

4. ENVIRONMENTAL SETTING AND IMPACTS

INTRODUCTION

This chapter describes the existing environmental conditions in the Seawall Lot 337 and Pier 48 Mixed-Use Project (Mission Rock Project or proposed project) area, the regulatory framework applicable to the proposed project, the thresholds used to determine the significance of potential impacts, the construction and operational impacts that may occur as a result of project implementation, and measures to mitigate identified significant impacts.

ORGANIZATION OF THIS CHAPTER

Each environmental topic considered in this chapter comprises three primary sections: 1) setting, 2) regulatory framework, and 3) impacts and mitigation measures. An overview of the general organization and the information provided in the three sections is provided as follows:

- *Environmental Setting.* The setting section for each environmental topic provides a description of the baseline physical setting for the project site and its surroundings at the beginning of the environmental review process (e.g., existing land uses, noise environment, traffic conditions).
- *Regulatory Framework.* The regulatory section provides an overview of statutory and regulatory considerations that are applicable to the specific environmental topic.
- *Environmental Impacts.* The impacts and mitigation measures section for each environmental topic presents a discussion of the impacts (i.e., the changes to baseline physical environmental conditions) that could result from implementation of the proposed project. Where applicable, both construction and operational impacts are analyzed as well as project-specific and cumulative impacts. The section begins with the criteria of significance, which establish the metric by which significance is determined. The latter part of this section assesses the impacts occurring as a result of project implementation and mitigation measures, if required. Project impacts are organized into separate categories, based on the criteria listed in each topical section.

Impacts are numbered and shown in bold type, and the corresponding mitigation measures, where identified, are numbered and indented, following the impact statements. Impacts and mitigation measures are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., LU). The following symbols are used for individual topics:

LU: Land Use	WS: Wind and Shadow
AE: Aesthetics	PS: Public Services and Recreation
PH: Population and Housing	UT: Utilities and Service Systems
CP: Cultural and Paleontological Resources	BI: Biological Resources
TR: Transportation and Circulation	GE: Geology and Soils
NO: Noise	HY: Hydrology and Water Quality
AQ: Air Quality	HZ: Hazards and Hazardous Materials
GG: Greenhouse Gases	

ENVIRONMENTAL BASELINE

According to Section 15125 of the California Environmental Quality Act (CEQA) Guidelines:

An EIR must include a description of the physical environmental conditions in the vicinity of the project as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines an impact is significant.

This environmental impact report (EIR) generally uses conditions at the time of publication of the notice of preparation (NOP) (December 2013) with the addition of one additional project as the environmental baseline against which project impacts are determined. This project, Mission Bay Block 1, is currently under construction and will be fully operational by the time the proposed project is constructed. Because of this, the adjacency of Mission Bay Block 1 to the proposed project site, and the localized impacts that could result from its operation, this project was assumed in the (adjusted) baseline for the environmental topics of this Draft EIR. However, a further updated baseline is used for the transportation analysis to reflect the anticipated conditions at the time the project becomes operational. This is because there have been numerous approved, funded, or constructed changes to the transportation network in the vicinity since publication of the NOP. These changes include additional buildings or facilities that have been constructed since publication of the NOP, projects under construction as of July 2015, or projects that were approved and funded by July 2015 and that would be either under construction or completed before first occupancy of the proposed project. Additionally, the buildout year for the proposed project is 2023, and the cumulative analysis year is 2040.

The Central Waterfront and Mission Bay neighborhoods are currently experiencing rapid change and development. Under both land use assumptions, construction is projected to begin in 2017, then be phased over an approximately 6-year period, concluding in 2023. Proposed development is expected to involve four phases. The proposed project is likely to complete construction well after a number of approved transportation improvements and land use development projects are implemented. These projects were under construction as of the date of publication of the NOP or are approved and reasonably likely to be completed and occupied or in operation when the proposed project is expected to be implemented. The adjusted “existing conditions,” which include these development projects, form an appropriate baseline against which to measure many of the analysis topics in the EIR for the proposed project rather than the existing conditions as of the time when the NOP was published.

CEQA METHODOLOGY

Under (CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The guidelines for implementing CEQA direct that this determination be based on scientific and factual data, including the entire record for the proposed project, and not on argument, speculation, or unsubstantiated evidence. Each impact and mitigation measure section of this chapter is prefaced by specific criteria, which have been developed by the San Francisco Planning Department for use in determining whether an impact is significant.

CLASSIFICATION OF IMPACTS

Impacts are categorized by type of impact, as follows:

- *No Impact (NI)*. No adverse changes (or impacts) on the environment are expected.
- *Less than Significant (LS)*. An impact that would not involve an adverse physical change to the environment, does not exceed the defined significance criteria, or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations.
- *Less than Significant with Mitigation (LSM)*. An impact that is reduced to a less-than-significant level through implementation of the identified mitigation measures.
- *Significant and Unavoidable with Mitigation (SUM)*. An adverse physical environmental impact that exceeds the defined significance criteria and can be reduced through compliance with existing local, state, and federal laws and regulations and/or implementation of all feasible mitigation measures but cannot be reduced to a less-than-significant level.

- *Significant and Unavoidable (SU)*. An adverse physical environmental impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations and for which there are no feasible mitigation measures.

MITIGATION MEASURES

Section 15126.4 of the CEQA Guidelines directs preparers of an EIR to describe feasible measures that could minimize significant adverse impacts. Mitigation measures are developed to avoid, minimize, rectify, reduce, or eliminate an impact or compensate for an impact resulting from project implementation. Section 15041 of the CEQA Guidelines grants authority to the lead agency to require feasible changes in any or all activities involved in a project to substantially lessen or avoid significant effects on the environment. Feasible mitigation measures have been included in this chapter for specific environmental impacts where applicable.

APPROACH TO THE ANALYSIS

The analysis of each environmental topic includes an evaluation of the potential environmental impacts associated with implementation of either the High Commercial Land Use Assumption or High Residential Land Use Assumption. As discussed in Chapter 2, *Project Description*, both assumptions would include the same building program, except for on Blocks H, I, and J, which would have greater commercial or residential uses and different heights, either 90 or 120 feet, depending on the land use assumption. For an applicable topic, the analysis relies on which of the two land use assumptions would result in the greatest impacts. In many cases, especially those topics with impacts that are commensurate to building footprint (such as biological or cultural resources) rather than size of development in square feet or person trips, for example, the analysis applies to both land use assumptions because the mix of land uses would not result in different effects on resources.

AESTHETICS AND PARKING ANALYSIS

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, effective January 1, 2014. Among other provisions, SB 743 amended CEQA by adding Public Resources Code Section 21099, which states that aesthetics and parking impacts of residential, mixed-use residential, or employment center infill projects located in transit priority areas are not considered significant impacts on the environment under CEQA.¹ Accordingly, a project that meets the following criteria would not result in significant environmental effects related to aesthetics or parking:

¹ See Public Resources Code Section 21099(d).

- a) The project is on an infill site,
- b) The project is in a transit priority area, or
- c) The project is residential, mixed-use residential, or an employment center use.

The proposed Seawall Lot 337 and Pier 48 Mixed-Use Project meets the first criterion of being located on an infill site. The project site is located within the city of San Francisco, which is an urbanized area, and has been used previously for commercial and public institutional uses. The proposed project also meets the second criterion of being located within a transit priority area. The project site is within 0.5 mile of at least one stop on the San Francisco Municipal Railway (Muni) T line and within 0.5 mile of the Fourth and King Caltrain station. It is uncertain if the project fully meets the third criterion of being a residential, mixed-use residential, or an employment center use. For these reasons, as further articulated below, this EIR provides an analysis of aesthetics and parking as a conservative measure.

The proposed project would include residential, commercial, and industrial uses. Thus, the proposed project could not be characterized as strictly residential. Employment center projects must be on sites that are currently zoned for commercial uses, with a floor area ratio (FAR) of no less than 0.75. The proposed project could not be classified as an employment center project because the project site is currently zoned for either open space or industrial uses.

Mixed-use projects typically include residential, commercial, or some light industrial uses but not heavy industrial uses. The proposed brewery on Pier 48 is characterized as a heavy industrial use, per various provisions in the Planning Code (e.g., proposed on a site zoned for industrial uses); thus, this component of the project would not fit within the generally accepted classification of a mixed-use residential development.² With the exception of the brewery portion of the proposed project, the project would otherwise meet the criteria in Section 21099(d). The brewery constitutes an estimated 10 percent of the approximately 2.5 million gross square feet (gsf) of proposed development; thus, it would be reasonable to consider the predominate uses proposed for the site (residential, commercial, and light industrial) when determining compliance with Section 21099(d) and conclude that the proposed project meets the criteria. However, because the

² Per Planning Code Section 890.54, the City defines mixed-use zoning districts in Article 8 of the Planning Code. These districts generally allow all of the uses proposed as part of the project, with the exception of the brewery operation. Light manufacturing is allowed, but "food processing, including mechanized assembly line production of canned or bottled goods," is not allowed. Planning Code Section 102 defines "industrial uses" to include "food, fiber, and beverage processing 1," which including breweries. Planning Code Section 202.2, which establishes location and operating conditions for different uses, lists food, fiber, and beverage processing 1 as an industrial use in the "heavy manufacturing" category that is allowed within 50 feet of a residential use in a completely enclosed building and in PDR districts and M districts as a permitted use, except in PDR1-B districts, which is a light industrial buffer district between heavier industrial uses and residential uses (Planning Code Sections 210.3 and 210.4). The conclusion from this is that a brewery is a heavy industrial use that can be located within 50 feet of a residential use if totally enclosed.

whole of the proposed project would not strictly meet the criterion of being a residential, mixed-use residential, or employment center project, the conservative approach applied in this EIR is to analyze the impacts of the proposed project on aesthetics and parking. Furthermore, the passage of SB 743 occurred subsequent to publication of the NOP, which had indicated that this EIR would include a discussion of the aesthetics-related impacts of the proposed project. Therefore, this EIR considers aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.

APPROACH TO CUMULATIVE IMPACTS

CEQA requires that EIRs discuss a proposed project's potential contributions to cumulative impacts, in addition to proposed project-specific impacts. CEQA Guidelines Section 15130(a)(1) states that a "cumulative impact consists of an impact which is created as a result of the combination of the proposed project evaluated in the EIR together with other proposed projects causing related impacts." Other proposed projects include past, present, and reasonably probable future proposed projects.

CEQA Guidelines Section 15130(b)(1) states that the approach to the cumulative impact analysis may be based on either of the following approaches, or a combination thereof:

- A list of past, present, and probable future projects producing related or cumulative impacts and/or
- A summary of projections contained in an adopted general plan or related planning document that describes or evaluates conditions that contribute to the cumulative effect.

For the purposes of this EIR, the analysis of the potential for the proposed project's incremental effects to be cumulatively considerable is based on past and present projects, described as part of the Environmental Setting, and a list of related proposed projects and plans identified by the City and County of San Francisco (City) and neighboring jurisdictions and/or on full implementation of the San Francisco General Plan and/or other planning documents, depending on the specific impact being analyzed. Table 4-1, Cumulative and Baseline Projects in the Site Vicinity, describes the proposed plans and projects that were considered in the cumulative analysis.

The geographic scope of the cumulative impact analyses and the specific past, present, and future projects and plans that are included in the analyses may also vary, depending on the specific environmental issue being analyzed. For instance, Section 4.B, *Aesthetics*, uses the list-based approach by considering related projects near to and immediately adjacent to the project site, given the limited nature of related impacts that would occur as a result of the proposed changes in use and associated tenant improvements. In contrast, Section 4.E, *Transportation and Circulation*, uses the projections approach by relying on the San Francisco Chained Activity

Modeling Process (SF-CHAMP) regional travel demand model, which encompasses the many individual projects that are anticipated in and surrounding the project area. Each technical section of this EIR designates the cumulative context for each cumulative impact analysis.

The EIR presents a cumulative impact analysis only where the proposed project’s incremental effect would result in a less-than-significant or significant and unavoidable cumulative impact. The EIR does not present a cumulative impact analysis if the proposed project’s incremental effect would result in no impact.

TABLE 4-1. BASELINE AND CUMULATIVE PROJECTS IN THE SITE VICINITY

Project/Plan	Description
Baseline Project	
Mission Bay Block 1 (Third and Channel Streets)	The proposed project would demolish the existing building and parking lot and construct approximately 350 residential units, a 250-room hotel, and approximately 50,000 gsf of retail uses.
Cumulative Projects	
Eastern Neighborhoods Plan	The Eastern Neighborhoods Plan includes four area plans: the Central Waterfront Area Plan, which includes the project site; the Showplace Square/Potrero Area Plan, west of Interstate 280); the Mission Area Plan, west of Potrero Avenue; and the East SoMa Area Plan, north of Mission Bay. Rezoning under the Eastern Neighborhoods Plan would increase the potential for residential development on infill sites in the eastern neighborhoods over what would have been available under the previous zoning by between approximately 7,400 and 9,900 units. Rezoning would also increase nonresidential space (excluding production, distribution, repair [PDR] loss) by about 3,200,000 to 6,600,000 gsf and decrease the number of sites that would have been available for PDR growth.
Fourth and King Railyards Study	The Planning Department received funding from the San Francisco County Transportation Authority to produce a technical study of development on the Fourth/King railyards, including explorations of the potential physical and economic feasibility for such development as well as revenue potential to help fund rail infrastructure, such as the Caltrain extension to downtown. Total mixed-use development for this project could be between approximately 3.5 and 3.6 million gsf.
Mission Bay Plan	The 303-acre Mission Bay Redevelopment Plan area is adjacent to and south of the project site. The plan was adopted in 1998. It envisioned a mixed-use, transit-oriented neighborhood that would include 6,000 housing units, 4.4 million gsf of office/research/commercial space, 500,000 gsf of retail space, public parks, a school, a library, a fire station, and a University of California, San Francisco (UCSF) research campus, generally bounded by Mariposa, Owens, and Illinois Streets and Mission Bay Boulevard South. The Mission Bay UCSF campus within Mission Bay is also the subject of the UCSF Long-Range Development Plan. In 2014, approximately 1 million gsf of new development under the UCSF Long-Range Development Plan was approved in addition to the UCSF development originally approved under the Mission Bay Plan. Much of the Mission Bay Redevelopment Plan area has been built out over the last 17 years since adoption of the plan.

Project/Plan	Description
Mission Bay Block 3E	As part of the original Mission Bay Plan, the Office of Community Investment and Infrastructure (OCII), with the Chinatown Community Development Center, is proposing to develop Block 3E with 97 affordable rental units. Construction is expected to begin in Quarter 2 of 2017 and end in Quarter 2 of 2019.
Mission Bay Blocks 4E, 6E, 6W, 9, and 9A	As part of the original Mission Bay Plan, OCII is proposing to develop the following: <ul style="list-style-type: none"> • Block 4E with 100 affordable rental units for seniors, with construction anticipated to begin in Quarter 1 of 2019 and continue through Quarter 4 of 2020. • Blocks 6E and 6W with 233 affordable rental units for families. Construction of Block 6E is anticipated to begin in Quarter 4 of 2016 and continue through Quarter 4 of 2017. Construction of Block 6W is anticipated to begin in Quarter 4 of 2018 and continue through Quarter 3 of 2020. • Blocks 9 and 9A with 150 affordable units for sale, with construction anticipated to begin in Quarter 4 of 2020 and continue through Quarter 4 of 2022.
Mission Bay Blocks 26 and 27	As part of the original Mission Bay Plan, Alexandria Real Estate is in the process of developing approximately 420,000 gsf of office headquarters for Uber. The space would include ground-floor retail and child care. Construction began in Quarter 3 of 2016 and is anticipated to be complete by Quarter 1 of 2019.
Golden State Warriors Event Center and Mixed-Use Development at Mission Bay	Also being developed within the scope of the Mission Bay Plan, the Golden State Warriors basketball team proposes to develop an event center to host NBA season games and provide a year-round venue for a variety of other uses, including concerts, family shows, other sporting events, cultural events, conferences, and conventions as well as office and retail uses. Construction is anticipated to begin in Quarter 1 of 2017 and continue through Quarter 3 of 2019.
Pier 70 Mixed-Use District Project	The Pier 70 Mixed-Use District Project would rezone the entire 35-acre project site and establish land use controls for the project site through adoption of a Special Use District (SUD), with incorporation of design standards and guidelines in a proposed Pier 70 Design for Development document. The proposed project would include the rehabilitation and adaptive reuse of three of the 12 onsite contributing resources in the Union Iron Works Historic District and retention of the majority of one onsite contributing resource (Irish Hill). The proposed project would include demolition of the eight remaining onsite contributing resources and partial demolition of the single noncontributing structure on the site, Slipways 5 through 8, which are currently covered by fill and asphalt. The proposed project would involve a flexible land use program under which certain parcels on the project site could be designated for either commercial/office or residential uses. If the proposed project were to be built with the maximum amount of commercial space, less space would be developed with residential uses; conversely, if the maximum number of residential units were constructed, less space would be developed with commercial uses, as described below. Depending on the uses developed, the proposed project's total gross square footage would be between a maximum of 4,212,230 gsf, under the High Residential Assumption, to 4,179,300 gsf, under the High Commercial Assumption, excluding square footage associated with accessory and structured parking. New buildings would range in height from 50 to 90 feet, consistent with Proposition F, which was passed by San Francisco voters in November 2014.

Project/Plan	Description
Crane Cove Park	The proposed Crane Cove Park project would involve 1) construction of a new, approximately 9.8-acre shoreline park (Crane Cove Park); 2) an extension of 19 th Street for park access and circulation; 3) creation of Georgia Street, which would connect 20 th Street to the 19 th Street extension; 4) relocation of the BAE Shipyard entrance from 20 th Street to the terminus of the 19 th Street extension and rerouting of BAE Shipyard truck traffic from 20 th Street to the 19 th Street extension; and 5) street improvements along the eastern side of Illinois Street. The proposed project would involve the creation of a new park, including the following: a new sandy shoreline edge to allow access to San Francisco Bay for human-powered boats (e.g., kayaks and canoes) and swimmers; ancillary park uses, such as café uses; multi-purpose lawn areas; a children’s play area; shoreline paths; pile-supported look-out piers; site furnishings; and site interpretation elements. Phase 1 of construction, under way fall 2016, is anticipated to be completed in January 2018. Phase 2 is estimated to occur between 2026 and 2028.
Central SoMa Plan	The San Francisco Planning Department is in the process of developing an integrated community vision for the southern portion of the central subway rail corridor. This area is located generally between Townsend and Market Streets, along Fourth Street, and between Second and Sixth Streets. The plan’s goal is to integrate transportation and land uses by implementing changes to the allowed land uses and building heights. The plan also includes a strategy for improving the pedestrian experience in this area. These changes will be based on a synthesis of community input, past and current land use efforts, and analysis of long-range regional, citywide, and neighborhood needs. This plan is funded by a transportation planning grant from the California Department of Transportation.

Source: San Francisco Planning Department, 2017.

IMPACTS REQUIRING NO FURTHER ANALYSIS

It was determined that the environmental topics listed below would not require further analysis, because the proposed project would have no effect on the resources.

AGRICULTURAL AND FORESTRY RESOURCES

The California Department of Conservation designates the project site as “Urban and Built-Up Land,” and no portion of the project site is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.³ In addition, the project site is not zoned for agricultural use and is not under a Williamson Act contract. The project site is not zoned as timberland or forestland, and no forestry resources are found on the site. Because there are no agricultural or forestland resources on the project site, no agricultural or forestlands would be converted to non-agricultural or nonforest uses, and no impact would occur.

³ California Department of Conservation. 2010. *Farmland Mapping and Monitoring Program*. San Francisco Bay Area Important Farmland 2010. Available: [ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/regional/2010/bay_area_fmmp2010.pdf](http://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/regional/2010/bay_area_fmmp2010.pdf). Accessed: October 7, 2015.

MINERAL RESOURCES

According to the Environmental Protection Element of the San Francisco General Plan, mineral resources are not found in San Francisco to any appreciable extent.⁴ The project site does not contain known mineral resources and does not serve as a mining reserve. Consequently, implementation of the proposed project would not result in the loss of availability of mineral resources that are important to local, regional, or state residents, and no impact would occur. (Energy resources are discussed in the Utilities and Service Systems section.)

⁴ City and County of San Francisco. 2004. *General Plan: Environmental Protection Element*. Available: http://www.sf-planning.org/ftp/General_Plan/I6_Environmental_Protection.htm#ENV_CON. Accessed: October 7, 2015.