development would only occur at HPS Phase II, resulting in reduced construction-related impacts and fewer or less substantial operational impacts due to the reduced population and employment growth. Alternative 2 (CP-HPS Phase II Development Project, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge) would avoid Project impacts related to biological resources, water quality, and hazardous materials because the Yosemite Slough bridge would not be constructed. However, because the Yosemite Slough bridge would not be constructed, Alternative 2 would result in increased traffic-related impacts~~, particularly~~ on game days. … Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation, No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge) would reduce the most significant Project impacts to a less-than-significant level (reduced traffic-related air quality and noise impacts, avoidance of historic resource impacts, and avoidance of construction-related impacts to water quality and biological resources because the bridge and marina would not be constructed). Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) would avoid the significant Project impacts to historic resources, but all other impacts would be the same as for the Project. Alternative 5 (Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge) would avoid Project impacts related to biological resources, water quality, and hazardous materials because the Yosemite Slough bridge would not be constructed. However, because the Yosemite Slough bridge would not be constructed, Alternative 5 would result in increased traffic-related impacts resulting from population and employment growth at HPS Phase II. Alternative 4 would be the environmentally superior alternative. However, this Alternative would not meet the objectives to the same extent as the Project.

Page VI-173, Table VI-12 (Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised to correct typographical errors. Table VI-12 is identical Table ES-1d; however, Table VI-12 only includes those rows with text that has changed, whereas Table ES-1d contains all of the significant and unavoidable impacts, similar to Table VI-12 in the Draft EIR.]

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
Impact TR-1 The Project would result in construction-related transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-2 Implementation of the Project would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Project travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Project and the Project's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-3 The Project would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Project vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-4 At the intersection of Tunnel/Blanken, the Project would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Project	~~<~~=	=	~~<~~=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~LTS~~SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
Impact TR-10 The Project would result in significant Project traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
Impact TR-27 The Project would increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. Implementation of mitigation measures MM TR-27.1 and MM TR-27.2 would reduce impacts to transit operations. However, since feasibility of MM TR-27.1 is uncertain, and since MM TR-27.2, without MM TR-27.1, would reduce, but not completely avoid, impacts on the 28L-19th Avenue/Geneva Limited, Project impacts and Project contributions to cumulative impacts on the 28L-19th Avenue/Geneva Limited would remain significant.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~NI~~SU	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
NOISE					
Impact NO-2 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 activity on adjacent parcels is complete. Although the Project's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Project	~~<~~=	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-3 Construction activities associated with the Project would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Project	<	=	~~<~~=	~~<~~=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-6 Operation of the Project would generate increased local traffic volumes that could cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Project	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-180, Table VI-13 (Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-13 Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The R&D Variant would result in construction-related transportation impacts in the R&D Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the R&D Variant vicinity.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the R&D Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The R&D Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the R&D Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the R&D Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
The R&D Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-13 Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the R&D Variant 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 ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	~~<~~=	~~<~~=	~~>~~=	~~>~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
Construction activities associated with the R&D Variant 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 activity on adjacent parcels is complete. Although the R&D Variant's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	~~<~~=	=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the R&D Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	~~<~~=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the R&D Variant 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.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-185, Table VI-14 (Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-14 Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Housing Variant would result in construction-related transportation impacts in the Housing Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Housing Variant vicinity.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Housing Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Housing Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Housing Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Housing Variant contributions at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions were determined to be significant, and no feasible mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	~~<~~=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Housing Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-14 Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the Housing Variant 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 ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
…					
Construction activities associated with the Housing Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Housing Variant 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.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
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SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-194, new Table VI-14a (Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant to Each of the Alternatives) has been inserted (for readability, text is not underlined)

[NOTE: This table has been inserted to include information concerning Variant 2A.]

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Housing/R&D Variant would result in construction-related transportation impacts in the Housing/R&D Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Housing/R&D Variant vicinity.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Housing/R&D Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Housing/R&D Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Housing/R&D Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Housing/R&D Variant contributions at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions were determined to be significant, and no feasible mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant's contributions 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, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-6 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Housing/R&D Variant contributions at the intersections of Bayshore/Geneva, which would operate at LOS F under 2030 No Project conditions, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-8 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant traffic impacts on freeway conditions.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts at four freeway on-ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant cumulative traffic impacts at freeway ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts related to freeway diverge queue storage at the Harney/US-101 Northbound Off-ramp. Mitigation measure MM TR-6 has been identified to avoid this impact, but its implementation is uncertain. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant cumulative traffic impacts related to freeway diverge queue storage at some off-ramp locations. Mitigation measure MM TR-6 has been identified to avoid this impact at the US-101 Northbound off-ramp to Harney Way, and US-101 Southbound Off-ramp to Harney Way/Geneva Avenue. However, implementation is uncertain. For the other ramps, no feasible mitigations have been identified. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Housing/R&D Variant 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. Implementation of mitigation measures MM TR-21.1 and MM TR-21.2 could reduce impacts to transit operations. However, since feasibility of MM TR-21.1 is uncertain, and since MM TR-21.2, without MM TR-21.1, would reduce, but not completely avoid, impacts on the 9-San Bruno, Project impacts and Project contributions to cumulative impacts on the 9-San Bruno would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion and contribute to cumulative conditions at intersections, which would increase travel times and impact transit operations of the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy. Feasibility of mitigation measures is unclear or would not completely avoid impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections along Gilman Avenue and Paul Avenue, which would increase travel times and would impact operations of the 29-Sunset. Implementation of mitigation measures MM TR-23.1 and MM TR-23.2 would reduce impacts to transit operations. However, since feasibility of MM TR-23.1 is uncertain, and since MM TR-23.2, without MM TR-23.1, would reduce, but not completely avoid, impacts on the 29-Sunset, Project impacts and Project contributions to cumulative impacts on the 29-Sunset would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street. Implementation of mitigation measures MM TR-24.1 and MM TR-24.2 would reduce impacts to transit operations. However, since feasibility of MM TR-24.1 is uncertain, and since MM TR-24.2, without MM TR-24.1, would reduce, but not completely avoid, impacts on the 48-Quintara-24th Street, Housing/R&D Variant impacts and Housing/R&D Variant contributions to cumulative impacts on the 48-Quintara-24th Street would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections in the study area, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the 54-Felton. Implementation of mitigation measure MM TR-25 would reduce, but not avoid impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Housing/R&D Variant 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. Implementation of mitigation measures MM TR-26.1 and MM TR-26.2 would reduce impacts to transit operations. However, since feasibility of MM TR-26.1 is uncertain, and since MM TR-26.2, without MM TR-26.1, would reduce, but not completely avoid, impacts on the T-Third, Project impacts and Project contributions to cumulative impacts on the T-Third would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. Implementation of mitigation measures MM TR-27.1 and MM TR-27.2 would reduce impacts to transit operations. However, since feasibility of MM TR-27.1 is uncertain, and since MM TR-27.2, without MM TR-27.1, would reduce, but not completely avoid, impacts on the 28L-19th Avenue/Geneva Limited, Project impacts and Project contributions to cumulative impacts on the 28L-19th Avenue/Geneva Limited would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant 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.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant 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.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant's proposed transit preferential treatments and significant increases in traffic volumes on Palou Avenue would result in impacts on bicycle travel on Bicycle Routes #70 and #170 between Griffith Street and Third Street. The effectiveness of mitigation is uncertain. Therefore, the impact would remain significant.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
For as many as 12 times a year 49ers games at the proposed stadium would result in significant impacts on study area roadways and intersections. Implementation of mitigation measure MM TR-38 would lessen game-day impacts; however, traffic impacts would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/NI	SU/NI

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The existing game day service and transit improvements would not be adequate to accommodate projected transit demand. Implementation of mitigation measure MM TR-39 would reduce game-day impacts on transit capacity; however, traffic impacts on transit operations would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/NI	SU/NI
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. Implementation of mitigation measure MM TR-46 would reduce but not avoid impacts.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
The existing transit service and Housing/R&D Variant 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.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Weekday evening events at the arena would exacerbate congestion at intersections, freeway mainline, and freeway ramps already operating at unacceptable LOS under Housing/R&D Variant conditions without an arena event, and result in significant traffic impacts at Harney Way and Jamestown Avenue, which was operating acceptably under Housing/R&D Variant conditions without an arena event. Mitigation measure MM TR-51 would reduce but not avoid impacts.					
Significance of Alternative Compared to Variant	<	=	<	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/SU	SU/SU
Sell-out weekday evening events at the arena could impact existing and proposed transit service.					
Significance of Alternative Compared to Variant	<	=	<	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/SU	SU/SU
AIR QUALITY					
Operation of the Housing/R&D Variant 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.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
NOISE					
Construction of the Housing/R&D Variant 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 construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Housing/R&D Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	<	<	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Housing/R&D Variant 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.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
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.					
Significance of Alternative Compared to Variant	=	>	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	NI/NI	NI/SU	NI/NI	NI/NI	NI/NI
CULTURAL RESOURCES					
The Housing/R&D Variant would result in a substantial adverse change in the significance of a historical resource. Implementation of mitigation measure MM CP-3b would reduce the impact, but not to a less-than-significant level. The impact would be significant and unavoidable.					
Significance of Alternative Compared to Variant	<	=	=	<	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/SU	SU/LTS	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt[b]*	*Alternative 3 49ers at Candlestick[c]*	*Alternative 4 Lesser Build with Historic Preservation[d]*	*Alternative 5 No Park Agreement[e]*

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development; Historic Preservation; State Parks Agreement: No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-194, Table VI-15 (Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-15 Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt[b]*	*Alternative 3 49ers at Candlestick[c]*	*Alternative 4 Lesser Build with Historic Preservation[d]*	*Alternative 5 No Park Agreement[e]*
TRANSPORTATION					
The Tower Variants would result in construction-related transportation impacts in the Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Tower Variants would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Variant and the Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-15 Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Tower Variants would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Tower Variants would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Tower Variants would result in significant Tower Variants traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
NOISE					
Construction of the Tower Variants 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 construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Tower Variants would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	~~<~~ =	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Tower Variants 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.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	~~<~~ =	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-15 Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-201, Table VI-16 (Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Utilities Variant would result in construction-related transportation impacts in the Utilities Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Utilities Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Utilities Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Utilities Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Utilities Variant and the Utilities Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Utilities Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Utilities Variant would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Utilities Variant would result in significant Variant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
AIR QUALITY					
Operation of the Utilities Variant 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 ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	~~<~~ =	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SUSU	SU/SU	SU/SU
NOISE					
Construction of the Utilities Variant 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 construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	~~<~~ =	=	~~<~~ =	~~<~~ =	~~<~~ =
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Utilities Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	~~<~~ =	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Operation of the Utilities Variant 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.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-208, Table VI-17 (Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The 49ers/Shared Stadium Variant would result in construction-related transportation impacts in the 49ers/Shared Stadium Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the 49ers/Shared Stadium Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Implementation of the 49ers/Shared Stadium Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing 49ers/Shared Stadium Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the 49ers/Shared Stadium Variant and the 49ers/Shared Stadium Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The 49ers/Shared Stadium Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the 49ers/Shared Stadium Variant would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	~~<~~ =	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The 49ers/Shared Stadium Variant would result in significant Variant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	~~<~~ =	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
For as many as 24 times a year 49ers/Raiders games at the proposed stadium would result in significant impacts on study area roadways and intersections. Implementation of mitigation measure MM TR-38 would lessen game-day impacts; however, traffic impacts would remain significant.					
Significance of Alternative Compared to Variant	<	~~<~~ =	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
The existing game day service and 49ers/Shared Stadium Variant transit improvements would not be adequate to accommodate projected transit demand. Implementation of mitigation measure MM TR-39 would reduce game-day impacts on transit capacity; however, traffic impacts on transit operations would remain significant.					
Significance of Alternative Compared to Variant	<	~~<~~ =	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
…					

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the 49ers/Shared Stadium Variant 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 ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	~~<~~=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
Construction of the 49ers/Shared Stadium Variant 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 construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the 49ers/Shared Stadium Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the 49ers/Raiders Shared Stadium Variant 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.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

F.31 Changes to Chapter VIII (Acronyms/Abbreviations and Glossary)

Pages VIII-1 through -13

[NOTE: The acronyms/abbreviations table has been revised to add new acronyms included in responses to comments.]

Acronym/ Abbreviation	*Definition*
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 32	California Global Warming Solutions Act of 2006
ABAG	Association of Bay Area Governments
ACB	Articulated Concrete Block
ACBM	Asbestos Containing Building Materials
ACORN	Association of Community Organizations for Reform Now
ADA	American Disabilities Act
ADMP	Asbestos Dust Mitigation Plan
ADRP	Archaeological Data Recovery Plan
AEP	Association of Environmental Professionals
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
Agency	San Francisco Redevelopment Agency
Agency Commission	San Francisco Redevelopment Agency Commission
AGO	California Attorney General's Office
ALS	Advanced Life Support
AMI	Area Median Income
AMP	Archaeological Monitoring Program
ANSI	American National Standards Institute
AOC	Administrative Order of Consent
ARB	California Air Resources Board
ARDTP	Agency for Toxic Substances and Disease Registry
ARIC	Area Requiring Institutional Controls
AST	Above-Ground Storage Tank
AT&T Park	San Francisco Giants Ballpark
ATCM	Asbestos Airborne Toxic Control Measure
ATP	Archaeological Testing Plan
ATSDR	Agency for Toxic Substances and Disease Registry
AWSC	All-Way Stop Controlled
AWSS	Auxiliary Water Supply System
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Basin Plan	San Francisco Bay Basin Water Quality Control Plan
BASMAA	Bay Area Stormwater Management Agencies Association
BAT	Best Available Technology Economically Achievable
BAU	Business as Usual
Bay	San Francisco Bay
Bay Area	San Francisco Bay Area

Acronym/ Abbreviation	*Definition*
Bay Plan	San Francisco Bay Plan
Bay Trail	San Francisco Bay Trail
Bay Trail Plan	San Francisco Bay Trail Plan
BayCAMP	Bayview Community Air Monitoring Project
BCDC	San Francisco Bay Conservation and Development Commission
BCT	Best Conventional Pollutant Control Technology
BERA	Baseline Ecological Risk Assessment
BFE	Base Flood Elevation
BIT	Bayview Industrial Triangle
BLIP	Branch Library Improvement Program
BLS	Basic Life Support
BMPs	Best Management Practices
Board of Supervisors	San Francisco Board of Supervisors
BOE	Bureau of Engineering
Boundaries Analysis	San Francisco Police Department District Station Boundaries Analysis
BRAC	Base Realignment and Closure
Brisbane Baylands North	Brisbane Baylands Future Phase Area
Brisbane Baylands South	Brisbane Baylands Phase I Specific Plan Area
BRT	Bus Rapid Transit
BTI	Bayview Transportation Improvements
BTIP	Bayview Transportation Improvements Project
BVHP	Bayview Hunters Point
BVHP Area Plan	Bayview Hunters Point Area Plan
BVHP Redevelopment Plan	Bayview Hunters Point Redevelopment Plan
BWWF	Bayside Wet Weather Facilities
C&D	Construction and Demolition
C&R	Comment and Response
C-1 Baylands	Commercial Mixed-Use Zoning District
C_2F_6	PFC: Hexafluoroethane
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAC	Citizens Advisory Committee
CAFE	Corporate Average Fuel Economy
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Department of Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Climate Action Plan (as used in the Greenhouse Gas Emissions section)
CAP	Corrective Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARE	Community Air Risk Evaluation
CAT	Climate Action Team
CBC	California Building Code
CCAR	California Climate Action Registry
CCBA	Core Community Benefits Agreement
CCCC	California Climate Change Center

Acronym/ Abbreviation	*Definition*
CCR	California Code of Regulations
CCSF	City and County of San Francisco
CCTA	Contra Costa Transportation Authority
CDC	Centers for Disease Control
CDFG	California Department of Fish and Game
CDPH	California Department of Public Health
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission
CEG	Certified Engineering Geologist
Central Bay	San Francisco Bay Central
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Cleanup and Liability Act
CESA	California Endangered Species Act of 1984
CEUS	California Commercial End-Use Survey
CF_4	PFC: Tetrafluoromethane
CFCs	Chlorofluorocarbons
CFD	Community Facilities District
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CIE	Cultural/Institutional/Educational
City	City and County of San Francisco
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Program
CMTP	Construction Management Traffic Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COG	Council of Governments
Concept Plan	Bayview Hunters Point Community Revitalization Concept Plan
Construction General Permit	NPDES General Permit for Storm Water Discharges Associated with Construction Activity
Corps	United States Army Corps of Engineers
CP	Candlestick Point
CP-HPS Phase II	Candlestick Point–Hunters Point Shipyard Phase II
CPSRA	Candlestick Point State Recreation Area
CPSRA General Plan	Candlestick Point State Recreation Area General Plan
CPUC	California Public Utilities Commission
CPX	Candlestick Point Downtown Express
CRHR	California Register of Historic Resources
CSLC	California State Lands Commission

Acronym/ Abbreviation	*Definition*
CSMP	Construction Site Monitoring Program
CSO	Combined Sewer Overflow
CTC	California Transportation Commission
CTMP	Construction Transportation Management Plan
CTTP 2000	Census 2000 Transportation Planning Package
CWA	Clean Water Act of 1977
CY	Cubic Yards
D4D	Design for Development
dBA	A-weighted decibel scale
DBH	Diameter at Breast Height
DBI	Department of Building Inspection
DCP	Dust Control Plan
DDA	Disposition and Development Agreement
DDC	Deep Dynamic Compaction
DDT	Dichlro-diphenyl-trichloroethane
DEIS	Draft Environmental Impact Statement
Demand Report	2004 San Francisco Retail Water Demands and Conservation Potential Report
DHS	California Department of Health Services
DMMO	Dredged Material Management Office
DOD	Department of Defense
DOE	United States Department of Energy
DOT	United States Department of Transportation
DPH	Department of Public Health
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
DPS	Distinct Population Segment
DPW	Department of Public Works
DTSC	California Department of Toxic Substances Control
Dust Ordinance	Construction Dust Control Ordinance
DWR	Department of Water Resources
EAM	Early Action Measure
eb	East Bound
EC	Elemental carbon
EE	Environmental Evaluation
EFH	Essential Fish Habitat
EHS	Electromagnetic hypersensitivity
EHSP	Environmental Health and Safety Plan
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act of 2007
EMFAC	Emission Factor Model
EMS	Emergency Medical Services
EMS	Environmental Management System (as used in the Utilities section)
ENA	Exclusive Negotiations Agreement
ENVIRON	ENVIRON International Corporation

Acronym/ Abbreviation	*Definition*
EPA	United States Environmental Protection Agency
ERA	Ecological Risk Assessment
ERM	Effects Range Median
ERO	Environmental Review Officer
ESA	Environmental Site Assessment (as used in the Hazards and Hazardous Materials section)
ESA	Endangered Species Act (as used in the Biological Resources section)
ESCP	Erosion and Sediment Control Plan
ESUs	Evolutionary Significant Units
ETCA	Early Transfer Cooperation Agreement
F	Fahrenheit
FAA	Federal Aviation Administration
FAC	Facultative
FACW	Facultative Wetland
FARR	Final Archaeological Resources Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FFA	Federal Facilities Agreement
FHWA	Federal Highway Administration
Findings	Findings of Fact
FIRM	Flood Insurance Rate Map
FMP	Fisheries Management Plan
FOSET	Finding of Suitability for Early Transfer
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability Transfer
FS	Feasibility Study
FTA	Federal Transit Administration
FTE	Full-time Equivalent
g	Gravity
GCMs	General Circulation Models
GE	California Registered Geotechnical Engineer
General Plan	San Francisco General Plan
Geomatrix	Geomatrix Consultants, Inc.
GGBHTD	Golden Gate Bridge, Highway, and Transportation District
GGNRA	Golden Gate National Recreation Area
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GMP	Gas Monitoring Probe
GP Guidelines	General Plan Guidelines 2003
GPM	Gallons Per Minute
GPR	Green Point Rated
GPRC	Geotechnical Peer Review Committee
GRACE	Gravity Recovery and Climate Experiment
gsf	Gross Square Feet
GWP	Global Warming Potential
HABS	Historic American Building Survey

Acronym/ Abbreviation	*Definition*
HAER	Historic American Engineering Record
HASP	Health and Safety Plan
HBO	Home Based Other Trip
HBS	Home Based Shopping
HBW	Home Based Work
HCD	Housing and Community Development
HCM	Highway Capacity Manual
HCM	Highway Capacity Manual
HFCs	Hydrofluorocarbons
HHRA	Human Health Risk Assessment
HHWP	Hetch Hetchy Water and Power
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
HMFRA	Housing and Fair Market Development Metro Fair Market Rent Area
Housing Program	Citywide Tax Increment Housing Program
Housing Variant	Variant 2: No Stadium – Housing Variant
HOV	High Occupancy Vehicle
HPRP	Hunters Point Redevelopment Plan
HPS	Hunters Point Shipyard
HPS Phase II	Hunters Point Shipyard Phase II
HPS Redevelopment Plan	Hunters Point Shipyard Redevelopment Plan
HPX	Hunters Point Shipyard Downtown Express
HR 2764	The Consolidated Appropriations Act of 2008
HRA	Historical Radiological Assessment
HRE	Historic Resource Evaluation
HSRA	High-Speed Rail Authority
HTL	High Tide Level
HUD	US Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
I-280	Interstate 280
IB	India Basin
IBC	International Building Code
IBIP	India Basin Industrial Park
ICBO	International Conference of Building Officials
ICC	International Code Council
ICs	Institutional Controls
IEPR	Integrated Energy Policy Report
Industrial General Permit	NPDES General Industrial Permit for Discharges of Storm Water Associated with Industrial Activities
Interim CIP	Wastewater Enterprise Interim Capital Improvement Program
IPCC	Intergovernmental Panel on Climate Change
IR Sites	Installation Restoration Sites
IRP	Installation Restoration Program
IS	Initial Study
ITE	Institute of Transportation Engineers

Acronym/ Abbreviation	*Definition*
ITL	Interim Target Level
JARPA	Joint Aquatic Resources Permit Applications
JPB	The Peninsula Corridor Joint Powers Board
K	Kindergarten (as used in the Public Services section)
KJ	Franciscan Complex
Kyoto Protocol	United Nations' Framework Convention on Climate Change Agreement
lbs	pounds
LCA	Life Cycle Assessment
LCFS	Low Carbon Fuel Standard
LEED®	Leadership in Energy and Environmental Design
Lennar Urban	Lennar/Bayview Hunters Point Limited Liability Corporation
L_{eq}	Average Noise Level
LID	Low Impact Development
LIFOC	Lease in Furtherance of Conveyance
L_{max}	Highest Peak Noise
L_n	Statistical Sound Level
LOMR-F	Letter of Map Revision Based on Fill
LOS	Level of Service
Lower Bay	San Francisco Bay Lower
LRT	Light Rail Transit
LRV	Light-Rail Vehicle
LRV	Light Rail Vehicle
LTMS	Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region
LTS	Less-Than-Significant Impact
LTS/M	Less-Than-Significant Impact with Mitigation
LUCRD	Land Use Control Remedial Designs
LUPs	Linear Underground/Overhead Projects
LWCF	Land and Water Conservation Fund
LWCFA	Land and Water Conservation Fund Act of 1965
M	Moment Magnitude (as used in the Geology and Soils section)
M	Manufacturing
M-1	Light Industrial District
M-2	Heavy Industrial District
MBRs	Membrane Bioreactors
MBTA	Migratory Bird Treaty Act
MBtu	Million British Thermal Units
MC	Motor Coach
MEA	Major Environmental Analysis
MED	Medical and Health Services
MEI	Maximally Exposed Individual
MEP	Maximum Extent Practicable (as used in the Hydrology and Water Quality section)
MEP	Maximum Extent Possible (as used in the Hydrology and Water Quality section)
MGD	Million Gallons per Day

Acronym/ Abbreviation	*Definition*
MHW	Mean High Water
MID	Modesto Irrigation District
MIP	Management and Information Professional Services
Mitigation Monitoring Plan	Wetland and Jurisdictional Waters Mitigation Monitoring Plan
MLD	Most Likely Descendant
MLLW	Mean Lower Low Water
MM	Mitigation Measure
MMI	Modified Mercalli Intensity
MMPA	Marine Mammal Protection Act
MMRP	Mitigation Monitoring and Report Program
$MMTCO_2E$	Million Metric Tons of CO_2-Equivalent
MOA	Memorandum of Agreement
MPH	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Act
MT	Metric Tonnes
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MU	Mixed-Use
Muni	San Francisco Municipal Railway
Municipal Stormwater General Permit	Phase II NPDES General Permit for the Discharge of Storm Water from Small MS4s
N_2O	Nitrous Oxide
NAHC	Native American Heritage Commission
NALs	Technology-Based Numeric Action Levels
NASA	National Aeronautics and Space Administration
NAT	No Action Taken
NAVD88	North American Vertical Datum of 1988
Navy	United States Navy
nb	North Bound
NC	Neighborhood Commercial
NC-1	Neighborhood Commercial Cluster
NC-2	Small-Scale Neighborhood Commercial
NCD-IB	Neighborhood Commercial District, India Basin
NCP	National Contingency Plan
NEHRP	National Earthquake Hazards Reduction Program
NELs	Technology-Based Numeric Effluent Limitations
NEP	New Expenditure Plan
NEPA	National Environmental Policy Act
NFA	No Further Action
NFIP	National Flood Insurance Program
NFL	National Football League
NGVD29	National Geodetic Vertical Datum
NHB	Non-home Based

Acronym/ Abbreviation	*Definition*
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic Safety Administration
NI	No Impact
NMFS	National Marine Fisheries Services
NO_2	Nitrogen Dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPRA	National Parks and Recreation Association
NPS	National Park Service
NPSs	Nonpoint Sources (as used in the Hydrology and Water Quality section)
NPWWF	North Point Wet Weather Facility
NRC	National Resource Council
NRDL	Naval Radiological Defense Laboratory
NRHP	National Register of Historic Places
NSC	No Significant Contribution
NSMCSD	North San Mateo County Sanitation District
NTP	Neighborhood Transportation Plan
NURP	Nationwide Urban Runoff Program
NWIC	California Archaeological Site Survey Northwest Information Center
O&G	Oil and Grease
O_3	Ozone
OAL	Office of Administrative Law
OBL	Obligate
°F	degrees Fahrenheit
OHW	Ordinary High Water
OPA	Owner Participation Agreement
OPR	California Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Agency
P	Public
PA	Programmatic Agreement
PA	Public Address System (as used in the Noise and Vibration section)
PA&ED	Project Approval and Environmental Document
PA/SI	Preliminary Assessment and Site Identification
PAC	Bayview Hunters Point Project Area Committee
PAHs	Polycyclic Aromatic Hydrocarbons
Pathogens	Bacteria and Viruses
Pb	Lead
pc/h	Passenger cars per hour
pc/mi/ln	Passengers cars per mile per lane
PCBs	Polychlorinated Biphenyls

Acronym/ Abbreviation	*Definition*
PCC	Portland Concrete Cement
PCEs	Primary Constituent Elements
PCOs	Parking Control Officers
PCWQCA	Porter-Cologne Water Quality Control Act
PDF	Project Design Feature
PDR	Production, Distribution, and Repair
PDT	Pacific Daylight Time
PE	Professional Engineer
PEIR	Program Environmental Impact Report
Peninsula	San Francisco Bay Area Peninsula
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric
Phase I ESA	Phase I Environmental Site Assessment
PI	Project Impact
Pier 80 Outfall	Southeast Pollution Control Outfall
Planning Code	San Francisco Planning Code
Planning Commission	San Francisco Planning Commission
Planning Department	San Francisco Planning Department
PM	Particle Matter
PM_{10}	Respirable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
Port	Port of San Francisco
ppm	Parts per Million
PPRF	Pulse Plasma Rock Fragmentation
PRC	Public Resources Code
PRDs	Permit Registration Documents
PRMMP	Paleontological Resources Monitoring and Mitigation Program
Project	Candlestick Point–Hunters Point Shipyard Phase II Development Plan Project
PSSG	Public Safety Strategies Group
PST	Pacific Standard Time
PV	Photovoltaic
Qaf	Artificial Fill
Qc	Colma Formation
Qm	Bay Mud Deposits
QMS	Quality Management System
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Qsr	Slope Debris and Revise Fill
Qu	Undifferentiated Sedimentary Deposits
R Value	Rainfall Erosivity Value
R&D	Research and Development
R&D Variant	Variant 1: No Stadium – Additional Research and Development Variant
RAP	Rammed Aggregate Piers
RBCA	Risk Based Corrective Action
RCRA	Resource Conservation and Recovery Act

Acronym/ Abbreviation	*Definition*
RD	Remedial Design
REAP	Rain Event Action Plan
REB	Resource Efficient Building
RECs	Recognized Environmental Conditions
Recycled Water General Permit	General Waste Discharge Requirements for Landscaping Irrigation Uses of Municipal Recycled Water
RET	Retail
RFS	Renewable Fuel Standard
RFS	Renewable Fuel Standard
RH-1	Residential House One-Family District
RH-1D	Residential House Character District
RH-2	Residential House Two-Family District
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIC	Rapid Impact Compaction
RM-1	Residential, Mixed District
RM-2	Residential, Mixed Moderate Density District
RMP	Risk Management Plan
ROD	Record of Decision
ROG	Reactive Organic Gas
ROWD	Report of Waste Discharge
RPD	San Francisco Recreation and Park Department
RPP	Residential Permit Parking
RPS	Renewables Portfolio Standard
RTAC	Regional Targets Advisory Committee
RTPs	Regional Transportation Plans
RUSLE	Revised Universal Soil Loss Equation
RV	Recreational Vehicle
RWMP	Recycled Water Master Plan
RWQCB	Regional Water Quality Control Board
RWS	Regional Water System
RWSAP	Retail Water Shortage Allocation Plan
SACOG	Sacramento Area Council of Governments
SamTrans	San Mateo County Transit Districts
SAP	Special Area Plan
SB	Senate Bill
sb	South Bound
SC	Specific Conductance
SC	Standard Condition (as used in the Climate Change section)
SC/PI	Significant Contribution/Project Impact
SCBA	Self-Contained Breathing Apparatus
SCC	California State Coastal Conservancy
SCP	Stormwater Control Plan
SDMP	Stormwater Drainage Master Plan

Acronym/ Abbreviation	*Definition*
Seaport Plan	San Francisco Bay Area Seaport Plan
SEIS	Supplemental Environmental Impact Statement
SF_6	Sulfur Hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFBC	San Francisco Building Code
SFCAP	San Francisco Climate Action Plan
SFCD	San Francisco City Datum
SF-CHAMP	San Francisco County's travel demand model
SFCTA	San Francisco County Transportation Authority
SFDPH	San Francisco Department of Public Health
SFDPW	San Francisco Department of Public Works
SFEI	San Francisco Estuary Institute
SFFD	San Francisco Fire Department
SFGSP	San Francisco Groundwater Supply Project
SFHA	San Francisco Housing Authority
SFHA	Special Flood Hazard Area (as used in the Hydrology and Water Quality section)
SFMTA	The San Francisco Municipal Transportation Agency
SFO	San Francisco International Airport
SFPD	San Francisco Police Department
SFPL	San Francisco Public Library
SFPUC	San Francisco Public Utilities Commission
~~SFPUC~~	~~San Francisco Public Utilities Commission~~
SFRPD	San Francisco Recreation and Park Department
SFRWQCB	San Francisco Bay Regional Water Quality Control Board
SFUSD	San Francisco Unified School District
SGMP	Soil and Groundwater Management Plan
SHPO	State Historic Preservation Officer
SI	Site Identification
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SLERA	Screening-Level Ecological Risk Assessment
SO_2	Sulfur Dioxide
SoMa	South of Market
SP	Service Population
SPP	Spill Prevention Plans
SPT	Standard Penetration Test
SRA	State Recreation Area
SRRE	Source Reduction and Recycling Element
SSSC	Side-Street Stop Controlled
Stormwater Design Guidelines	Draft San Francisco Stormwater Design Guidelines
SU	Significant and Unavoidable Impact
SUD	Special Use District
SVE	Soil Vapor Extraction System
SVOCs	Semi-Volatile Organic Compounds

Acronym/ Abbreviation	*Definition*
SVP	Society for Vertebrate Paleontology
SWIS	Solid Waste Information
SWMP	Site Waste Management Plan (as used in the Utilities section)
SWMP	Stormwater Management Plan (as used in the Hydrology and Water Quality section)
SWPCP	Southeast Water Pollution Control Plant
SWPPP	Storm Water Pollution Prevention Plans
SWRCB	State Regional Water Quality Control Board
TAC	Toxic Air Contaminants
TAR	Third Assessment Report
TAZ	Traffic Analysis Zones
TBD	To Be Determined
TC	Trolley Coach
TCRA	Time Critical Removal Action
TDM	Transportation Demand Management
TDM Plan	Transportation Demand Management Plan
TDS	Total Dissolved Solids
TEP	Transit Effectiveness Project
TEPHd	Total Extractable Petroleum Hydrocarbons as Diesel
Tg	Teragram
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
TNM	Traffic Noise Model
TOC	Total Organic Carbon
Tower Variants	Candlestick Point Tower Variants
TPH	Total Petroleum Hydrocarbons
TPS	Transit Preferential Street
TPS	Transit Preferential Street
Triple A	Triple A Machine Shop
TSDs	Treatment, Storage, and Disposal Facilities
TSS	Total Suspended Solids
UCSF	University of California, San Francisco
UPC	Universal Paragon Corporation
URBEMIS	Urban Emissions Model
US	United States
USDA	United States Department of Agriculture
US DOT	United States Department of Transportation
USEPA Levels	Information of Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety
US-101	United States Highway 101
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
USGS	United State Geological Survey

Acronym/ Abbreviation	*Definition*
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
v/c	Volume/Capacity
VCA	Voluntary Cleanup Agreement
VdB	Vibration Decibels
VDECS	Verified Diesel Emission Control Strategies
VIS	Visitor Lodging
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VOR	Vehicle Occupancy Rate
VTA	Santa Clara Valley Transportation Authority
V-Zones	Coastal High Hazard Areas
Waterfront Plan	Port of San Francisco Waterfront Land Use Plan
wb	West Bound
WDR	Waste Discharge Requirement
WEPA	Worker Environmental Awareness Program
WETA	San Francisco Bay Area Water Emergency Transportation Agency
WETA	Water Emergency Transit Authority
WHO	World Health Organization
WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan
WSAS	Water Supply Availability Study
WSIP	Water Supply Improvement Program
WTP	Water Treatment Plant
WWII	World War II
XII	Total Destruction on the Modified Mercalli Intensity Scale
ZVI	Zero-Valent Iron

F.32 Changes to Draft EIR Appendices

Appendices A1 through A5 have been added

[NOTE: Since publication of the Draft EIR, modifications have been made in the Project Development Schedule, as outline in Section B.1 (Project Refinements) of this document. These appendices present memoranda supporting the fact that the changes do not result in new or substantially more severe environmental impacts.]

Appendix D1 has been added

[NOTE: Since publication of the Draft EIR, some transit travel time increases associated with the Project have changed. A memorandum supplementing the Transportation Impact Study (Appendix D of the Draft EIR) is now included as Appendix D1.]

Appendix H3 has been revised

[NOTE: Appendix H3 has been revised in the main text and Attachment IV to conform to the revised text in Section III.H (Air Quality) and the text provided in Master Response 19 (Proposed BAAQMD Guidelines). While the other components

of Appendix H3 remain unchanged [Attachments I, II, III, V, and VI], the date of Appendix H3 has been changed in the footnotes and citations from September 28, 2009, which was the date of the appendix in the Draft EIR, to May 2010, to reflect the most current updates.]

Appendix H4 has been added

[NOTE: Appendix H4 presents additional analysis related to cumulative impacts and compliance with Article 38 of the San Francisco Health Code.*]*

Appendices J1 through J4 have been added

[NOTE: Two of the historical resources reports relied upon in the Draft EIR have been added as appendix material, rather than provided only as reference material, and two new historic resources reports (one related to the stadium and the other to the buildings and structures at HPS Phase II) have been added.]

Appendix N2 has been revised

[NOTE: Appendix N2 has been revised to include Yosemite Slough bridge plans and profiles for both the stadium and non-stadium options.]

Appendix Q2 has been revised

[NOTE: Appendix Q2 has been revised to include an additional water demand memorandum that presents results and analysis for Variant 2A (Housing/R&D Variant).]

Appendices T4 through T7 have been added

[NOTE: Since publication of the Draft EIR, modifications have been made to Variant 3 and Alternative 2, and Variant 2A and Subalternative 4A have been added. These appendices present memoranda supporting the fact that the changes do not result in new or substantially more severe environmental impacts.]

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