Initial Study

Balboa Reservoir Project Planning Department Case No. 2018.007883ENV

Table of Contents

		<u>Page</u>
A.	Project Description	B-2
B.	Project Setting	B-2
C.	Compatibility with Existing Zoning and Plans	B-2
D.		
Ε.		
	1. Land Use and Land Use Planning.	
	2. Aesthetics	
	3. Population and Housing.	B-17
	4. Cultural Resources	B-23
	5. Tribal Cultural Resources	B-33
	6. Transportation and Circulation	
	7. Noise	
	8. Air Quality	
	9. Greenhouse Gas Emissions.	
	10. Wind.	
	11. Shadow.	
	12. Recreation	
	14. Public Services	
	15. Biological Resources.	
	16. Geology and Soils.	
	17. Hydrology and Water Quality.	
	18. Hazards and Hazardous Materials.	
	19. Mineral Resources	
	20. Energy	
	21. Agriculture and Forest Resources	
	22. Wildfire	
F.	Public Notice and Comment	B-121
G.	Mitigation Measures and Improvement Measures	B-122
Н.	Determination	
I.	Initial Study Preparers	B-126
	GURE	
Fio	gure 1 Historical Resources in the Balboa Park Station Area Plan	R-25
_	gure 2 Unity Plaza	
_	gure 3 Project Shadow on Unity Plaza, 7:36 p.m., June 21	
_	ABLE	
	able 1 Proposed On-Site Residents and Employees	R_10
	ible 2 Estimated Water Demand for Proposed Project Options	
_ ~.	25 Indiana in Troposed Project Options	

A. PROJECT DESCRIPTION

The Balboa Reservoir project (proposed project) description is provided in subsequent environmental impact report (SEIR) Chapter 2, Project Description, to which this initial study is attached. The project variants descriptions and environmental effects of the variants are provided in SEIR Chapter 5, Variants.

B. PROJECT SETTING

The project setting and existing site land use characteristics are provided in SEIR Chapter 2, Project Description.

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	Applicable	Not Applicable
Discuss any variances, special authorizations, or changes proposed to the San Francisco planning code or zoning map, if applicable.		
Discuss any conflicts with any adopted plans and goals of the City or region, if applicable.	\boxtimes	
Discuss any approvals and/or permits from city departments other than the planning department or the Department of Building Inspection, or from regional, state, or federal agencies.		

In accordance with California Environmental Quality Act (CEQA) Guidelines section 15125(d), this section discusses potential obvious inconsistencies of the proposed project with applicable local plans and policies, as well as conflicts with regional policies (if applicable). Inconsistencies with existing plans and policies do not, in and of themselves, indicate a significant physical environmental effect within the meaning of CEQA. To the extent that adverse physical environmental impacts may result from such inconsistencies, these impacts are analyzed below under the specific environmental topic sections in Section E, Evaluation of Environmental Effects, and in SEIR Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

Local Plans and Policies

San Francisco General Plan

The San Francisco General Plan, adopted by the planning commission and the board of supervisors, is both a strategic and long-term document, broad in scope and specific in nature. The general plan is the embodiment of the City's collective vision for the future of San Francisco, and is composed of a series of elements, each of which deals with a particular topic, that applies citywide. The general plan contains ten elements (Housing, Commerce and Industry, Recreation and Open Space, Community Facilities, Urban Design, Environmental Protection, Transportation, Air Quality, Community Safety, and Arts) that provide goals, policies, and objectives for the physical development of the city. In addition, a land use index cross-references the policies related to land use located throughout the general plan.

The general plan also includes area plans that outline goals and objectives for specific geographic planning areas. Among these is the Balboa Park Station Area Plan, which encompasses the project site. In

an area plan, "the more general policies in the General Plan elements are made more precise as they relate to specific parts of the city".¹ The area plans contain specific policies and objectives that address land use and planning issues in the local context. As described in SEIR Chapter 2, Project Description, the project sponsor would seek amendments to the general plan, to allow for approval of the proposed project.

Potential conflicts with general plan policies are discussed below. A conflict between a proposed project and a general plan policy does not, in itself, indicate a significant effect on the environment within the context of CEQA. Any physical environmental impacts that could result from a conflict with general plan policies are analyzed in this initial study or SEIR. In general, potential conflicts with the general plan are considered by the decision makers (in the case of a general plan amendment, the planning commission and board of supervisors) independently of the environmental review process. Thus, in addition to considering inconsistencies that affect environmental issues, the decision makers consider other potential inconsistencies with the general plan as part of the decision to approve or disapprove a proposed project. Any potential conflict not identified in this environmental document would be considered in that context and would not alter the physical environmental effects of the project, which are analyzed in this SEIR.

This section is not intended to provide a comprehensive analysis of general plan consistency; in particular, this section is not intended to, and does not, identify policies that the proposed project would support. Staff report(s) for planning commission and board of supervisors action(s) on the proposed project will contain a complete analysis of general plan consistency.

Balboa Park Station Area Plan

The Balboa Park Station Area Plan (area plan) was adopted in 2009. The area plan's objectives and policies were developed to implement a set of land use and zoning controls; urban design and architectural guidelines; and transportation/infrastructure, streetscape, and open space improvements that would enhance the overall urban environment and encourage new development, particularly housing and neighborhood-serving commercial uses.² The area plan envisions the transformation of the area that supports transit-oriented growth supporting the development of a mix of complementary uses, including residential, retail, cultural/institutional uses and publicly accessible open space, in the vicinity of the Balboa Park Station and along the nearby Geneva, Ocean, and San Jose avenues.

The area plan includes specific objectives and policies related to integrating underused parcels into the surrounding neighborhoods. With respect to the project site, Objective 1.4 identifies the Balboa Reservoir as one of the largest remaining undeveloped sites in San Francisco. Policy 1.3.1 encourages the development of the west basin of the reservoir in a manner that would be the greatest benefit to the city as a whole as well as the surrounding neighborhoods. Objective 4.4 relates to considering housing as a primary component to any development on the reservoir site, and Policy 4.4.1 seeks to develop housing on the west basin if it is not needed for water storage. With regard to housing, the area plan encourages providing "increased housing opportunities affordable to a mix of households at varying income levels"

¹ San Francisco Planning Department, San Francisco General Plan, Introduction, October 2012.

City and County of San Francisco, Balboa Park Station Area Plan, adopted by Planning Commission Motion No. 17776 on December 4, 2008 and the Board of Supervisors Ordinance No. 0060-09 on April 17, 2009. http://generalplan.sfplanning.org/Balboa_Park_Station.htm. This document (and all other documents cited in this report, unless otherwise noted), is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2018-007883ENV.

(Objective 4.5) and to "give first consideration to the development of affordable housing on publicly-owned sites" (Policy 4.5.1). The area plan also emphasizes the importance of creating a system of public parks, plazas, and open space areas (Objective 5.1). The area plan's land use map designates the site's land use as P (Public) and the height map indicates a 40-foot height limit (Maps 3 and 6).

The proposed project would not be obviously inconsistent with the area plan objectives and policies regarding housing, open space, and connectivity, but would require Maps 3 and 6 to be amended. The proposed project would develop the site with mixed-income housing (50 percent affordable units), 4 acres of publicly accessible open space, a childcare facility/community space available for public use, retail space, on- and off-street parking, new internal streets, and new infrastructure including pedestrian and bicycle infrastructure connections in structures up to 78 feet (Developer's Proposed Option) or 88 feet (Additional Housing Option) in height.

San Francisco Planning Code

The San Francisco Planning Code (planning code), which incorporates by reference the City's zoning maps, governs permitted uses, densities, and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless a project conforms to the planning code or an exception is available under the code.

Use Districts

The project site is located entirely within a P (Public) District. As described in Planning Code section 211, the P District applies to land that is owned by a governmental agency and in some form of public use, including open space. As described in SEIR Chapter 2, Project Description, the proposed project includes amendments to the planning code and the City's zoning maps, which are incorporated.

Under each option, the proposed project would amend the zoning map and the planning code, adding a new Balboa Reservoir Special Use District. If approved by the planning commission and board of supervisors, the special use district would establish land use zoning controls and incorporate design standards and guidelines for the site. The San Francisco Zoning Map would be amended to show changes from the current zoning (P [Public]) to the proposed zoning. While the residential uses proposed under the project are not permitted under existing zoning, if the rezoning is approved, project uses would be permitted on the site.

Height and Bulk Districts

The project site is mostly located within a 40-X Height and Bulk District, which limits the maximum allowable height on the site to 40 feet. An "X" bulk designation permits structures to cover the entire lot, without setbacks, up to the permitted height limit (subject to rear yard requirements and other controls). The project site is also partially located within a 65-A Height and Bulk District, which limits the maximum allowable height on the site to 65 feet. The "A" bulk designation sets maximum dimension limits of 110 feet in length and 125 feet in diagonal dimension for structures above 40 feet.

Building heights under the proposed project are inconsistent with the existing height limits on the project site. The proposed project would amend the height and bulk map within the zoning map to change the existing height limits of 40 and 65 feet to height limits of up to 78 feet in the Developer's Proposed Option and up to 88 feet in the Additional Housing Option. If the rezoning is approved with respect to height

limits, building heights under the proposed project would be consistent with the revised Height and Bulk Districts applicable to the project site.

The Accountable Planning Initiative

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Planning Code section 101.1 and established eight priority policies. These policies are (1) preservation and enhancement of neighborhood-serving retail uses and future opportunities for resident employment in and ownership of such businesses; (2) conservation and protection of existing housing and neighborhood character to preserve the cultural and economic diversity of neighborhoods; (3) preservation and enhancement of affordable housing (discussed in initial study Section E.3, Population and Housing); (4) discouragement of commuter automobiles that impede Muni transit service or that overburden streets or neighborhood parking (discussed in Section 3.B, Transportation and Circulation, of this SEIR); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership; (6) maximization of earthquake preparedness (discussed in initial study Section E.16, Geology and Soils); (7) preservation of landmarks and historic buildings; and (discussed in initial study Section E.4, Cultural Resources); and (8) protection of parks and open space and their access to sunlight and vistas (discussed in initial study Sections E.12, Recreation, E.10, Wind, and E.11, Shadow).

Prior to issuing a permit for any project that requires an initial study under CEQA, and prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action that requires a finding of consistency with the general plan, the City must find that the proposed project or legislation is consistent with the priority policies. In evaluating general plan consistency of the proposed project, the planning commission and/or planning department would make the necessary findings of consistency with the priority policies.

Other Local Plans and Policies

In addition to the planning code and zoning maps, general plan, and the Accountable Planning Initiative, other local plans and policies that are relevant to the proposed project are discussed below.

- San Francisco Transit First Policy is a set of principles that emphasize the City's commitment that the use of public rights-of-way by pedestrians, bicyclists, and public transit be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the City's Transit First Policy principles in conducting the City's affairs.
- San Francisco Bicycle Plan is a citywide bicycle transportation plan that identifies short-term, long-term, and other minor improvements to San Francisco's bicycle route network. The overall goal of the San Francisco Bicycle Plan is to make bicycling an integral part of daily life in San Francisco.
- San Francisco Better Streets Plan was adopted in 2010 to support the City's efforts to enhance the streetscape and the pedestrian environment. It classifies the city's public streets and rights-of-way and creates a unified set of standards, guidelines, and implementation strategies that govern how the City designs, builds, and maintains its public streets and rights-of-way.
- San Francisco Climate Action Strategy is a local action plan that: examines the causes of global climate change and the human activities that contribute to global warming; provides projections of

climate change impacts on California and San Francisco based on recent scientific reports; presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets; and describes recommended actions for reducing the city's GHG emissions.

• City College Master Plan was adopted in 2004 and includes plans and recommendations for the long-term development of the City College campuses, including the Ocean Campus. The City College Master Plan includes a facilities master plan that provides a comprehensive strategy for the development of grounds and facilities to meet City College's needs through the year 2015. City College is currently developing an update to the facilities master plan that will provide a strategy for facilities improvement, renovation, replacement, and new construction over the next 10 years. Initial study Section E.15, Public Services, discusses the potential secondary physical impacts of implementing the proposed project.

Regional Plans and Policies

In addition to local plans and policies, the environmental, land use, and transportation plans and policies prepared by several regional planning agencies consider the growth and development of the nine-county San Francisco Bay Area. Some of these plans and policies are advisory, and some include specific goals and provisions that must be adhered to when evaluating a project under CEQA. The regional plans and policies that are relevant to the proposed project are discussed below.

• Plan Bay Area 2040 was prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), and includes the Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area. Plan Bay Area is a long-range integrated land use and transportation plan for the nine-county Bay Area that covers the period from 2010 to 2040. Plan Bay Area calls for concentrating housing and job growth around transit corridors, particularly within areas identified by local jurisdictions as Priority Development Areas. Plan Bay Area 2040 is a limited and focused update of the region's previous integrated transportation and land use plan adopted in 2013.

In addition, Plan Bay Area specifies strategies and investments for maintaining, managing, and improving the region's multi-modal transportation network and proposes transportation projects and programs to be implemented with reasonably anticipated revenue. Plan Bay Area also provides a list of transportation projects for highway, transit, rail, and related uses through 2040 for the nine Bay Area counties. Plan Bay Area was adopted on July 26, 2017, and will be updated every four years.

The project site is located within the Balboa Park Priority Development Area, which includes the Balboa Park Station Area Plan area. This Priority Development Area is one of 12 Priority Development Areas in San Francisco, in which a large share of new housing production and population growth is expected to take place. Accordingly, the proposed project would promote growth in a Priority Development Area and would not obviously be inconsistent with the goals and objectives of Plan Bay Area 2040.

- ABAG's *Projections 2013* is an advisory policy document that includes population and employment forecasts to assist in the development of local and regional plans and policy documents.
- The Bay Area Air Quality Management District's Bay Area 2017 Clean Air Plan updated the 2010 Clean Air Plan. The California Clean Air Act. requires implementation of "all feasible measures" to reduce ozone and to provide a control strategy to reduce emissions of ozone, particulate matter, toxic air contaminants, and greenhouse gas emissions. The clean air plan describes the status of local air quality and identifies emission control measures to be implemented. The proposed project would not

be obviously inconsistent with the clean air plan. Physical impacts of the proposed project related to air quality and compliance with this plan is addressed in SEIR Section 3.D, Air Quality, and initial study Section E.9, Greenhouse Gas Emissions.

- The Regional Water Quality Control Board's *Water Quality Control Plan for the San Francisco Bay Basin* is a master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives. The stormwater discharge, wastewater management, drainage, and water quality control systems for the proposed project would not be obviously inconsistent with the basin plan's water quality regulations. Initial study Section E.15, Hydrology and Water Quality, discusses the physical impacts of implementing the proposed project.
- The State Water Resources Control Board's San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay Delta Plan) establishes water quality control measures and flow requirements to increase water releases on the tributaries of the San Joaquin River above the Bay Delta to restore the ecology and fish habitats in the region. In December 2018, the State Water Resources Control Board adopted the Lower San Joaquin River and Southern Delta piece of the Bay Delta Plan update, which focuses on San Joaquin River flows and southern Delta salinity. Initial study Section E.13, Utilities and Service Systems, discusses impacts related to water supply. [Note to Reviewer: this text will be refined upon further direction from SFPUC/EP re: the WSA.]

Approvals and Permits

Refer to SEIR Section 2.I, Required Project Approvals, for a list of approvals and/or permits.

D. SUMMARY OF ENVIRONMENTAL EFFECTS AND APPROACH TO ANALYSIS

The proposed project could potentially result in either new significant environmental effects or substantially more severe impacts than were previously identified in the programmatic EIR for the Balboa Park Station Area Plan (area plan PEIR, or PEIR), as noted by the environmental factor(s) checked below. The resource areas checked below indicate topic areas to be discussed in detail in the subsequent EIR. This section describes the approach to analysis for this initial study, and Section E, Evaluation of Environmental Effects, presents a more detailed checklist and discussion of each environmental factor and the associated impact assessment.

	Land Use/ Planning	Greenhouse Gas Emissions		Hydrology/Water Quality
	Aesthetics	Wind		Hazards & Hazardous Materials
	Population and Housing	Shadow		Mineral Resources
	Cultural Resources	Recreation		Energy
	Tribal Cultural Resources	Utilities/Service Systems		Agriculture and Forestry Resources
	Transportation and Circulation	Public Services		Wildfire
	Noise	Biological Resources	\boxtimes	Mandatory Findings of Significance
\boxtimes	Air Quality	Geology/Soils		

Approach to Analysis

The following approach to analysis is used in this initial study to determine which topics require no additional environmental analysis beyond what is presented in the PEIR and this initial study and which topics require more detailed analysis in this SEIR. With the exception of aesthetics and parking, the evaluation of environmental impacts is based on potential effects of the proposed project compared to existing (2018) conditions using the significance criteria listed in the San Francisco Planning Department's initial study checklist. Significance criteria that do not apply to the proposed project, if any, are first identified, and neither this initial study nor this SEIR provide further discussion of those criteria; for example, since the project is not located within an airport land use plan, none of those criteria apply to this project.

Project Impacts

For those topics determined in this initial study to be focused out from further analysis in this SEIR, this analysis first summarizes how these topics were addressed in the PEIR as it related to the Balboa Reservoir site, including identifying any applicable mitigation measures from the PEIR and conclusions reached regarding significance of effects. Second, the initial study analyzes the impacts of the proposed project to determine: (1) if the proposed project, circumstances under which the project is undertaken, or new information (which could not have been ascertained at the time of the preparation of the PEIR) would lead to new or more severe significant environmental effects from what was identified in the PEIR; (2) if newly feasible or different mitigation measures or alternatives are available that would substantially reduce one or more significant effects of the project; and (3) if the mitigation measures identified in the PEIR and/or newly added mitigation measures would reduce impacts to a less-than-significant level. The impact evaluation presents the significance determination for each impact and includes the detailed description of all mitigation measures applicable to the proposed project, whether it is the same as that specified in the PEIR or an updated mitigation measure.

For those topics to be analyzed in detail in this SEIR, this initial study provides the checklist response identifying the potential for new significant impacts or substantially more severe impacts than those identified in the PEIR. However, the summary of the PEIR and the detailed analysis of the proposed project are in this SEIR.

For the purposes of this initial study, the checklist questions in CEQA Guidelines Appendix G have been modified to reflect the updated checklist,³ and the fact that the proposed project is a subsequent activity under the Balboa Park Station Area Plan program and that this analysis is being tiered from the certified PEIR as a project EIR, consistent with CEQA Guidelines section 15168(c). The analysis also takes into account changes in the CEQA Guidelines since the PEIR was certified in 2008. The four revised checklist questions used in this initial study are described below.

_

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including an updated Appendix G checklist. http://opr.ca.gov/ceqa/updates/guidelines/

- 1. Would the project result in potentially significant effects not identified in the prior EIR? This question examines whether or not the proposed project would result in new significant or potentially significant environmental effects that were not identified in the PEIR. This could include significant effects that are due to:
 - Project-specific features of the proposed project.
 - Substantial changes with respect to the circumstances under which the project would be undertaken, such as real estate development trends in the surrounding area or major projects that were previously unanticipated.
 - New information of substantial importance which was not known and could not have been known at the time the PEIR was certified, such as newly available information related to a particular environmental topic.

If the analysis identifies a new significant or potentially significant impact, this initial study then determines if either previously identified mitigation measures or newly identified mitigation measures would reduce the impact to less than significant. In this event, the mitigation measures are presented in this initial study and no further analysis is required. On the other hand, if a new significant or potentially significant impact is identified and/or further analysis is necessary to determine if mitigation measures are available to reduce the impacts to less than significant, then this issue will be addressed in further detail in this SEIR.

- 2. Would the project result in a potentially substantial increase in severity of a significant impact identified in the prior EIR? This question examines whether or not the proposed project would result in substantially more severe environmental effects than what was identified in the PEIR. This increase in severity of a significant effect could be due to the criteria listed under item 1 above.
 - If the project would result in an increase in severity of a previously identified significant impact, this initial study then determines if either previously identified mitigation measures or newly identified mitigation measures would reduce the more severe impact to less than significant. In this event, the mitigation measures are presented in this initial study and no further analysis is required. On the other hand, if a more severe significant impact is identified and/or further analysis is necessary to determine if mitigation measures are available to reduce the impacts to less than significant, then this issue will be addressed in further detail in this SEIR.
- 3. Does the project sponsor decline to adopt a feasible mitigation measure or alternative? This question addresses the case in which the initial study identifies a new significant impact or a substantial increase in severity of a significant impact but the project sponsor has declined to adopt a feasible mitigation measure or alternative. In the event of such cases, if any, the issue will be addressed in further detail in this SEIR. (In particular, alternatives necessary to reduce or avoid impacts will be analyzed only in this SEIR, and not in this initial study.)
- 4. Would the project result in no new or more severe significant effects? This question addresses several possible scenarios for certain topics which the initial study provides the complete analysis and no further analysis is necessary in this SEIR. These scenarios include the following:
 - The PEIR identified a significant impact, and the proposed project would result in the same significant impact. In addition, the same mitigation measure identified in the PEIR would reduce the impact to a less-than-significant level. In this case, the previous mitigation measure as applicable to the proposed project is presented in this initial study.

- The PEIR identified a significant impact and the proposed project would result in the same significant impact. However, a new or revised mitigation measure is recommended to reduce the impact to a less-than-significant level, and this new measure would replace the previously identified mitigation measure. In this case, only the new mitigation measure is presented in this initial study, and the reader is referred to the PEIR for the original mitigation measure.
- The PEIR identified a significant impact and the proposed project would result in the same impact. However, under the current approach to analysis, the impact would be considered less than significant due to implementation of actions required to comply with applicable regulations (e.g., hazardous materials regulations). In this case, the revised analysis would supersede the analysis in the PEIR, and with compliance with applicable regulations, no mitigation measures would be required and none are presented in this initial study.
- The PEIR identified either no impact or a less-than-significant impact, and the proposed project would also result in no impact or a less-than-significant impact. In this case, no mitigation measures are required and none are presented either in this SEIR or this initial study.
- The PEIR did not address an environmental topic that is included in the planning department's
 current CEQA initial study checklist, and the proposed project would result in a significant
 impact that could be reduced to less than significant with implementation of a feasible mitigation
 measure. In this case, the new mitigation measure is presented in this SEIR or this initial study.
- The PEIR did not address an environmental topic in the current planning department CEQA
 initial study checklist, but the proposed project would result in either no impact or a less-thansignificant impact. In this case, no mitigation measures are required or presented.
- Since certification of the PEIR in 2008, new policies, regulations, statutes, and funding measures have been adopted, passed, or are underway that affect the physical environment and/or environmental review methodology for projects in the plan area. These policies, regulations, statutes, and funding measures either (1) have implemented or will implement mitigation measures; (2) replace mitigation measures identified in the PEIR; or (3) further reduce less-than-significant impacts identified in the PEIR. These will be addressed under the appropriate topic area in this SEIR or this initial study.

Cumulative Impacts

The cumulative impact analyses for topics addressed in Section E, Evaluation of Environmental Effects, use the list-based approach. Reasonably foreseeable development and infrastructure projects that could potentially contribute to cumulative impacts on various resource topics are listed in Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, and mapped on Figure 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-12, of SEIR Section 3.A, Impact Overview.

Effects Found to Be Potentially Significant

On the basis of this initial study, the resource topics for which there is a potential for project-specific effects to be significant or for which the analysis requires additional detail are analyzed in this SEIR and are as follows:

- Transportation and Circulation (all topics except aviation-related ones);
- Noise (all topics except aviation-related ones); and

• Air Quality (all topics).

Effects Found Not to Be Potentially Significant

The initial study determined that the potential individual and cumulative environmental effects on the following resource topics are either less than significant or would be reduced to a less-than-significant level through recommended mitigation measures identified in this initial study:

- Land Use and Planning (all topics)
- Population and Housing (all topics)
- Cultural Resources (all topics)
- Tribal Cultural Resources (all topics)
- Transportation (aviation-related topics)
- Noise (aviation-related topics)
- Greenhouse Gas Emissions (all topics)
- Wind (all topics)
- Shadow (all topics)
- Recreation (all topics)
- Utilities and Service Systems (all topics)
- Public Services (all topics)
- Biological Resources (all topics)
- Geology and Soils (all topics)
- Hydrology and Water Quality (all topics)
- Hazards and Hazardous Materials (all topics)
- Mineral Resources (all topics)
- Energy (all topics)
- Agricultural and Forest Resources (all topics)
- Wildfire (all topics)

Impacts associated with these topics are discussed with mitigation measures, where appropriate, in Section E, Evaluation of Environmental Effects, of this initial study, and require no further environmental analysis in this SEIR. All mitigation measures identified in this initial study are listed in Section H, Mitigation Measures and Improvement Measures, and have been agreed to be implemented by the project sponsor as part of implementation of the proposed project, if approved. For each checklist item, the evaluation considers both project-specific and cumulative impacts of the proposed project.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
1.	LAND USE AND LAND USE PLANNING. Would the project:				
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

Detentially

Summary of Comments Received in Response to the Notice of Preparation

Comments received in response to the NOP related to land use and land use planning concern potential land use conflicts with the Westwood Park neighborhood. This issue is discussed under Impact LU-2. Scoping comments were also received concerning potential housing on the upper (east) basin. Reasonably foreseeable projects at City College are addressed under Impact C-LU-1 below.

Summary of Land Use Impacts in the PEIR

The land use significance criteria were addressed in the PEIR initial study Section 1, Land Use, and PEIR Section IV.A, Land Use, Plans, and Policies. Relevant information from these sections is summarized below.

PEIR Section IV.A, Land Use, Plans, and Policies, characterized the existing land uses in the plan area at that time. The PEIR provided environmental analysis for the entire plan area, which was divided into four main subareas. The project site was located within the Balboa Reservoir Subarea and was assumed to include up to 500 residential units.

PEIR initial study Section 1, Land Use, determined that while implementation of the area plan would increase the intensity of land uses in the plan area, as well as introduce a new mix of transit-oriented residential and neighborhood-commercial uses, the changes would be expected to be compatible with existing and planned new uses, would not be expected to result in adverse impacts on existing neighborhoods, and would better connect the plan area to surrounding communities.

PEIR Section IV.A, Land Use, Plans, and Policies, determined that implementation of the area plan would build on established land use patterns in the Balboa Park community, and would not physically divide or disrupt an established community. The PEIR also noted that the area plan would concentrate and direct new development on in-fill sites near transit, and would not propose changes to established residential neighborhoods surrounding the plan area, including Westwood Park, Ingleside, Ingleside Terrace and Mission Terrace/Cayuga. By implementing land use controls that encourage transit-oriented development, the area plan would create opportunities for a more cohesive, livable neighborhood environment. Therefore, the PEIR concluded the area plan would have a less-than-significant effect with regard to physical division of an established community. The PEIR also determined that changes in existing land use character proposed by the area plan would improve and enhance the existing character

of the established Balboa Park community, and would not be considered an adverse physical environmental impact.

Overall, the PEIR found that implementation of the area could result in three major land use effects: (1) increase total housing development in the Balboa Park neighborhood by 1,780 units; (2) create sustainable and more efficient land use patterns by concentrating and redirecting land uses into higher density, residential and mixed-use developments on infill sites near transit and neighborhood-serving retail uses; and (3) reduce the negative land use effects of automobile traffic and parking in the plan area, including the creation of a more livable street environment for residents, pedestrians, and bicyclists. The PEIR concluded that implementation of the area plan would not result in significant land use impacts and did not require any mitigation measures.

The PEIR acknowledged that the predominant auto-oriented use in the reservoir area would be replaced by a residential community in proximity to transit, neighborhood services, open space, and educational services. Because the development would be adjacent to the Westwood Park residential neighborhood, the PEIR stated that access and building design/heights on the western portions of the reservoir site would need to be carefully considered during project-level environmental review.

The PEIR also discussed cumulative impacts to land use with regard to the City College of San Francisco Master Plan. The PEIR found that development envisioned in the City College master plan would not result in significant cumulative land use impacts as the master plan development would occur entirely within the City College campus and would be a continuation of an existing institutional use in the plan area. The PEIR found that implementation of the area plan and the City College master plan would not be expected to result in significant cumulative impacts on land use, and accordingly, did not require any mitigation measures.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar land uses (with varying amounts of residential units and parking spaces) within the project site. The two project options are therefore analyzed as one, except where the differences between the assumptions would result in a different conclusion with respect to potential impacts on the environment that could result from inconsistencies with applicable land use plans.

Impact Evaluation

Impact LU-1: The proposed project would not physically divide an established community. (Less than Significant)

The 17.6-acre project site is bounded on three sides by sloping western, northern, and eastern edges that surround a sunken paved surface at the center. The site does not contain any permanent structures and currently contains 1,007-space surface vehicular parking spaces in a lot that provides overflow vehicular parking for City College students, faculty, and staff. Paved walkways, stairs, vegetation, and lighting are located on the eastern slope, providing pedestrian connections between the project site and adjacent City College property containing parking and the Multi-Use Building. Direct vehicular access into and out of the site is provided along the north side of the project site by an east-west access road immediately south

of Archbishop Riordan High School, and accessed from Frida Kahlo Way. No direct pedestrian or vehicular access to the project site is available from the south or west.

The proposed project would not create a barrier or obstruction that would physically divide the plan area. Rather, the proposed project would extend a network of pedestrian and bicycle facilities through the project site, including shared pedestrian and bicycle access to the site at Brighton Avenue on the south side, and San Ramon Way on the west side of the site. The project site would also be accessible via a shared pedestrian and bicycle connection across City College property to the east. Other pedestrian access to the site would be provided at Brighton and Plymouth avenues and from Unity Plaza. The central park and San Francisco Public Utilities Commission (SFPUC) open space areas would be linked by the landscaped shared pedestrian and bicycle passages through the site. Therefore, the proposed network of walkways through the project site is intended to enhance the pedestrian environment and facilitate pedestrian passage through the site and connectivity with surrounding neighborhoods and commercial districts. The proposed project would also include the extension of Lee Avenue along the eastern project site border that would connect to proposed interior streets. For these reasons, the proposed project would not physically divide an established community. This impact would be *less than significant*, and no mitigation measures are necessary.

The proposed project would not result in new or substantially more severe impacts than those identified in the PEIR related to physical division of an established community.

Impact LU-2: The proposed project would not conflict with any applicable land use plans, policies or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

Applicable local land use plans that regulate development on the project site include the San Francisco General Plan and the planning code. Other applicable plans include the Balboa Park Station Area Plan, the Better Streets Plan, and the Accountable Planning Initiative. Applicable regional plans include the Plan Bay Area and the Regional Water Quality Control Board's Water Quality Control Plan for the San Francisco Bay Basin. The discussion in Section C, Compatibility with Existing Zoning and Plans, generally describes the proposed project's potential inconsistencies with these plans.⁴

As described in Section C, Compatibility with Existing Zoning and Plans, the proposed project would not obviously or substantially conflict with any adopted environmental plan or policy. The proposed project would amend the general plan, including the area plan, and the planning code and zoning map, adding a new Balboa Reservoir Special Use District. If approved by the planning commission and board of supervisors, the special use district would establish land use zoning controls and incorporate design standards and guidelines for the site. The San Francisco Zoning Map and Maps 3 and 6 of the area plan would be amended to show changes from the current zoning (P [Public]) to the proposed zoning and height reclassification. While the residential and retail uses and heights over 40 feet proposed under the project are not permitted under existing zoning and height limits, if the rezoning and height limit reclassification are approved, project uses and building heights would be permitted on the site. Additionally, the PEIR noted that building design and heights on the western portion of the reservoir site would need to be carefully considered due to the adjacent Westwood Park neighborhood. The proposed

Other regional plans, such as the 2017 Clean Air Plan and the Basin Plan concerning San Francisco Bay, address specific environmental resources and are discussed in Section C, Compatibility with Existing Zoning Plans, of this initial study.

project would taper building heights such that height decreases from east to west, and would provide setbacks as a buffer with the Westwood Park neighborhood.

Conflicts with plans, policies, and regulations do not necessarily indicate a significant environmental land use impact under CEQA, unless the project substantially conflicts with a land use plan/policy that was adopted for the purpose of avoiding or mitigating an environmental effect, such that a substantial adverse physical change in the environment related to land use would result. To the extent that such substantial physical environmental impacts may result from such conflicts, this initial study and this SEIR disclose and analyze these physical impacts under the relevant environmental topic sections, as noted above in the introduction to this section.

Potential conflicts with applicable general plan objectives and policies will continue to be analyzed and considered as part of the review of entitlement applications required for the proposed project independent of environmental review under CEQA. They also will be considered by the decision makers during their deliberations on the merits of the proposed project and as part of their actions to approve, modify, or disapprove the proposed project. Thus, the proposed project would have a *less-than-significant* impact with regard to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

The proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Cumulative Impacts

Impact C-LU-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in significant cumulative impacts to land use. (Less than Significant)

SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, identifies cumulative development projects within a 0.25-mile radius of the project site that are either under construction or undergoing environmental review. The cumulative projects include development of new residential units, community and institutional space, and commercial and retail space. City College is currently preparing an updated facilities master plan that would provide a strategy for facilities improvement, renovation, replacement, and new construction for City College over the next 10 years, and the Recommended Facilities Master Plan is expected to go before City College's Board of Trustees in February 2019.⁵ The facilities master plan would be subject to separate CEQA review. Reasonably foreseeable projects at City College include the cumulative project number 5 (Performing Arts Center) and number 6 (East Basin Parking Structure).^{6,7}

Like the proposed project, the cumulative projects consist of infill development, which would result in the intensification of uses in the project vicinity. Cumulative project numbers 1 through 4 would not result in conflicts with land use plans or policies adopted for the purpose of avoiding or mitigating

Balboa Reservoir Project Draft SEIR B-15 April 2019
Case No. 2018-007883ENV

⁵ City College of San Francisco, Facilities Master Plan, 2018, https://www.ccsf.edu/en/about-city-college/administration/vcfa/facilities_planning/facilities-master-plan.html, accessed December 3, 2018.

⁶ The east basin is also known as the upper basin. Its grade was raised to match the surrounding terrain to the east in 2010.

Housing on the east basin is not a foreseeable project, as it is not currently proposed by City College and would be dependent on funding from a bond measure that may or may not pass.

environmental impacts, because they would be consistent with the area plan and City's objectives for increasing the supply of housing and a mix of development in the vicinity of major transit stops. Cumulative projects 5 and 6 on the City College campus would be required to be consistent with City College Facilities Master Plan and policies. The cumulative projects would be required to comply with applicable land use plans, policies, and regulations. Therefore, the proposed project, in combination with reasonably foreseeable future projects, would have *less-than-significant* cumulative land use impacts, and no mitigation measures are necessary.

Τοι	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
2.	AESTHETICS.				
	Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?				

Since certification of the PEIR in 2008, state legislation amended CEQA to eliminate consideration of aesthetics and parking impacts for infill projects in transit priority areas. Public Resources Code section 21099(d), effective January 1, 2014, provides that "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment." Accordingly, aesthetics and parking are not considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

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

The proposed project meets each of the above three criteria and thus, this initial study and this SEIR do not consider aesthetics or parking in determining the significance of project impacts under CEQA.⁸ The planning department recognizes that the public and decision makers nonetheless may be interested in

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

B-16
April 2019

San Francisco Planning Department, Eligibility Checklist: CEQA section 21099 – Modernization of Transportation Analysis for Balboa Reservoir Project, November 15, 2018.

information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. Therefore, some of the information that would have otherwise been provided in an aesthetics section of an initial study or EIR (such as representative drawings) has been included in SEIR Chapter 2, Project Description. However, this information is provided solely for informational purposes and is not used to determine the significance of the environmental impacts of the project, pursuant to CEQA.

Το	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
3.	POPULATION AND HOUSING. Would the project:				
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing?				

The proposed site is currently used for overflow vehicular parking for City College students, faculty and staff. The proposed project would not displace any residents or housing units, since no residential uses or housing units currently exist on the site. Therefore, criterion E.3(b) related to housing and population displacement does not apply and is not addressed further in this section.

Summary of Comments Received in Response to the Notice of Preparation

Comments received in response to the NOP expressed concern regarding the increase in population density and associated impacts on traffic, infrastructure, and public services from the increased demand. Traffic is addressed in SEIR Section 3.B, Transportation and Circulation. Initial study Sections E.13, Utilities and Service Systems, and E.14, Public Services, include discussions of potential impacts to infrastructure and public services.

Summary of Population and Housing Impacts in the PEIR

PEIR Section IV.B, Population, Housing, and Employment, determined that implementation of the area plan would increase population within the plan area from about 6,340 to 10,435. Between the years 2000 and 2025, the PEIR estimated this would constitute a net increase of about 4,095 residents, or a 65 percent increase in plan area population, and 3.6 percent of population growth anticipated citywide. The PEIR estimated that implementation of the area plan would create approximately 1,780 new residential units at full buildout, increasing the housing supply in the plan area by about 61 percent in 2025, and accounting for about 3 percent of the city's total anticipated housing production between 2000–2025. The reservoir site accounted for 500 of these new housing units in the PEIR analysis. The PEIR found less-than-significant impacts to population and housing because implementation of the plan would focus potential new housing development in an established urban residential and neighborhood commercial area with a high level of transit and other public amenities and services that could accommodate this increase in

residents. The PEIR also concluded that implementation of the area plan would not result in a net increase in City growth not accounted for in citywide projections.

The PEIR estimated a net increase of about 200–250 jobs in the plan area from the 104,620 net new gross square feet (gsf) of commercial development at full buildout by 2025. The new jobs generated in the plan area would represent about 0.2 percent of the City's employment growth between 2000–2025. The PEIR estimated that the increase in jobs would generate demand for approximately 80 new housing units, and that residential development under the area plan would accommodate housing demand resulting from employment growth in the plan area.

The PEIR determined that implementation of the area plan would not be expected to displace any residences or result in substantial displacement of businesses. The PEIR also determined cumulative impacts to population, housing, and employment to be less than significant.

In summary, the PEIR identified no significant impacts to population, housing, or employment growth from the area plan, and accordingly, did not require any mitigation measures related to plan effects on population and housing.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. Population estimates for both options are derived and analyzed for each project option. The analysis considers whether the population and housing growth that would occur with implementation of either project option would be considered substantial relative to planned growth in the city.

Impact Evaluation

Impact PH-1: Construction of the proposed project would not induce substantial unplanned growth in the area. (Less than Significant)

Project construction is anticipated to occur over a period of six years. Construction work is considered temporary and not all workers would remain on the project through all phases. The number of daily construction workers at the project site would vary over the course of construction, depending on the specific construction activities being performed, and overlap between block construction. The number of construction workers at the project site would range from an average of 33 to 460 workers per day.

According to the California Employment Development Department, about 20,600 people worked in construction jobs in San Francisco in 2017 and 118,200 people worked in construction jobs in San Francisco and the four surrounding counties (San Mateo, Marin, Alameda, and Contra Costa). The peak number of construction jobs for the project—350 jobs—construction jobs in the five-county region in 2017; in addition, 460 jobs would be substantially fewer than the 8,670 new construction jobs that the Association of Bay Area Governments estimates will be added in San Francisco between 2010 and 2030. Given the size of the regional construction work force compared to the number of workers that would be

State of California Employment Development Department, Industry Employment Data for San Francisco, Alameda, Contra Costa, Marin, and San Mateo Counties, California, March 28, 2018.

¹⁰ ABAG, Projections 2013, December 2013.

needed for project construction, even during peak construction periods, project construction workers would likely be drawn primarily from the local and regional construction work force. Project construction workers who do not live in the project vicinity would likely commute from elsewhere in the city or Bay Area rather than relocate from more distant cities or towns. Consequently, construction of the proposed project would not induce population growth by attracting a substantial number of construction workers from outside the region to relocate to the area, and therefore, project construction would not create demand for additional housing or other facilities and services associated with growth. Therefore, construction-related impacts on population growth associated with the proposed project would be *less than significant*.

The proposed project would not result in any new or substantially more severe construction-related impacts on population growth than those identified in the PEIR.

Impact PH-2: Operation of the proposed project would not induce substantial unplanned growth in the area, either directly (for example, by constructing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure. (Less than Significant)

As described above, the PEIR estimated that implementation of the area plan would result in a net increase of 1,780 residential units and 104,620 net new gsf of commercial development in the plan area by 2025, including 500 units to be developed on the reservoir site. The project proposes a greater number of units at the project site than what was analyzed in the PEIR, resulting in 600 and 1,050 additional residential units for the Developer's Proposed Option and the Additional Housing Option, respectively. **Table 1, Proposed On-Site Residents and Employees**, provides a summary of expected population and employment increases from both project options.

Table 1
Proposed On-Site Residents and Employees

	Generation Rate	PEIR Assumption for Project Site	Developer's Proposed Option	Additional Housing Option	Change between PEIR and Project	
Units		500 units	1,100 units	1,550 units	+ 600–1,050 units	
Residential	2.30 persons/householda	1,150 residents	2,530 residents	3,565 residents	+ 1,380-2,415 residents	
Employees						
Retail (7,500 gsf)	500 sf/employee ^b	n/a	14 emp	oloyees	+ 14 employees	
Child Care (10,000 gsf)	630 sf/employee ^b	n/a	16 employees		+ 16 employees	

SOURCES: ABAG 2013; LEED 2018.

NOTES:

At full buildout of the project in 2027 and as shown in Table 1, the Developer's Proposed Option and Additional Housing Option would increase the onsite residential population to 2,530 and 3,565 persons,

The current citywide average of persons per household is 2.26. ABAG projects that the city will have 2.30 persons per household in 2030, which is higher than the existing citywide persons per household. The PEIR also based population growth based on the city's average of 2.3 persons per household. Using the ABAG persons per household rate provides a conservative scenario and is used for purposes of this analysis.

b The employee generation rates are based on LEED Reference for Building Operations and Maintenance, Version 4. Appendix 2 – Table 1. Default Occupancy Numbers.

respectively. Under the PEIR, the 500 residential units planned for the project site would result in a population of 1,150. The proposed project would result in 1,380 and 2,415 more residents than originally analyzed in the PEIR for the Developer's Proposed Option and the Additional Housing Option, respectively.

The project site is located within the Balboa Park Priority Development Area. ABAG's population projection for the Balboa Park Priority Development Area is 9,855 in 2040, compared to a 2010 population of 3,819.¹¹ The proposed project's maximum population increase of 3,565 new residents from the Additional Housing Option (1,550 housing units) would represent approximately 36 percent of growth within the Balboa Park Priority Development Area during that period. ABAG's housing unit projection for the Balboa Park Priority Development Area is 6,853 in 2040, compared to 3,467 housing units in 2010. The project proposes a maximum of 1,550 residential units which would represent approximately 23 percent of the housing unit growth within the Balboa Park Priority Development Area during that period. The growth projections in the Balboa Park Priority Development Area represent planned growth in the city, as Priority Development Areas are locally designated areas within existing communities that have been identified and approved by local cities or counties for future growth.

Although the addition of approximately 2,530 or 3,565 new residents on the project site would be substantial for the vicinity, it would not be substantial for the city as a whole, as it would represent approximately 0.4 and 0.6 percent of the projected increase in citywide population growth of 280,465 persons between 2010 and 2040 (from 805,235 in 2010 to 1,085,700 in 2040),¹² and less than 0.1 percent of the projected increase in the Bay Area-wide population growth of approximately 2.4 million persons over the same time period for both project options.¹³

Additionally, the proposed number of residents would not be considered a substantial adverse impact in and of itself for the following reasons: the site is located in proximity to a major transit corridor and highway (I-280) and is served by existing transportation infrastructure such as streets, buses and light rail (Muni) and regional rail (BART). Consistent with the findings in the PEIR and this SEIR, the new housing would be focused in an established urban residential and neighborhood commercial area with a high level of transit and other public amenities and services that could accommodate this increase in residents. The proposed project would also contribute to San Francisco County's share of identified regional housing need. ABAG's 2015–2023 Regional Housing Need Allocation (RHNA) identifies the need for 28,869 total housing units with 16,333 designated as affordable (very low, low, and moderate income) and 12,536 designated as market rate (above moderate) in San Francisco County. Both project options would contribute to the housing supply in the city and would designate up to 50 percent of the units for

Metropolitan Transportation Commission (MTC), Plan Bay Area (2013) Forecast by Priority Development Area: Balboa Park, http://opendata.mtc.ca.gov/datasets, November 2018. While the Plan Bay Area 2040 is the most current regional planning document, it does not provide explicit updated population forecasts at the Priority Development Area level; therefore, this analysis considers data as included in the 2013 Plan Bay Area to estimate planned growth in the Balboa Park Priority Development Area.

ABAG, *Projections 2013*, December 2013. While the *Plan Bay Area 2040 is* the most current regional planning document, it does not provide explicit updated population forecasts at the city level; therefore, this analysis considers data as included in the *2013 Plan Bay Area* to estimate planned growth in the city. The *Plan Bay Area 2040* indicates that its projections for the region as a whole represent a moderate increase over 2040 estimates from the 2013 Plan Bay Area and incorporate the region's strong growth since 2010; thus, analyzing growth based on the 2013 Plan Bay Area provides a more conservative growth analysis.

¹³ ABAG, *Plan Bay Area* 2040, adopted July 26, 2017.

affordable housing. Therefore, the Additional Housing Option would add a total of 775 affordable and 775 market rate housing units to the project site, which would contribute 4.7 percent of the affordable units and 6.2 percent of the market rate units in the RHNA. The Developer's Proposed Option would add a total of 550 affordable and 550 market rate units, which would contribute 3.4 percent of the affordable units and 4.4 percent of the market rate units in the RHNA. The increase in population attributable to the proposed project would not result in a net increase in city growth not planned for in citywide projections.

Employment

Commercial uses were not anticipated on the reservoir site in the PEIR. Under both project options, the proposed project could include approximately 7,500 square feet of retail space and a 10,000 square foot childcare facility/community space that would generate an estimated 30 jobs. The PEIR estimated that up to approximately 250 jobs from 104,620 net new gsf of commercial development would be created in the plan area by 2025. The jobs created by the proposed project would represent an increase of approximately 12 percent of the maximum number of jobs envisioned in the plan area. The increase in jobs from the proposed project would not represent a substantial increase in growth as compared to the anticipated employment growth of 190,780 jobs expected for the city from 2010–2040. Therefore, the increase in employment growth attributable to the proposed project that was not envisioned in the PEIR would not result in a net increase in employment growth not planned for in citywide projections. No mitigation measures would be required.

As discussed above, the population and employment growth that would result from the proposed project would not be substantial relative to citywide projections, nor would these increases exceed population and housing projections. The proposed project therefore would not result in any new or substantially more severe impacts on population growth than those identified in the PEIR and impacts would be *less than significant*.

Cumulative Impacts

Impact C-PH-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in significant cumulative population and housing impacts. (Less than Significant)

The PEIR estimated that implementation of the area plan would result in a net increase of 1,780 residential units and 104,620 net new gsf of commercial development in the plan area by 2025. As of September 2018, 273 dwelling units and 40,904 gsf of commercial uses have been built in the plan area. Excluding the proposed project, an additional 209 dwelling units and 10,995 gsf of commercial uses are under construction or review in the plan area. The Developer's Proposed Option, in combination with completed and reasonably foreseeable future projects, would represent a net increase of 1,582 residential units and 59,339 square feet of commercial development. This is 198 fewer residential units and 45,281

Based on employment factors of 550 square feet per employee for general retail uses and 630 square feet per employee for daycare uses. U.S. Green Building Council, *LEED Reference for Building Operations and Maintenance*, Version 4. Appendix 2 – Table 1, Default Occupancy Numbers, Updated January 5, 2018.

¹⁵ ABAG, Projections 2013, December 2013.

San Francisco Planning Department, Development Status of Balboa Park Area Plan Land Use Program – Updated September 2018, September 2018.

fewer square feet of commercial space than what was assumed in the PEIR. The Additional Housing Option, in combination with completed and reasonably foreseeable future projects, would represent a net increase of 2,032 residential units and 59,339 square feet of commercial development. This is 252 more residential units and 45,281 fewer square feet of commercial space than what was assumed in the PEIR. [Note to Reviewers: These numbers will be updated before the Draft SEIR publication.]

The geographic scope for potential cumulative population and housing impacts encompasses the Plan Bay Area Balboa Park Priority Development Area and the city. ABAG's population projection for the Balboa Park Priority Development Area is 9,855 in 2040, compared to a 2010 population of 3,819.¹⁷ The proposed project's maximum population increase of 3,565 new residents from the Additional Housing Option would represent approximately 36 percent of growth within the Balboa Park Priority Development Area during that period. Future residential growth from cumulative projects in the project vicinity would total approximately 481 residents in 209 units. San Francisco is expected to reach 483,700 households by 2040, with citywide growth of 137,800 new units from 2010 to 2040. As identified under Impact PH-2, much of this growth would take place in Priority Development Areas. Under the Plan Bay Area 2040 Final report, of the 137,800 units, 127,700 units would be located in Priority Development Areas such as the project site.¹⁸

Thus, the proposed project's maximum population increase of 3,565 new residents from the Additional Housing Option in combination with cumulative projects would provide approximately 1.3 percent (approximately 1.550 + 209 = 1.759 units) of the total number of units required to meet the regional housing need (137,800 new units) and an estimated 4.046 (3.565 + 481) new residents.

Under both project options, the proposed project would include approximately 7,500 square feet of retail space and a 10,000-square-foot childcare facility/community space that would generate an estimated 30 jobs.¹⁹ The relatively small incremental job growth from the proposed project would not result in a cumulatively considerable impact. Between 2010 and 2040, ABAG Plan Bay Area 2040 forecasts that the number of total jobs in the City will increase from 576,800 to 872,500, or a total growth of 295,700 jobs. Of this growth, Plan Bay Area indicates that 267,700 new jobs would be located in PDAs. The proposed project, in addition to the cumulative projects would generate approximately 1,647 jobs,^{20,21} which represents nearly 0.6 percent of the anticipated employment growth in San Francisco through 2040 (296,000 jobs). Thus, the proposed project in combination with reasonably foreseeable future projects in the vicinity would be within the planned citywide growth projections and would not constitute

_

Metropolitan Transportation Commission (MTC), Plan Bay Area (2013) Forecast by Priority Development Area: Balboa Park, http://opendata.mtc.ca.gov/datasets, November 2018.

MTC and ABAG, *Plan Bay Area* 2040 *Final*, Land Use Modeling Report, July 2017. Appendix 1- Household and Employment Growth Forecasts by Jurisdiction, p. 35.

Based on employment factors of 550 square feet per employee for general retail uses and 630 square feet per employee for daycare uses. U.S. Green Building Council, LEED Reference for Building Operations and Maintenance, Version 4. Appendix 2 – Table 1. Default Occupancy Numbers, Updated January 5, 2018.

Cumulative projects represent approximately 10,995 square feet of commercial/retail, 36,082 square feet of educational/institutional, and 4,000 square feet of childcare uses. The 54 jobs are based on employment factors of 550 square feet per employee for general retail uses, 1,300 square feet per employee for educational uses (conservatively K-12), and 630 square feet per employee for daycare uses. U.S. Green Building Council, LEED Reference for Building Operations and Maintenance, Version 4. Appendix 2 – Table 1. Default Occupancy Numbers, Updated January 5, 2018.

²¹ City College employment is projected to reach 1,563 jobs by 2040, composed of faculty and classified and administrative staff. City College of San Francisco, *Reasonably Foreseeable Projects on City College Upper Reservoir (East Basin)*, November 21, 2018.

unplanned growth. Therefore, the proposed project in combination with reasonably foreseeable projects would not result in a significant cumulative impact related to population and housing. This impact would be *less than significant*.

		Potentially Significant Effects Not Identified in	— Potentially Substantial Increase in Severity of Significant Impact	Sponsor Declines to Adopt Feasible Mitigation Measures	No New or More-Severe Significant
To	pics:	Prior EIR	Identified in Prior EIR	or Alternatives	Effects
4.	CULTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code?				
b)	Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?				\boxtimes
c)	Disturb any human remains, including those interred outside of formal cemeteries?				

Summary of Comments Received in Response to the Notice of Preparation

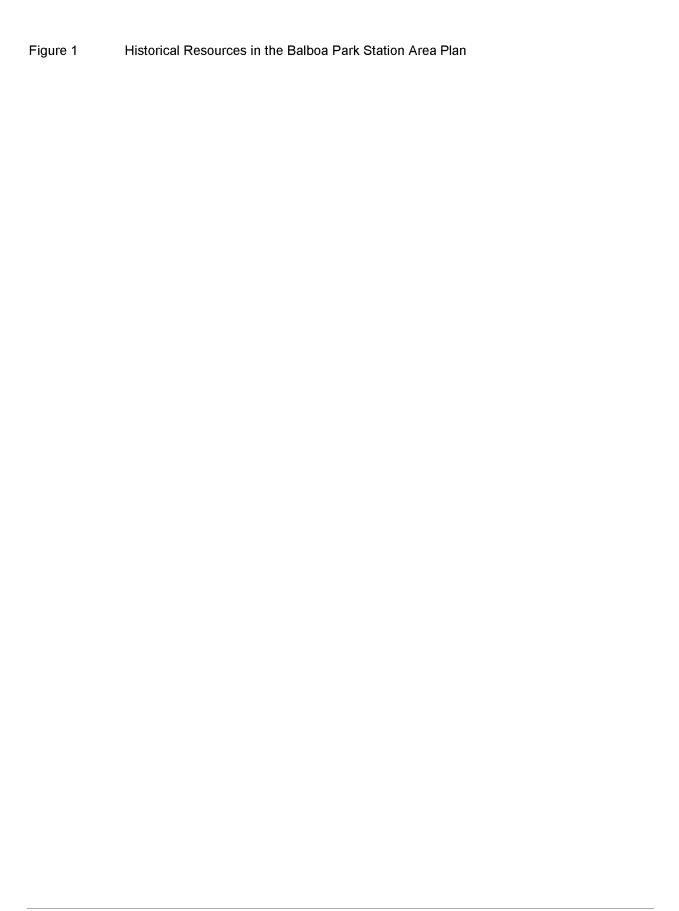
Comments requested that the analysis study how the proposed project would impact the character of the Westwood Park neighborhood, especially the residential character of the neighborhood and any other neighborhoods or homes that have an historical designation. Historic architectural resources are addressed under Impact CR-1.

The Native American Heritage Commission (NAHC) provided comments related to cultural resources, including archeological resources. The NAHC recommended an archeological records search of the California Historical Resources Information System (CHRIS), a final report disseminating the results of an archeological survey, and contacting the NAHC for a sacred lands file search and list of tribes for consultation. Archeological resources are addressed under Impact CR-2.

Summary of Historic Architectural Resources in the PEIR

Pursuant to CEQA Guidelines sections 15064.5(a)(1) and 15064.5(a)(2), historical resources are buildings or structures that are listed, or are eligible for listing, in the California Register of Historical Resources or are identified in a local register of historical resources, such as planning code articles 10 and 11. PEIR Section IV.H, Historic Architectural Resources, summarized historic architectural resources within the plan area, including information from a report identifying potential historical resources in the plan area prepared in 2005 by Carey & Co. The PEIR identified two potential historic districts and 10 potential individually significant resources within the plan area, described below. Additionally, one locally designated resource under article 10 of the planning code – the Geneva Office Building (City Landmark No. 180) – is within the plan area. **Figure 1, Historical Resources in the Balboa Park Station Area Plan**,





- Potential Ocean Avenue Neighborhood Commercial Historic District: This potential historic district encompasses the blocks fronting Ocean Avenue and bounded by Fairfield Way to the west and Plymouth Avenue to the east. It has a period of significance of ca. 1900 to ca. 1955 and is associated with residential and commercial development patterns in San Francisco and features a uniform architectural type (i.e., early 20th-century commercial buildings ranging from the 1920s to the 1940s). Forty-four contributing buildings were identified in the Carey & Co. report. The Balboa Reservoir site is not located within the potential Ocean Avenue Neighborhood Commercial Historic District.
- Potential Balboa Park Historic District: This potential historic district is bounded by Ocean Avenue, San Jose Avenue, Havelock Street, and Interstate 280. It has a period of significance of ca. 1900 to ca. 1955 and is associated with residential development patterns in San Francisco. Five contributing resources (including the Balboa Park grounds) were identified in the Carey & Co. report. The Balboa Reservoir site is not located within the potential Balboa Park Historic District.
- **Potential Individually Significant Resources**: The PEIR identified the following 10 buildings as potentially eligible for individual historic designation for their architectural significance:
 - Balboa Swimming Pool;
 - 755 Ocean Avenue, Lick-Wilmerding High School;
 - 1345 Ocean Avenue, Ingleside Presbyterian Church;
 - 1549–1551 Ocean Avenue, Brannagan Building;
 - 1831–1835 Ocean Avenue;
 - 1901–1903 Ocean Avenue;
 - 1931–1935 Ocean Avenue;
 - 300 Seneca Avenue, Leadership High School;
 - One John V. Young Lane, SFPD Ingleside Station; and
 - 2377 San Jose Avenue, Turko-Persian Rug Co. and neon signage.

The PEIR determined that implementation of the area plan would result in a significant and unavoidable cumulative impact on the potential Ocean Avenue Neighborhood Commercial Historic District and less-than-significant impacts on the potential Balboa Park Historic District and the Geneva Office Building. No mitigation measures were identified for historic architectural resources. Impacts on potential individually significant resources were not analyzed in the PEIR, as no specific projects were identified that included these resources.

Summary of Archeological Resources in the PEIR

PEIR Section IV.I, Archaeological Resources, summarized information from a technical memorandum prepared by the planning department's archeologist.²³ In summary, the prehistoric and historical contexts of the plan area suggest that expected archeological resources within the plan area may have important research value and would, therefore, be significant under CEQA. The archeological record documents the presence of prehistoric populations within the land comprising San Francisco for at least 6,000 years.

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

B-26

April 2019

²³ Dean, Randall, *Balboa Park Station Area Plan Technical Memorandum*, prepared by the City of San Francisco, 2006.

Archeological research indicates that resources within the plan area could contribute significant data to questions regarding prehistoric resource management practices and settlement distribution.

The earliest European settlement relevant to the history of the plan area was the original mission of San Francisco de Asís constructed in 1776. The first known historic-period settlement within the plan area was that of a farmer, Schmidt, who held a large tract of land south of Ocean Avenue. During the latter quarter of the 19th century, many of the dairies located in the northern part of San Francisco, especially in Cow Hollow, relocated to available farm tracts above Islay Creek and to Glen Park in the plan area. By the late 1890s, a dog-racing track, Ingleside Coursing Park, had opened where the project site and east basin are currently located. Research themes within the plan area could include 19th century farming on the urban margin, ethnic farming practices, Victorian treatment of children, especially from pauperized households, 19th century saloons, and the German community. Some of the archeological property types that may be present within the plan area represent archeological remains and associated research issues that have not previously been addressed or only partially addressed in San Francisco. These new archeological properties include 19th century immigrant French Swiss dairy farming communities, 19th century elite recreational facilities, and the House of Refuge movement.

The PEIR concluded that development and associated construction under the plan could disturb prehistoric occupation sites that may be present within the eastern part of the plan area towards the historic loci of "Islay" Creek and Geneva Lake, as well as small ephemeral activity loci (temporary encampment, tool-making or foraging sites, etc.) that may be present within the western part of the plan area. The PEIR also concluded that development under the plan could disturb several locations of historic-period occupation, most notably the Ingleside Coursing Park, a dog racing course located on the north side of Ocean Avenue. The former racetrack was on the current site of Balboa Reservoir. The former Grandstand was located on the Kragen Auto Parts Site [now 1150 Ocean Avenue] and the dog kennels and other structures were on the Phelan Loop Site [now 1100 Ocean Avenue]. Archeological deposits or features associated with the racing course could include structural foundations, domestic deposits associated with dog keeper, trash pits, and sheet refuse. The PEIR identified two mitigation measures related to archeological resources. Mitigation Measure AM-1 requires that archeological resources be avoided and, if accidentally discovered, that they be treated appropriately for projects that would result in soils disturbance to a depth of 4 feet or greater below ground surface (bgs). Mitigation Measure AM-2 requires implementing an archeological monitoring plan for projects that would result in soil disturbing activities greater than 10 feet in depth. Mitigation Measure AM-2 was applicable only to the Phelan Loop Site, Kragen Auto Parts Site, east side of San Jose Avenue between Ocean and Geneva avenues, and the Upper Yard Parcel in the plan area.

In summary, the PEIR determined that implementation of the area plan would result in potentially significant impacts to subsurface prehistoric or historic archeological resources and identified Mitigation Measures AM-1 and AM-2 to reduce those impacts to a less-than-significant level.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar building configurations, building footprints, and similar construction characteristics. The differences between the two project options would not result in any meaningful difference in potential impacts on historic archeological or architectural resources and therefore analyzed as one.

Impact Evaluation

Historic Architectural Resources

Impact CR-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5. (No Impact)

CEQA Guidelines section 15064.5 requires the lead agency to consider the effects of a project on historical resources. A historical resource is defined as a building, structure, site, object, or district (including landscapes) listed in or determined to be eligible for listing in the California Register of Historical Resources (California Register), included in a local register or identified as significant in an historical resource survey, or determined by a lead agency to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The following discussion focuses on architectural resources. Archeological resources, including archeological resources that are potentially historical resources according to CEQA Guidelines section 15064.5, are addressed under Impact CR-2.

As discussed above, the PEIR did not identify any historic architectural resources within the project site. No previous determinations have been made about the eligibility of the Balboa Reservoir site for listing in the California Register of Historical Resources, and a historic resource evaluation was prepared for the project site in October 2018.24 The project site was purchased by the City of San Francisco in 1930, and plans for a new reservoir were announced the following year. The Balboa Reservoir site was a project of the SFPUC, and construction began in the 1950s. However, the original two basins were never fully realized or functioned as water reservoirs and were instead used by the public for a variety of functions, including a practice area for new drivers, recreation, and automobile and motorcycle racing. The land was ultimately leased to various tenants, with the longest tenant being City College, which currently uses the project site as a parking lot. By 2004 or 2005, the east-west embankment that separated the two basins was removed, and the reservoir site was reconfigured as one large basin. In 2008, the eastern half of the reservoir site was filled and raised to the Frida Kahlo Way grade, once again reconfiguring the site into western and eastern portions. The evaluation concluded that the Balboa Reservoir site does not appear to be individually eligible for listing in the California Register of Historical Resources under any criteria; thus, it is not considered to be a historical resource for the purposes of CEQA.²⁵²⁶ Therefore, the project would have no direct impacts to historic architectural resources.

The potential Ocean Avenue Neighborhood Commercial Historic District is the only historic architectural resource identified in the PEIR that is in proximity to the project site with the potential for indirect impacts by the project. As shown on Figure 1, this district's eastern boundary is west of Plymouth Avenue, approximately 150 feet from the southwestern corner of the project site. The proposed project would not demolish or alter any contributors to the potential historic district. In addition, although the design and scale of the project would not be compatible in massing or details with the potential historic district, the

Balboa Reservoir Project Draft SEIR B-28 April 2019
Case No. 2018-007883ENV

²⁴ Environmental Science Associates (ESA), *Final Historic Resource Evaluation Part 1 for the Balboa Reservoir Project, San Francisco, California*. Prepared for Reservoir Community Partners, LLC, October 2018.

ESA, Final Historic Resource Evaluation Part 1 for the Balboa Reservoir Project, San Francisco, California, Prepared for Reservoir Community Partners, LLC, October 2018.

San Francisco Planning Department, Preservation Team Review Form for the Balboa Reservoir Site (Case No. 2018-007883ENV), October 9, 2018.

physical separation between the new construction and the historic district would further reduce the potential for direct or indirect impacts. The proposed project may alter the setting of the historic district; however, the overall integrity of the historic district would not be affected. Based on recent department review, Westwood Park does not appear to be eligible as a historic district.²⁷ Thus, the proposed project would not have any new or substantially more severe effects than those identified in the PEIR, and there are *no indirect impacts* to historic architectural resources as a result of the project. No mitigation is required.

Archeological Resources

Impact CR-2: The proposed project could cause a substantial adverse change in the significance of an archeological resource pursuant to section 15064.5. (Less than Significant with Mitigation)

This section discusses archeological resources, both as historical resources according to CEQA Guidelines section 15064.5, as well as unique archeological resources as defined in Public Resources Code section 21083.2(g). An *Archeological Sensitivity Assessment* was completed for the proposed project in December 2018. The assessment included a records search at the CHRIS and background research including a review of historic maps and photographs.²⁸

No archeological sites have been previously documented within the project area or within 0.5 mile of the project area. The record search results suggest that the area surrounding the project area is not highly sensitive for prehistoric or historic-period archeological resources.

The 1869 U.S. Coast Survey map shows a detailed view of the project area, and no structures or delineated lots are present within the project area at that time. In 1881, Adolph Sutro acquired the land and in 1894, the Spring Valley Water Company purchased the parcel from Sutro. The Spring Valley Water Company leased the land to a gambling organization to run a dog coursing venue. In 1896, the Ingleside Coursing Park opened; it was the first recorded development within the project area. Though the course itself was within the project site, the associated structure (grandstand/food service area) was not. The Ingleside Coursing Park operated until 1910, when it closed due to pressure from nearby residents and anti-gambling organizations.

Throughout the 1910s and 1920s, the parcel remained vacant. In 1930, the City of San Francisco purchased the holdings of the Spring Valley Water Company and formed the municipal utility then known as the San Francisco Water Department. The first known excavations for a reservoir basin in the project area took place during the 1930s. Given the history of the project area, it is extremely unlikely that historic-period remains were deposited within the project area and the historical archeological sensitivity of the project area is low.

The project area is located on Franciscan bedrock overlain by the Colma Formation, which is a Pleistocene-era alluvium. The upper 3 feet of the Colma Formation was available for human use and occupation during the Early Holocene period and is therefore considered archeologically sensitive. The proposed excavation within the current footprint of the reservoir basin floor would occur within planned

²⁷ San Francisco Planning Department, Historic Resource Evaluation Response for 154 Eastwood Drive, August 20, 2018 (Case No. 2017-014346ENV).

Archeo-Tec Inc., Archeological Sensitivity Assessment for the Balboa Reservoir Project, City and County of San Francisco. Prepared for the San Francisco Planning Department, December 2018.

fill deposits that would be used to raise the grade of the site to match the grades of adjacent areas along each side of the site. This excavation has no potential to encounter archeological resources. The small amount of native soil that could be displaced below this fill is in an area previously excavated beyond the vertical zone of archeological sensitivity. Excavation beneath the current berm and along basin slopes would disturb a small amount of native soil; however, based on the results of previous geotechnical borings that did not indicate the presence of archeological materials, as well as the paucity of sites in the vicinity, the archeological sensitivity of the project area is low.

Based on the results of the records search and background research, no archeological resources have been identified in the project area, and the project area has a low potential to uncover buried archeological resources. Therefore, the proposed project is not anticipated to affect archeological resources pursuant to CEQA Guidelines section 15064.5. While unlikely, if any previously unrecorded archeological resources are identified during project ground-disturbing activities and were found to qualify as an historical resource per CEQA Guidelines section 15064.5 or a unique archeological resource as defined in Public Resources Code section 21083.2(g), any impacts to the resource resulting from the project could be potentially significant. Implementation of Mitigation Measure M-CR-2, Accidental Discovery of Archeological Resources (PEIR Mitigation Measure AM-1), during construction would address impacts on any previously unrecorded and buried (or otherwise obscured) archeological deposits by requiring the project sponsor and its contractors to adhere to the appropriate procedures and protocols to identify and appropriately treat archeological resources discovered during construction activities. As a result, the potential impact of project construction on previously unrecorded archeological resources would be *less than significant with mitigation*. Thus, the proposed project would not have any new or substantially more severe effects than those identified in the PEIR.

Mitigation Measure M-CR-2: Accidental Discovery of Archeological Resources (PEIR Mitigation Measure AM-1). The project sponsor shall distribute the planning department archeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils-disturbing activities within the project site. Prior to any soils-disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel including, machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archeological resource be encountered during any soils-disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils-disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.

If the ERO determines that an archeological resource may be present within the project area, the project sponsor shall retain the services of an archeological consultant from the pool of qualified archeological consultants maintained by the planning department archeologist. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is

warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archeological resource; an archeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describing the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

Impact CR-3: The proposed project may disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)

The PEIR did not specifically address impacts associated with potential disturbance of human remains. Although no known human remains have been identified within the project area, the possibility that human remains are present and could be subject to inadvertent disturbance during construction of the project cannot be entirely discounted. Although unlikely, earthmoving activities associated with project construction could result in direct impacts on previously undiscovered human remains, which would be a significant impact. Implementation of **Mitigation Measure M-CR-3**, **Accidental Discovery of Human Remains**, during project construction would address impacts on any buried human remains and associated or unassociated funerary objects that are discovered during project construction activities by requiring the project sponsor to solicit the Most Likely Descendant's recommendations and adhere to appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition protocols. As a result, the potential impact of project construction would be *less than significant with mitigation*. With implementation of Mitigation Measure M-CR-3, the proposed project would not have any new or substantially more severe effects than those identified in the PEIR.

Mitigation Measure M-CR-3: Accidental Discovery of Human Remains. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable state and federal laws. Federal laws, including 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 who shall appoint a Most Likely Descendant (Public Resources Code section 5097.98). The Environmental Review Officer (ERO) shall also be immediately notified upon discovery of human remains. The archeological consultant, project sponsor, ERO, and Most Likely Descendant shall have up to but not beyond six days after the discovery to 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 section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept recommendations of a Most Likely Descendant. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such as agreement has been made or, otherwise, as determined by the archeological consultant and the ERO. If no agreement is reached state regulations shall be followed including the reinternment of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further subsurface disturbance (Public Resources Code section 5097.98).

Cumulative Impacts

Impact C-CR-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in significant cumulative impacts to cultural resources. (Less than Significant)

The cumulative impacts on historic architectural resources considers reasonably foreseeable future projects within the potential Ocean Avenue Neighborhood Commercial Historic District. There is one foreseeable project that could impact the potential Ocean Avenue Neighborhood Commercial Historic District: 1601–1631 Ocean Avenue and 1271 Capitol Avenue (cumulative project number 3 on SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, and Figure 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-12), which is located within the potential Ocean Avenue Neighborhood Commercial Historic District.

The PEIR identified a significant and unavoidable cumulative impact on the potential Ocean Avenue Neighborhood Commercial Historic District. When considered together, the above-mentioned projects have the potential to result in a significant adverse cumulative impact on the integrity of the district. However, as discussed under Impact CR-1, the proposed project would have no impact on the potential historic district. Therefore, the proposed project would not contribute to the cumulatively significant impact on the historic district. The project would not have any new or substantially more severe cumulative effects than those identified in the PEIR. No mitigation is required.

Project-related impacts on archeological resources and human remains are site-specific and generally limited to a project's construction area. For these reasons, the proposed project in combination with other reasonably foreseeable future projects would not have a significant cumulative impact on archeological resources or human remains. The project would not have any new or substantially more severe cumulative effects on archeological resources than those identified in the PEIR. This impact would be *less than significant*.

To	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
5.	TRIBAL CULTURAL RESOURCES. Would the project:				
a)	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	 Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 				
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

Summary of Comments Received in Response to the Notice of Preparation

During the scoping period, the NAHC provided comments related to tribal cultural resources. The NAHC recommended consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

Summary of Tribal Cultural Resources in the PEIR

The PEIR did not specifically address impacts associated with tribal cultural resources. Tribal cultural resources are discussed under Impact TC-1.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar building configurations, building footprints, and similar construction characteristics. The differences between the two project options would not result in any meaningful difference in potential impacts on tribal cultural resources and therefore analyzed as one.

Impact Evaluation

Impact TC-1: The proposed project may result in a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. (Less than Significant with Mitigation)

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, state, or local register of historical resources. Pursuant to CEQA section 21080.3.1(d), on January 7, 2019, the planning department contacted Native American individuals and organizations for the San Francisco area, providing a description of the project and requesting comments on the identification, presence, and significance of tribal cultural resources in the project vicinity. During the 30-day comment period, no Native American tribal representatives contacted the planning department to request consultation.

As discussed under Impact CR-2, Mitigation Measure M-CR-2, p. B-30, would be applicable to the proposed project. Unknown archeological resources may be encountered during construction that could be identified as tribal cultural resources at the time of discovery or at a later date. Therefore, the potential adverse effects of the proposed project on previously unidentified archeological resources, discussed under Impact CR-2, also represent a potentially significant impact on tribal cultural resources. Implementation of Mitigation Measure M-TC-1, Tribal Cultural Resources Interpretive Program, would reduce potential adverse effects on tribal cultural resources by requiring either preservation-in-place of the tribal cultural resources, if determined effective and feasible, or an interpretive program regarding the tribal cultural resources developed in consultation with affiliated Native American tribal representatives. As a result, the potential impact of project construction on previously unknown tribal cultural resources would be *less than significant with mitigation*. Thus, the proposed project would not have any new or substantially more severe effects than those identified in the PEIR.

Mitigation Measure M-TC-1: Tribal Cultural Resources Interpretive Program. If the Environmental Review Officer (ERO) determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be adversely affected by the proposed project, the proposed project shall be redesigned so as to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO determines that preservation-in-place of the tribal cultural resource is both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP). Implementation of the approved ARPP by the archeological consultant shall be required when feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content

and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifacts displays and interpretation, and educational panels or other informational displays.

Cumulative Impacts

Impact C-TC-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in significant cumulative impacts to tribal cultural resources. (Less than Significant)

Project-related impacts on tribal cultural resources are site-specific and generally limited to a project's construction area. For these reasons, the proposed project in combination with other reasonably foreseeable future projects would not have a significant cumulative impact on tribal cultural resources. This impact would be *less than significant*.

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
6.	TRANSPORTATION AND CIRCULATION. Would the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	\boxtimes			
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?				
d)	Result in inadequate emergency access?	\boxtimes			

The SEIR provides a summary of transportation and circulation impacts from the PEIR relevant to the project site. It also includes an updated, detailed analysis of transportation and circulation impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the PEIR. The SEIR includes a complete description of the existing transportation and circulation setting (2018), impact evaluation of the project, cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate. Transportation and circulation criteria E.6(a) through E.6(d) are addressed in SEIR Section 3.B, Transportation and Circulation.

То	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
7.	NOISE. Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Generation of excessive groundborne vibration or groundborne noise levels?		\boxtimes		
c)	For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				

Potentially

The project site is not located within an airport land use plan area, within two miles of a public airport, or within the vicinity of a private airstrip. Therefore, criterion E.7(c) is not applicable to the proposed project and are not discussed further in this initial study or in this SEIR.

This SEIR provides a summary of noise impacts from the PEIR relevant to the project site. It also includes an updated, detailed analysis of noise impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the PEIR. This SEIR includes a complete description of the existing noise setting (2018), impact evaluation of the project, cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate. Noise criteria E.7(a) and E.7(b) are addressed in SEIR Section 3.C, Noise.

To	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
8.	AIR QUALITY. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard?				
c)	Expose sensitive receptors to substantial pollutant concentrations?		\boxtimes		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?		\boxtimes		

Potentially

This SEIR provides a summary of the air quality impacts from the PEIR. It also includes an updated, detailed analysis of air quality impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the PEIR. This SEIR includes a complete description of the existing air quality setting (2018), impact evaluation of project and cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate. All air quality topics are addressed in SEIR Section 3.D, Air Quality.

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
9.	GREENHOUSE GAS EMISSIONS. Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Summary of Comments Received in Response to the Notice of Preparation

One comment received in response to the NOP expressed general concern regarding the increase in greenhouse gas (GHG) emissions from the proposed project. Construction and operational GHG emissions of the proposed project are discussed under Impact C-GG-1.

Summary of Greenhouse Gas Emissions Impacts in the PEIR

PEIR Section IV.E, Air Quality, assessed the GHG emissions that could result from the following four development scenarios: (1) the Kragen Auto Parts site; (2) the Phelan Loop site; (3) Tier 1 projects (including Kragen and Phelan Loop sites); and (4) Tier 1 and Tier 2 projects. The PEIR evaluated the four development scenarios and concluded that GHGs from implementation of the area plan would not

contribute significantly, either individually or cumulatively to global climate change. No mitigation measures were identified in the PEIR.

Impact Evaluation

GHG emissions and global climate change represent cumulative impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average temperature; instead, the combination of GHG emissions from future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The Bay Area Air Quality Management District (air district) has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared Strategies to Address Greenhouse Gas Emissions,²⁹ which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy in compliance with the CEQA Guidelines. These GHG reduction actions have resulted in a 28 percent reduction in GHG emissions in 2015 compared to 1990 levels,³⁰ exceeding the year 2020 reduction goals outlined in the air district's 2017 Clean Air Plan, Executive Order (EO) S-3-05, and Assembly Bill (AB) 32 (also known as the Global Warming Solutions Act).³¹

Given that the City has met the state and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with, or more aggressive than, the long-term goals established under EO S-3-05,³² EO B-30-15,^{33,34} and Senate Bill (SB) 32^{35,36} the City's GHG reduction goals are consistent with

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

²⁹ San Francisco Planning Department, Strategies to Address Greenhouse Gas Emissions in San Francisco, July 2017. Available at http://sf-planning.org/strategies-address-greenhouse-gas-emissions.

San Francisco Department of the Environment, San Francisco's Carbon Footprint. Available at https://sfenvironment.org/carbon-footprint, accessed July 19, 2017.

³¹ EO S-3-05, AB 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.

Office of the Governor, EO S-3-05, June 1, 2005, http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf. EO S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents [MTCO2e]">https://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf. EO S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce emissions to 1990 levels (approximately 427 million MTCO2e); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO2e). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

Office of the Governor, Executive Order B-30-15, April 29, 2015, https://www.gov.ca.gov/news.php?id=18938, accessed March 3, 2016. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO₂e).

San Francisco's GHG reduction goals are codified in section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

EO S-3-05, EO B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and would therefore not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the proposed project's impact on climate change focuses on the project's contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context, and this section does not include an individual project-specific impact statement.

Impact C-GG-1: The proposed project would generate greenhouse gas emissions, but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions. (Less than Significant)

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations.

Under both options, the proposed project would increase the intensity of use of the site by replacing the surface parking with new residential, retail, and a childcare facility/community space. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources), energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

The proposed project would be subject to regulations adopted to reduce GHG emissions as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce the project's GHG emissions related to transportation, energy use, waste disposal, wood burning, and use of refrigerants.

Compliance with the City's Commuter Benefits Ordinance, Emergency Ride Home Program, transportation management programs, Transportation Sustainability Program, bicycle parking requirements, low-emission car parking requirements, and car sharing requirements would reduce the proposed project's transportation-related emissions. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of alternative transportation modes with zero or lower GHG emissions on a per capita basis. The project sponsor would incorporate transportation demand management (TDM) measures to reduce vehicle trips and encourage sustainable modes of transportation. Measures incorporated into the project design include childcare, affordable housing, and sidewalks and streetscapes that prioritize safety for pedestrians and bicyclists. Programmatic transportation demand

³⁵ SB 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

SB 32 was paired with AB 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of GHG emissions.

management measures could include bike sharing stations and other means to encourage bicycle use, unbundled parking, car-sharing services, delivery supportive amenities, car seat storage, and other approaches to discourage use of single-occupant private vehicles. These design features of the proposed project would contribute to reducing project-related GHG emissions and would further efforts to meet the city's targeted GHG reduction goals for 2025 and 2050.

The proposed project would be required to comply with the energy efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, Water Efficient Irrigation Ordinance, Residential Water Conservation Ordinance, and Residential Energy Conservation Ordinance, which would promote energy and water efficiency, thereby reducing the proposed project's energy-related GHG emissions.³⁷ Additionally, the project would be required to meet the renewable energy criteria of the Green Building Code, including renewable energy generation or green roof installation, further reducing the project's energy-related GHG emissions.

The proposed project's waste-related emissions would be reduced through compliance with the city's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, Construction and Demolition Debris Recycling Requirements, and Green Building Code requirements. These regulations reduce the amount of materials sent to a landfill, reducing GHGs emitted by landfill operations. These regulations also promote reuse of materials, conserving their embodied energy³⁸ and reducing the energy required to produce new materials. As described in SEIR Chapter 2, Project Description, the project's grading plan intends to balance the site and use as much cut soil as fill soil in other areas of the site, minimizing or eliminating the need for either soil import or export. Cut and excavated material would be recycled and re-used onsite to the extent possible, which would further reduce the amount of materials sent to a landfill and associated hauling trips.

Compliance with the City's street tree planting requirements would serve to increase carbon sequestration. Other regulations, including those limiting refrigerant emissions and the air district's wood-burning regulations would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds.³⁹ Thus, the proposed project was determined to be consistent with San Francisco's GHG reduction strategy.⁴⁰

The project sponsor is required to comply with these regulations, which have proven effective as San Francisco's GHG emissions have measurably decreased when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, AB 32, and the 2017 Clean Air Plan GHG reduction goals for the year 2020. Furthermore, the city has met its 2017 GHG reduction goal of reducing GHG emissions to 25 percent below 1990 levels by 2017. Other existing regulations, such as those implemented through AB 32, will continue to reduce a proposed project's contribution to climate change. In addition, San Francisco's local GHG reduction targets are consistent with the long-term GHG

³⁷ Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump and treat water required for the project.

Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site.

³⁹ While not a GHG, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing volatile organic compound emissions would reduce the anticipated local effects of global warming.

⁴⁰ San Francisco Planning Department, Greenhouse Gas Analysis: Compliance Checklist for Balboa Reservoir Project, November 15, 2018.

reduction goals of EO S-3-05, EO B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan. Therefore, because the proposed project is consistent with the City's GHG reduction strategy, it is also consistent with the GHG reduction goals of EO S-3-05, EO B-30-15, AB 32, SB 32, and the 2017 Clean Air Plan, would not conflict with these plans, and would therefore not exceed San Francisco's applicable GHG threshold of significance. Therefore, the proposed project would result in a *less-than-significant* impact with respect to GHG emissions. No mitigation measures are necessary.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the PEIR related to GHG emissions.

Тор	pics:	Potentially Significant Effects Not Identified in Prior EIR	Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
10.	WIND. Would the project:				
a)	Create wind hazards in publicly accessible areas of substantial pedestrian use?				\boxtimes

Potentially

Summary of Comments Received in Response to the Notice of Preparation

During the scoping period, a public comment was received inquiring whether project buildings would direct prevailing winds towards the Sunnyside neighborhood northeast of the project site, where winds are said to already be strong.

Summary of Wind Impacts in Area Plan PEIR

Based upon experience of the planning department in reviewing wind analyses and expert opinion on other projects, it is generally (but not always) the case that projects under 80 feet in height do not have the potential to generate significant wind impacts. PEIR initial study Section 6, Air Quality/Climate, found that development that would result from the proposed changes to height and bulk limits in the plan area would not be expected to result in significant impacts on ground-level winds, given that the maximum height limit proposed under the area plan would be 85 feet.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the height and massing of the buildings would vary between the two options; however, the variation would not be great (generally, a height difference of one story). Therefore, the two options are analyzed together. Where effects would be different, this is noted in the analysis.

Impact Evaluation

Impact WI-1: The proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use. (Less than Significant)

Tall buildings and exposed structures can strongly affect the wind environment for pedestrians. A building that stands alone or is much taller than the surrounding buildings can intercept and redirect winds that might otherwise flow overhead and bring them down the vertical face of the building to ground level, where they create ground-level wind and turbulence (variability in wind speed and pressure). These redirected winds, or down-drafts, can be relatively strong and turbulent, and may in some instances be incompatible with the intended uses of nearby ground-level spaces. Conversely, a building with a height that is similar to the heights of surrounding buildings typically would cause little or no additional ground-level wind acceleration and turbulence. In addition to the localized effects from individual buildings, larger groups of buildings interact with and tend to slow the approaching winds, due to the friction and drag created by the many individual structures.

Thus, wind impacts are generally caused by large building masses extending substantially above their surroundings, and by buildings oriented so that a large wall catches a prevailing wind, particularly if such a wall includes little or no articulation. In general, as noted above, new buildings less than 80 feet in height above ground surface are unlikely to result in substantial adverse effects on ground-level winds such that pedestrians would be uncomfortable. Such winds may occur under existing conditions, but shorter buildings typically do not cause substantial changes in ground-level winds.

Data collected at the old San Francisco Federal Building at Civic Center show that average winds speeds in San Francisco are the highest in the summer and lowest in winter. However, the strongest peak wind speeds occur in winter. The highest average wind speeds occur in mid-afternoon and the lowest in the early morning. Westerly to northwesterly winds are the most frequent and strongest winds during all seasons; southwest and west-southwest winds are also relatively prevalent.⁴¹ Historical wind data collected at Fort Funston, which is closer to the project site than is Civic Center and is also upwind from the site, show that there is reasonable consistency between the Civic Center and the Fort Funston meteorological stations, regardless of their substantially different locations. Similar to Civic Center, the majority of strong winds at Fort Funston were recorded as blowing from the south-southwest through the north-northwest.

After passing the coastline location of Fort Funston, winds that move towards the project site encounter surface roughness in the form of buildings, ground, and vegetation, and may also be altered by intervening topography. For example, the project site is offered some protection from northwest winds by the toe of Mount Davidson, which is more than 75 feet above the height of the project site at Faxon Avenue and Upland Drive, and from southwest winds by Merced Heights (the ridge that generally follows Lakeview Avenue and Shields Street), which generally parallels Lakeview Avenue and rises south of Ocean Avenue to a height more than 150 feet above that of the project site. However, westerly winds generally flow relatively unimpeded from the Pacific Ocean to the site, although they do lose some speed from surface roughness. Under existing conditions, the prevailing westerly winds flow generally unimpeded across the project site, as there are no tall buildings upwind of the site. The tallest buildings in the vicinity are three residential buildings on Ocean Avenue south and southeast of the project site; these buildings are five stories and 55 feet in height. However, they are generally cross-wind of the project site.

Development of the proposed project, under both options, would result in buildings up to five or six stories taller than the generally two-story development west of the project site. However, under both options the project would be developed with the shortest buildings at the west side of the site and the taller buildings stepping up in height to the east. In the case of the Developer's Proposed Option, the westernmost new structures would be two to three stories tall, followed by buildings four to six stories in height, with the tallest buildings, at four to seven stories (up to 78 feet) tall, being developed along the eastern edge of the site. Because of the proposed development pattern, with heights stepping up to the east, away from the prevailing wind, the proposed project under the Developer's Proposed Option would not present a situation in which large building masses extend substantially above the heights of adjacent upwind buildings. Instead, the greatest difference in height between adjacent blocks, moving with the wind from west to east, would be less than 35 feet. This means that no portion of the proposed project, under the Developer's Proposed Option, would present a wall into the prevailing winds at a height greater than about 35 feet, which is comparable to a three-story residential building. Accordingly, under

⁴¹ Wind direction is given as the point of origin (i.e., a westerly wind blows from west to east).

the Developer's Proposed Option, the proposed project would not result in large building masses extending substantially above their surroundings or buildings oriented so that large walls would intercept a prevailing wind and redirect it downward to the sidewalk. Rather, wind conditions adjacent to the proposed project would be comparable to conditions adjacent to the five-story buildings along Ocean Avenue immediately south of the project site. Winds near the project would also be comparable to, and possibly incrementally less strong than, those around the base of the 55-foot-tall City College Multi-Use Building 300 feet east of the project site. As is typical, the greatest wind speeds would be expected at the southwest corner of an individual building, where winds diverted around the building would combine with winds that have passed by the building. Similar but generally slightly less windy conditions would occur at a building's northwest corner. Winds would also be expected to accelerate in relatively narrow east-west-oriented breaks between buildings (such as between Blocks D and F) but would dissipate and slow upon reaching the project's central open space. However, given the limited height by which any of the project buildings would project into the prevailing winds, even these strongest winds would be unlikely, under the Developer's Proposed Option, to substantially and adversely affect public areas. It is noted that wind tunnel testing has found that articulation of building facades facing into the prevailing winds can result in meaningful decreases in resulting diverted winds around the base of a building.

In the case of the Additional Housing Option, most development along the western edge of the site would be two to three stories tall, with four-story development immediately behind. The southwestern most building would be four to five stories tall; however, this structure would be proximate to the existing residential building at 1200 Ocean Avenue (at Plymouth Avenue) and thus would represent development similar to existing conditions. The Additional Housing Option would develop a second rank of structures at heights of five to seven stories, and six to eight stories (up to 88 feet) along the eastern edge of the site. As with the Developer's Proposed Option, development would step up to the east, away from the prevailing wind. Even under the Additional Housing Option that would have buildings up to 88 feet tall, the tallest building elements facing the prevailing winds would be approximately 45 feet tall. As with the Developer's Proposed Option, this would not present a situation in which large building masses extend substantially above the heights of adjacent upwind buildings. Also, as with the Developer's Proposed Option, winds near the proposed project under the Additional Housing Option would be comparable to those adjacent to the buildings to the south on Ocean Avenue or the City College Multi-Use Building. As with the Developer's Proposed Option, the Additional Housing Option would result in greatest wind speeds at the southwest and northwest corners of individual buildings and would be expected to accelerate in narrow east-west oriented breaks between buildings, but would dissipate and slow upon reaching the project's central open space. However, even the strongest winds would be unlikely to substantially and adversely affect public areas because no building walls would project substantially into the wind. As with the Developer's Proposed Option, building articulation would be expected to result in lesser wind conditions than would occur with a relatively featureless wall facing into the wind.

Under both options, winds that pass over the top of the tallest and easternmost project buildings would result in some "downwash" immediately east of the project site, on the east basin owned by City College.⁴² However, downwash does not generally result in strong winds behind a building because there are no other winds with which the downwash can combine and accelerate, as these other winds have

Downwash refers to winds that pass over a building and head down to ground level; at the ground, these winds typically rotate back towards the building.

been blocked and diverted by the building itself. Therefore, the downwash east of the project site would not be anticipated to create windier conditions than would occur at the southwest and northwest corners of individual buildings, discussed above, and would not adversely affect public areas. Some winds that pass over the southeasterly project buildings would continue to flow over the existing City College Multi-Use Building. However, because that building is only about 55 feet tall, these winds would not be anticipated to result in adverse effects east of this building, adjacent to Frida Kahlo Way.

Based on the foregoing, neither option would be expected to create wind hazards in publicly accessible areas of substantial pedestrian use. Therefore, wind impacts would be *less than significant* for both options.

Cumulative Impacts

Impact C-WI-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in cumulatively considerable impacts related to wind. (Less than Significant)

Wind

There are two projects in the vicinity that could result in changes in pedestrian winds that could interact with wind effects of the proposed project. These are the two City College projects on the east basin site as shown in SEIR Table 3.A-1: cumulative project number 5, a 102,000-square-foot Performing Arts Education Center, anticipated to be approximately 40 feet tall with a fly loft rising to about 55 feet above the auditorium; and cumulative project number 6, an 877-space parking garage, assumed to have a height of approximately 65 feet. The Performing Arts Education Center would be immediately north of the existing Multi-Use Building and would be similarly oriented, parallel to Frida Kahlo Way, approximately 300 feet east of the project site. The parking garage would be located at the north end of the east basin, adjacent to Archbishop Riordan High School, and would be oriented perpendicular to Frida Kahlo Way, approximately 125 feet east of the project site. Both of these future buildings would be shorter than the tallest of the most easterly buildings developed under the proposed project (under both options), and comparable in height to the shortest easterly buildings. These easterly project buildings would range in height from about 50 feet to about 78 feet under the Developer's Proposed Option, and from about 70 feet to about 88 feet under the Additional Housing Option. As a result, some of the winds that would be diverted up and over the buildings on the project site would continue to flow over the new City College buildings, likely reducing to some degree the downwash flows behind the project buildings and resulting in some downwash behind the City College buildings, adjacent to Frida Kahlo Way. As noted above, however, downwash does not generally result in strong winds behind a building, because the City College buildings would be no more than about 65 feet in height, and because these buildings would generally not project substantially above their surroundings—being generally shorter than the proposed project buildings to the east—no adverse wind effects are anticipated along Frida Kahlo Way or its sidewalks.

Based on the foregoing, no cumulative adverse wind impacts are anticipated, and cumulative wind impacts, therefore, would be *less than significant*.

Balboa Reservoir Project Draft SEIR B-45 April 2019
Case No. 2018-007883ENV

Τοι	pics:	Potentially Significant Effects Not Identified in Prior EIR	Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
11.	. SHADOW. Would the project:				
a)	Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?				

Dotontially

Summary of Comments Received in Response to the Notice of Preparation

During the scoping period, public comments expressed concern over shadow effects on the adjacent Archbishop Riordan High School and its field, track, central courtyard, and windows, as well as over shadow effects on the project's own proposed central park.

Summary of Shadow Impacts in Area Plan PEIR

[Note to Reviewers: Shadow was not included in IS-2, so the revisions below are from IS-1.]

PEIR Section IV.F, Shadow, evaluated potential effects of the plan with respect to shading of existing and proposed open spaces. The PEIR noted that Planning Code section 295 generally restricts new shadow on Recreation and Parks Department properties from buildings in excess of 40 feet in height. The PEIR found that, while potential development pursuant to the area plan could add increased shadow to Balboa Park, section 295 would serve to limit new shadow on the park. Moreover, subsequent CEQA review of individual projects would identify potential shadow on Balboa Park and could provide a means to limit such shadow. Accordingly, the PEIR found that shadow impacts on Balboa Park—the only existing Recreation and Parks Department open space in the plan area—would be less than significant. The PEIR also found that shadow effects on new open spaces identified in the plan for creation within the plan area would be less than significant, because these open spaces, even with plan development, would have ample access to direct and reflected sunlight suitable for urban plazas. The PEIR acknowledged that the proposed (completed since the time of the PEIR) open space adjacent to the new Ingleside Branch of the San Francisco Public Library would be subject to shadow, except during the midday period, for most of the year. The PEIR also found that new shadow could affect a potential new open space on a portion of the former Muni turnaround loop. Since the time of the PEIR, the Muni loop has since been relocated eastward and the open space, known as Unity Plaza, has been developed between the new loop and the residential building at 1100 Ocean Avenue at Lee Avenue. Finally, the PEIR found that newly developed open spaces at the Balboa Reservoir and elsewhere in the plan area could be subject to new shadow, but shadow on these spaces would not interfere with any pre-existing recreational uses on these spaces or public expectations for the amount of sunlight on these spaces. Thus, shadow effects were determined to be less than significant.

PEIR Improvement Measure SM-1 would be applicable to development that could potentially affect a publicly accessible open space not subject to section 295. This improvement measure would require setbacks and certain architectural treatments for proposed new developments with the potential to shade newly created public and publicly accessible private open spaces, in order to minimize shadow effects on the use of these open spaces.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the height and massing of the buildings would vary between the two options; however, the variation would not be great (generally, a height difference of one story). Therefore, the two options are analyzed together. Where effects would be different, this is noted in the analysis.

Impact SH-1: The proposed project would not create shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces. (Less than Significant)

San Francisco Planning Code section 295 generally prohibits new structures above 40 feet in height that would cast additional shadows on open space that is under the jurisdiction of the San Francisco Recreation and Park Commission between one hour after sunrise and one hour before sunset, at any time of the year, unless that shadow would not result in a significant adverse effect on the use of the open space. In CEQA analysis of shadow impacts, the planning department commonly relies upon the hours governed by section 295—from one hour after sunrise to one hour before sunset. This is because, before and after these house, shadows are very long and much of the city is shaded at these times.

The following Recreation and Park Commission parks are located near the project site but are too distant from the site to be affected by shadow from the proposed project:

- Balboa Park, located about 0.35 mile east of the project site;
- Geneva Community Garden (opened in 2018), about 0.5 mile east-southeast of the project site at Geneva Avenue at Delano Avenue; and
- Geneva Car Barn and Powerhouse (currently under construction), about 0.5 mile east-southeast of the project site at San Jose Avenue and Geneva Avenue.

Closer to the project site are two publicly accessible open spaces just south of the project site, between the site and Ocean Avenue: the Ingleside Library Garden and Unity Plaza. Although not under the jurisdiction of the Recreation and Park Commission, because they are publicly accessible, these open spaces are analyzed herein to determine whether the project could substantially and adversely affect their use.

Ingleside Library Garden

This location, southwest of the project site, was identified as a potential future open space in the Balboa Park Station Area Plan. The library garden is an approximately 4,200-square-foot open space that consists of a patio and small planted area behind the library, under the jurisdiction of the San Francisco Public Library, and a paved courtyard with benches between the library and the adjacent residential building to the east, at 1200 Ocean Avenue, under the jurisdiction of the SFPUC. This open space was completed in 2015.

The library garden is currently partially shaded in the morning hours year-round by the residential building to the east. In the early morning hours, the library garden is in full shade. However, because of the location of the library garden southwest of the project site, the sun would never be far enough to the north such that the shadow from the proposed project (either option) would reach the library garden during the hours governed by section 295. Around the summer solstice (approximately June 21), shadow from the proposed project (both options) could potentially reach the northwestern most corner of the

library garden during the first few minutes after sunrise (outside the time governed by section 295). However, the sun is so low in the sky at this time that any shadow from the proposed project would not reach beyond shadow cast by the garden's own fence. Therefore, shadow from both options would have a less-than-significant effect on the library garden.

Unity Plaza

Constructed on a portion of former Municipal Railway bus loop,⁴³ Unity Plaza is located at the corner of Ocean Avenue and City College Loop, immediately east of the residential building at 1100 Ocean Avenue and approximately 200 feet from the project site's southeastern border. Unity Plaza was identified as a potential future open space in the area plan and was completed in 2016. It contains a domed play structure, seating benches, decorative pavement, pedestrian-level lighting, and photography displays depicting the history of the area. The approximately 16,000-square-foot open space is under the jurisdiction of the city's Real Estate Division, which oversees the San Francisco Plaza Program in cooperation with the Office of Economic and Workforce Development and San Francisco Public Works. **Figure 2, Unity Plaza**, presents two views of Unity Plaza.

Unity Plaza is currently partially shaded by the existing residential building to the west (1100 Ocean Avenue) in the afternoon year-round. At the summer solstice (approximately June 21), by mid-afternoon (3 p.m.), about one-third of the plaza is in shadow. This shadow grows to cover nearly all of the plaza south of the domed play structure by 6 p.m. At the spring and fall equinoxes (approximately March 21 and September 21), more than half of the plaza is shaded by 3 p.m., with shadow covering about 90 percent of the plaza by about 5 p.m. On the winter solstice (approximately December 21) at 3 p.m., about three-fourths of the plaza is in shadow, including a small amount of shadow from buildings across Ocean Avenue. The plaza is nearly fully shaded by 4 p.m.

The proposed project (both options) would cast net new shadow on Unity Plaza in the early evening for about 10 weeks of the year, between mid-May and late July. Project shadow would reach the plaza beginning a few minutes before 7:30 p.m., approximately at the end of the period governed by section 295, as the sun moves towards its most northerly position in the western sky. Shadow would first reach the very northern tip of Unity Plaza and would then move southward to cover the play structure near the northern end of the plaza. At this time of day, the southern approximately 75 percent of Unity Plaza is shaded by the existing building at 1100 Ocean Avenue (see Figure 3, Project Shadow on Unity Plaza, 7:36 p.m., June 21, which depicts project shadow on Unity Plaza at 7:36 p.m., the last section 295 minute, on the summer solstice (June 21). At this time, shadow on Unity Plaza from the Additional Housing Option would be the same as shadow from the Developer's Proposed Option, because both options would cast shadow beyond the extent of the plaza. As shown in Figure 3, project shadow (both options) would affect only the northernmost portion of Unity Plaza (the domed play area, adjacent hardscaping, and stairs/pathway to the City College East Basin and to City College Terminal).

The loop, known as City College Terminal, was relocated from a loop between Lee and Harold avenues to its current location in 2013 so that buses at the end of their routes turn around by circling San Francisco Fire Department Station 15 at Ocean Avenue and Frida Kahlo Way.

Figure 2 Unity Plaza



After the time shown in Figure 3, project shadow would progressively cover more of the unshaded northern portion of the plaza until the entire plaza would be shaded as sunset approaches, although the vast majority of shadow on Unity Plaza would continue to be cast by the adjacent residential building at 1100 Ocean Avenue. At other times of the year—before mid-May and after late July—the sun would not be far enough north to result in project shadow being cast on Unity Plaza until a few minutes before sunset, well outside the hours governed by Planning Code section 295. By this time of day, under existing conditions, the slope that rises to the north and northwest of Unity Plaza begins to cast shadow on the northern edge of the plaza. There would be no new shadow cast by the project on Unity Plaza, even outside the section 295 hours, before about May 1 or after about August 15. The Additional Housing Option would cast incrementally more shadow on Unity Plaza than would the Developer's Proposed Option, given the greater building heights. However, given that shadow from both options would fall on Unity Plaza only very late in the day, the difference between the two options would amount to shadow beginning about 15 minutes earlier on any given day, as well as net new shadow beginning a few days earlier in the spring and ending a few days later in the summer under the Additional Housing Option.

Given that the project would add net new shadow on Unity Plaza for a limited time of the day—early evening, in approximately the last hour or less before sunset—and limited period of the year—mid-May through late July during section 295 hours and May through mid-August outside section 295 hours—the proposed project would not substantially affect the use of Unity Plaza, and the shadow impact would be considered *less than significant*.

Other Project Shadow

The proposed project (both options) would cast shadow on surrounding streets and sidewalks, including portions of the west sidewalk of Frida Kahlo Way in the late afternoon (fall, winter, and spring) and early evening (summer). The project (both options) would also add net new shadow to streets and sidewalks in Westwood Park in the early morning throughout the year, including portions of Plymouth Avenue, Eastwood Drive, Southwood Drive, San Ramon Way, and Wildwood Way. Shadow on Westwood Park would be somewhat greater from the Additional Housing Option than from the Developer's Proposed Option due to the one to two story increase in building heights near the western portion of the site. In general, these shadows would be relatively fast-moving. Shadows on streets and sidewalks would be transitory in nature, would not exceed levels commonly expected in urban areas, and would be considered a *less-than-significant* impact under CEQA.

The project (both options) would create shadow on open spaces created as part of the project, on the project site, including the central open space, the SFPUC open space along the southern project edge, the gateway landscape east of Lee Avenue, and pedestrian paseos between certain buildings on the project site. However, the central park open space would remain largely in sunlight during the midday hours, even in winter, because it would be oriented north-south, in line with the sun's rays at midday. The project (both options) would cast shadow on the SFPUC open space only in the early morning and late afternoon, except around the winter solstice, when the sun would not be far enough north for the project to shade this open space. However, most of the shadow cast on this open space would be from the existing buildings at 1100, 1150, and 1200 Ocean Avenue. The pedestrian paseos would be more or less shaded depending on orientation; however, these spaces are intended largely as pedestrian connectors for travel around the site, and not for passive recreational use.

The project would develop a building up to 68 feet in height (Developer's Proposed Option) or up to 78 feet in height (Additional Housing Option) within about 30 feet of the project site's northern boundary, immediately south of Archbishop Riordan High School. Thus, the project would cast net new shadow on the athletic field at Riordan during the hours governed by section 295 year-round, except around the summer solstice, when shadows would not reach the athletic field. Given that the buildings proposed for the western portion of the project site would be the shortest structures developed, shadow on the Riordan athletic field would be most pronounced in the morning and less substantial in the afternoon. Around the spring and fall equinoxes, shadow would reach the southern portion of the running track. Shadow would reach the grass field itself from around October through February, but even at the greatest extent, around the winter solstice, project shadow from the Additional Housing Option would cover less than one-fourth of the athletic field (primarily the southeast portion of the field) during the afternoon.

Cumulative Impacts

Impact C-SH-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in cumulatively considerable impacts related to shadow. (Less than Significant)

There are no other proposed projects that would cast new shadow on Unity Plaza or on the library garden. Therefore, the proposed project (both options) would not result in any cumulative shadow effects.

Topics:		Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
	CREATION. ould the project:				
par phy	rease the use of existing neighborhood and regional rks or other recreational facilities such that substantial ysical deterioration of the facilities would occur or be relerated?				
or e	clude recreational facilities or require the construction expansion of recreational facilities that might have an everse physical effect on the environment?				

Summary of Comments Received in Response to the Notice of Preparation

Comments received in response to the NOP included a request that impacts to recreation be considered, and that the proposed open space be accessible to the public. These issues are addressed under Impact RE-1 and Impact RE-2.

Summary of Recreation Impacts in the PEIR

The PEIR initial study Section 7, Utilities/Public Services, summarized information on existing and planned recreation facilities at that time including Balboa Park, the Monterey Conservatory, Dorothy Erskine Park, Glen Canyon Park, Mount Davidson Park, Aptos Playground, Ocean View Playground,

Brooks Park, Merced Heights Playground, and Cayuga Playground. Additionally, the area plan assumed approximately 2.3 acres (100,000 square feet) of open space would be proposed on the reservoir site. The PEIR initial study determined that the increase in population under full buildout of the area plan would not represent a significant increase in citywide population, and therefore would not result in a significant increase in the demand for citywide recreation facilities. The PEIR also concluded that given the number of nearby public open spaces within the plan area and planned parks at that time, impacts to recreation facilities would be less than significant, and accordingly, did not require any mitigation measures.

Existing Recreation Resources

The San Francisco Recreation and Park Department administers more than 220 parks, playgrounds, and open spaces throughout the city, as well as recreational facilities including recreation centers, swimming pools, golf courses, athletic fields, tennis courts, and basketball courts totaling approximately 3,433 acres.⁴⁴ The following public parks, open spaces, and recreation facilities are located within 1 mile of the project site:

- The 24.02-acre Balboa Park south of Havelock Street between I-280 and San Jose Avenue is located
 approximately 0.40 mile east of the project site. The park includes Boxer Stadium (a football/soccer
 stadium available for rent), ball fields, tennis courts, an indoor pool, a playground, a dog play area, a
 skate park, and picnic areas;
- The 0.23-acre Geneva Community Garden is a community garden and open space located at Geneva and Delano avenues, approximately 0.53 mile southeast of the project site. This resource was not specifically identified in the PEIR. It contains raised garden boxes with space for over 50 community garden assignments and additional landscaped areas;
- The Geneva Car Barn at San Jose and Geneva avenues (2301 San Jose Avenue), located approximately 0.50 mile southeast of the project site, is a historic city landmark that is currently being rehabilitated. This resource was not specifically identified in the PEIR. The historic features of the building are being restored and upon completion, it will contain new circulation systems to accommodate Americans with Disabilities Act access, new studio and exhibition spaces, community meeting rooms, classrooms, a cafe, auditorium/concert hall/event space, a theater, a gallery, and a history center for the interpretation of the building's history;
- The 10.3-acre Minnie and Lovie Ward Rec Center south of Montana Street between Capitol and Plymouth avenues (650 Capitol Avenue) is located approximately 0.55 mile southwest of the project site. This resource was not specifically identified in the PEIR. It includes a recreation center and a 10acre park with baseball and soccer fields, tennis and basketball courts, a children's play area, and a picnic area;
- The 4.81-acre Aptos Playground at Aptos and Ocean avenues is located approximately 0.64 mile west
 of the project site. It includes a baseball diamond, tennis court, play structure, and large multi-use
 paved area;
- The 2.37-acre Sunnyside Playground east of Foerster Street between Teresita Boulevard and Mangels Avenue (290 Melrose Avenue) is located approximately 0.54 mile northeast of the project site. This

San Francisco Planning Department, *Recreation and Open Space Element* (ROSE), April 2014, p. 15, http://generalplan.sfplanning.org/Recreation_OpenSpace_Element_ADOPTED.pdf, accessed December 5, 2018.

resource was not specifically identified in the PEIR. It includes a play area, clubhouse, tennis and basketball courts, and grounds;

- The 0.51-acre Lakeview and Ashton Mini Park at the terminus of Shields Street, Lakeview, and Orizaba avenues (488 Orizaba Avenue) is located approximately 0.58 mile southwest of the project site. This resource was not specifically identified in the PEIR. This natural area includes grassy and rocky slopes that provide habitat to a variety of native plant species, including buckwheat, dudleya, farewell-to-spring, coast onion, and soap plant;
- The 1.5-acre Dorothy Erskine Park south of Bosworth Street at the terminus of Martha Avenue and Baden Street is located approximately 0.88 mile northeast of the project site. It is a hilltop natural area that includes native grassland and scrub habitats popular with dog-walkers and bird watchers;
- The Ingleside Branch of the San Francisco Public Library is located on Ocean Avenue less than 100 feet from the project's southwestern border. This resource was not specifically identified in the PEIR. The library has an outdoor courtyard and garden (under the SFPUC's jurisdiction) that is open to the public during library hours, and includes seating areas, a play-to-learn area for children, fencing, gates, and landscaping; and
- Unity Plaza, located at the corner of Ocean Avenue and City College Terminal approximately 200 feet from the project site's southeastern border, is a landscaped, publicly accessible open space with features including: benches, pedestrian lighting, artistic pavement, a domed play structure and photography displays depicting the history of the area. This resource was not specifically identified in the PEIR.

The City College campus located adjacent to the project site also provides other recreational facilities including the George M. Rush football stadium, a soccer practice field, tennis courts, a fitness center, and pool. Community members enrolled through the continuing education program have access to City College's fitness center and pool facilities. Additionally, the Shared Schoolyard Project, a partnership between various City agencies, opens participating schoolyards to the public on weekends to provide additional recreational facilities and open space. Participating schools near the project site include Commodore Sloat Elementary School, Sheridan Elementary School, Miraloma Elementary School, James Denman Middle School, and Aptos Middle School.⁴⁵

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar land uses (with varying amounts of residential units and parking square footages) within the project site. The two project options are analyzed using the growth assumptions derived in initial study Section E.3, Population and Housing.

-

San Francisco Schoolyard Project, Participating Schools, http://www.sfsharedschoolyard.org/participating_schools, accessed February 11, 2019.

Impact Evaluation

Impact RE-1: The project would increase the use of existing neighborhood parks and other recreational facilities, but not to such an extent such that substantial physical deterioration of the facilities would occur or be accelerated or such that the construction of new or expanded facilities would be required. (Less than Significant)

Since certification of the PEIR in 2008, the City adopted an update of the Recreation and Open Space Element (ROSE) of the general plan in April 2014. The ROSE provides a 20-year vision for open spaces in the City. It includes information and policies about accessing, acquiring, funding, and managing open spaces in San Francisco.46 The ROSE identifies areas within the plan area for acquisition and the locations where new open spaces and open space connections should be built. The element defines a high-needs area of the city as an area "with high population densities, high concentrations of seniors and youth, and lower-income populations that are located outside of existing park service areas."47 As shown on Maps 4a and 4b of the element, the project site is located within the 0.5-mile service area of active use/sports fields and passive use/tranquil spaces, and as shown on Map 4c, the project site is located outside of a 0.25-mile buffer for playground walkability. As shown on Maps 5a, 5c, and 5d of the element, the project site is within an area of the city that exhibits lower population densities (Map 5a), and lower concentrations for children and youth (Map 5c), and seniors (Map 5d), relative to the city as a whole. The project site is also located within an area with a higher percentage of high-income households relative to the city as a whole (Map 5b) and an area designated to absorb future population growth (Map 6). Based on these variables, a composite map was generated to identify areas of the city that receive priority when opportunities to acquire land for development of new parks arise and when funding decisions for the renovation of existing parks are made (Map 7).48 As shown on Map 7 of the element, the western portion of the project site, located adjacent to the Westwood Park neighborhood, is within an area identified as having greater need for acquisition and renovation of parks and open spaces. The project site is identified as proposed open space in the ROSE (Map 3), consistent with how it is defined in the PEIR.

The proposed project would provide approximately 4 acres of publicly accessible open space. An approximately 2-acre central park would be located at the center of the project site, generally surrounded by Blocks C, D, E, and F under both project options. Potential programming could include a multi-use lawn and terraces, playgrounds, community garden, picnic area, stormwater gardens and a terrace overlooking the park from the community room. An open space area is also proposed south of Blocks A and B along the south side of the project site that would serve as an active flexible urban recreation space and could potentially accommodate programming such as a farmers market, sports court, childcare overflow play area, and multiuse lawn. An approximately 0.15-acre gateway landscaped area at the project site's entrance east of the Lee Avenue and South Street intersection could also include neighborhood serving uses such as a dog park, subject to SFPUC approval. The open spaces and parks would be connected to surrounding areas by new internal networks such as pedestrian passages, sidewalks, and roadways. Furthermore, the proposed project would also include private open space comprised of balconies, rooftops, and courtyards accessible only to building occupants. Private open

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

⁴⁶ San Francisco Planning Department, ROSE, April 2014, p. 24.

⁴⁷ San Francisco Planning Department, *ROSE*, April 2014, p. 13.

San Francisco Planning Department, ROSE, April 2014, Maps 4 through 7.

space would be provided at a rate of 36 square feet per unit if located on a balcony, or 48 square feet per unit if commonly accessible to residents.

The PEIR assumed the project site would be developed with approximately 2.3 acres (100,000 square feet) of open space. The proposed project would provide an additional 1.7 acres, or 74 percent more open space at the site than was originally assumed for the reservoir site in the PEIR. Therefore, the proposed project would represent an increase in the availability of open space in the plan area. The introduction of new residents to the project site under the proposed project options would increase demand on existing recreational resources. As discussed in initial study Section E.3, Population and Housing, the additional growth proposed by the project would be greater than what was analyzed in the PEIR, but would not be considered substantial relative to planned citywide growth projections.

Although project residents may use parks, open spaces, and other recreational facilities in the vicinity of the project site, including Balboa Park, in general city parks are well maintained. The most recent annual report, the Park Maintenance Standards Annual Report 2017, summarizes all park maintenance evaluations performed by the city between July 1, 2016, and June 30, 2017. In general, a score of 85 percent means a park is well maintained and in good condition. The citywide average park score for fiscal year 2016–17 was 88 percent. For the second year in a row, the citywide average park score increased – going from 85 percent in fiscal year 2015, to 86 percent in fiscal year 2016, and to 88 percent in fiscal year 2017. Balboa Park is the closest parks department resource to the project site. Balboa Park also contains the Balboa Pool, which is in high demand as one of two San Francisco Recreation and Park Department pools in the southwestern portion of the city. The San Francisco Recreation and Park Department schedules annual closures for maintenance to each of its nine pools. During the closure period pools undergo routine maintenance, annual inspections, and repairs and upgrades are made to each facility. Balboa Park's athletic fields (soccer) and outdoor courts (basketball and tennis) are among the highest scoring facilities in the city's parks system.⁴⁹ Thus the existing park features—including vulnerable features such as play structures, athletic fields, and lawns—are generally well maintained.

The increase in demand for recreational facilities generated by the project would generally be consistent with that described in the PEIR initial study and would be met by existing parks and open spaces. The addition of the 4 acres of publicly accessible open space as part of the proposed project would partially offset the demand for parks and recreational facilities generated by the project residents. Additionally, demand for parks and recreation facilities would be expected to be balanced among facilities, and demand would not result in substantial physical deterioration of any existing resource.

Implementation of the project would result in an increase in the demand for recreational resources on the project site, in the project area, and at the citywide level. However, the anticipated use of recreational resources would not be expected to substantially increase or accelerate the physical deterioration or degradation of existing recreational resources, and would not result in the need to provide new or expanded parks or recreational facilities since that demand would be offset by the development of new recreational and open space facilities on the project site. Therefore, no new recreational facilities would need to be constructed, and the proposed project's impact to recreational resources would be *less than*

Recreation and Park Department, Park Maintenance Standards Annual Report 2017, pp. 4, 35, 42, https://sfcontroller.org/sites/default/files/Documents/Auditing/Annual%20Parks%20Report%202017%20(final).pdf, accessed December 4, 2018.

significant, and no mitigation is necessary. The proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Cumulative Impacts

Impact C-RE-1: The proposed project, in combination with other reasonably foreseeable development within approximately 0.5 mile of the project site, would not increase the use of existing neighborhood parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated or such that the construction of new or expanded facilities would be required. (Less than Significant)

Cumulative development projects located within an approximately 0.5-mile radius of the project site are identified in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11. Cumulative projects 1 through 4 would consist of residential development in the project vicinity would result in an intensification of land uses. The intensification of land uses would result in a cumulative increase in the demand for recreational facilities and resources in the plan area and in the city overall. The city has accounted for such growth in the 2014 update of the ROSE of the San Francisco General Plan.⁵⁰ As discussed above in Section E.3, Population and Housing, the additional growth proposed by the project that was not analyzed in the PEIR would not result in a net increase in city growth not accounted for in citywide projections. In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund the renewal or repair of parks, open spaces, and recreational resources owned by the Recreation and Park Department. As discussed under Impact RE-1, there are 10 parks, open spaces, or other recreational facilities within less than 1 mile of the project site, and the proposed project would create approximately 4 acres of publicly accessible open space on the project site. It is expected that these existing and proposed recreational facilities would be able to accommodate the increase in demand for recreational resources generated by the proposed project (approximately 3,565 new residents under the Additional Housing Option) and cumulative project numbers 1 through 4, which would also comply with on-site open space requirements. Although cumulative project 5 (Performing Arts Center) and project 6 (East Basin Parking Structure) for City College would not be required to comply with the City's open space requirements, the Ocean Campus currently provides recreational facilities, and undeveloped green space has been specifically identified in the draft recommendation for the City College Facilities Plan update. For these reasons, the proposed project, in combination with reasonably foreseeable future projects in the project vicinity would have a less-than-significant cumulative impact on recreational facilities or resources.

San Francisco Planning Department, ROSE, April 2014, pp. 20–36.

To	pics:	Potentially Significant Effects Not Identified in Prior EIR	Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
13	. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supply available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				\boxtimes

Potentially

Summary of Comments Received in Response to the Notice of Preparation

Comments received during the scoping period raised concern about impacts to water supply, given the project site's original purpose as water storage. This issue is discussed in the section below in Impact UT-1. Several comments expressed concern regarding the general availability of infrastructure to serve the demands related to increased population on the project site. This issue is discussed throughout this section.

Summary of Utilities and Service Systems Impacts in the PEIR

The PEIR addresses issues of utilities and service systems in multiple sections: initial study Section 7, Utilities/Public Services, addresses solid waste, water supply, power and communication facilities, and other public utilities related to implementation of the area plan; PEIR Section IV.G, Hydrology and Water Quality, addresses wastewater and stormwater.

Water Supply

The PEIR initial study Section 7, Utilities/Public Services, determined that implementation of the area plan would increase the intensity of development in the plan area and consequently increase demand for water, but not in excess of amounts expected and provided for in the plan area and the city. The PEIR initial study cited Resolution 02-0084, adopted May 14, 2002, in which the SFPUC determined that there is sufficient water supply to serve the expected development projects in the city through the year 2020. The PEIR initial study determined that the area plan's effects on water supply would be less than significant.

Wastewater/Stormwater Collection and Treatment

PEIR Section IV.G, Hydrology and Water Quality, describes the wastewater and stormwater collection and treatment system that existed at the time of preparation of the PEIR. The PEIR analyzed changes in sanitary sewage flows and stormwater runoff within the plan area as a result of implementation of the area plan. The PEIR concluded that the overall citywide volume of sanitary sewage flows discharged to the combined sewer system would remain the same whether or not the area plan was implemented, and it assumed that the area plan would result only in a redistribution of those flows within the city. During dry weather, all sanitary sewage generated in the plan area would be treated at the Oceanside Water Pollution Control Plant or Southeast Water Pollution Control Plant. At the time of the PEIR preparation, the Oceanside Water Pollution Control Plant was operating at about 86 percent of its permitted capacity, and the Southeast Water Pollution Control Plant was operating at about 80 percent of its permitted capacity. The PEIR determined that the localized increase in dry weather flow associated with implementation of development proposals under the area plan could be accommodated within the system's existing dry weather capacity, and it would not substantially contribute to an increase in the average volume of combined sewer overflow discharges to the Bay during wet weather beyond that expected as a result of overall growth in the city.

The PEIR determined that compliance with the clean water act combined sewer overflow control policy, and Water Pollution Prevention Program, incorporation of unpaved open space into the plan area, and application of SFPUC new development and redevelopment guidelines to new development proposals in the plan area would reduce the impacts of stormwater flows on the combined sewer overflow discharges by increasing infiltration of rainwater, delaying peak stormwater runoff flows, and providing reduction of pollutants in the stormwater runoff, which would be a beneficial impact of the area plan. Although the PEIR did not identify significant impacts to stormwater runoff, it included Improvement Measure WQ-1 (incorporating green stormwater management technologies into area plan open spaces), to further delay and reduce peak stormwater runoff flows. However, neither the details of these enhancement programs, the development site design measures, nor the extent of such improvements were known at the time of preparation of the PEIR. Further, the PEIR noted that project-level water quality analysis may be required for subsequent development proposals under the area plan, depending on the nature and timing of the development, and more site-specific mitigation measures applicable to individual development proposals may be required.

Thus, on a programmatic level, the PEIR did not identify the need for additional wastewater treatment or stormwater drainage facilities that would result in a significant impact on the environment.

Solid Waste

The PEIR initial study Section 7, Utilities/Public Services, estimated that new residents in the plan area would generate approximately 4,450 pounds of solid waste per day, or approximately 1.6 million pounds of solid waste per year that would be disposed of at the Altamont Landfill in Alameda County. The PEIR concluded that the overall solid waste generated by the expected 4,095 new plan area residents would be substantial, but it would be small in proportion to the total amount of solid waste generated by the city.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options

would involve similar land uses (with varying amounts of residential units and parking square footages) within the project site. The two project options are therefore typically analyzed as one, using the growth assumptions from the maximum development scenario (i.e., the Additional Housing Option with 1,550 residential units) to provide the most conservative analysis.

Impact Evaluation

Water Supply and Water

Impact UT-1: The SFPUC has sufficient water supply available to serve the proposed project from existing entitlements and resources. The proposed project would not require new or expanded water supply resources or entitlements or the construction of new or expanded water treatment facilities. (Less than Significant)

Originally constructed in 1957 by SFPUC, the original two basins (currently the project site and the east basin) were never fully realized or functioned as water reservoirs. The project site has been reconfigured over the years and is not suitable for water storage, as it is no longer bounded by berms on all four sides.⁵¹ Additionally, the project site has not been identified as current or future water storage in the city.⁵² Thus, the discussion below relates only to the project's demand for water supplies.

Construction

Construction-specific water use was not analyzed in the PEIR. During construction, the proposed project would intermittently use non-potable water for dust control in accordance with San Francisco Public Works Code article 21 (and as otherwise permitted by law) and would use relatively small amounts of potable water for various site needs such as drinking water, onsite sanitary needs, and for cement mixing. The small increase in potable water demand would not be substantial. In addition, this water use would be temporary, terminating with the completion of construction. Water supplies for San Francisco are provided by the SFPUC, and are planned such that short-term spikes in water use can be accommodated. Therefore, project construction would not warrant construction or expansion of water treatment facilities, and this impact would be less than significant during construction.

Operation

Once constructed, the proposed project uses would generate demand for potable water. As described above for the PEIR, the SFPUC (by adopting Resolution 02-0084 in 2002) determined that there would be sufficient water supply to serve expected development projects in San Francisco through the year 2020 including the plan area. Since certification of the PEIR in 2008, SFPUC has revised its assessment of water supply reliability as required and documented in an urban water management plan (UWMP). The UWMP is updated every five years in compliance with the Urban Water Management Planning Act. The UWMP describes the SFPUC's long-term plan for its water supplies to meet the existing and future demands of its

AECOM, Balboa Reservoir Study, December 19, 2014, pp. 7–8, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

⁵² SFPUC, 2015 Urban Water Management Plan, April 2016, Table 3-2, p. 3-7, https://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839, accessed February 12, 2019.

customers during normal, dry, and multiple dry years. The SFPUC's current 2015 UWMP was issued in 2016.⁵³ The project sponsor has estimated the water demands for both project options, as presented in **Table 2, Estimated Water Demand for Proposed Project Options.**⁵⁴ As indicated in **Table 2,** the Additional Housing Option would result in the greatest water demand. At full build out (expected by 2027), the maximum potable water use for this land use program would be 0.15 million gallons per day (mgd).

Table 2
Estimated Water Demand for Proposed Project Options

Proposed Use	Estimated Daily Water Demand (gpd)	Estimated Annual Water Demand (gpy	
Developer's Proposed Option			
Commercial water demand	216	65,319	
Multifamily water demand	104,251	38,051,564	
Irrigation	n/a	1,426,668	
TOTALa	104,467	39,543,551	
Additional Housing Option		1	
Commercial water demand	216	65,319	
Multifamily water demand	146,899	53,618,113	
Irrigation	n/a	1,426,668	
TOTALa	147,115	55,110,100	

SOURCE: ESA, 2019.

NOTES

gpd = gallons per day; gpy = gallons per year

The proposed project (both options) would be required by law to comply with the Nonpotable Water Ordinance (San Francisco Health Code article 12C) which requires large development projects (a single building, or multiple buildings on one or more parcels of 250,000 square feet or more of gross floor area) to be constructed, operated, and maintained using available alternate water sources for toilet and urinal flushing and irrigation. Thus, the proposed project could offset a portion of its potable water use through the use of non-potable water in toilets/urinals and on site irrigation. Details regarding the volumes of potable water that could be offset through the use of non-potable water are discussed under Impact UT-2 below.

The SFPUC approved and adopted a *water supply assessment* for the proposed project (included in this SEIR as Appendix F) on [date]. The assessment analyzed the water demand of the Additional Housing Option, as the maximum development scenario, and assessed whether the total water demand could be accommodated within existing and projected water supplies anticipated under the 2015 UWMP. The assessment also indicates that the demand from the proposed project is accounted for within the overall San Francisco water demand being used for current water supply planning. Therefore, as confirmed by

a. Does not reflect offset of potable demands with greywater sources.

⁵³ SFPUC, 2015 Urban Water Management Plan for the City and County of San Francisco, June 2016, https://www.sfwater.org/modules/showdocument.aspx?documentid=9300, accessed December 4, 2018.

⁵⁴ ESA, Balboa Reservoir Project: Water Supply Assessment Request, February 6, 2019.

the SFPUC, existing water supplies serving the City and County of San Francisco would be sufficient to meet the projected increase in water demand for the project. Impacts related to water supply would be less than significant. [Note to Reviewer: This discussion will be updated upon further direction from SFPUC/EP.]

The area around the project site is currently served by a well-developed water distribution network operated by the City Distribution Division that has the capacity to provide potable and fire-protection water to project site. The project site is located within the Sutro Reservoir pressure zone and supplied with SFPUC water from the Hetch Hetchy Regional Water System via the Sutro Reservoir. The project would include construction of potable water distribution piping located under the planned streets and open spaces. Access to water service for the project site is available from the 8-inch and/or 12-inch water mains within the Ocean Avenue and Frida Kahlo Way rights-of-way (public rights-of-way) to the south and east, respectively. To connect the project site to the water mains in Frida Kahlo Way, SFPUC would most likely have to use an existing 60-foot-wide pipeline easement southeast of site or the 60-foot-wide public-access easement to the northeast. Connection to the Ocean Avenue water mains would occur either via the SFPUC parcel between the 1150–2000 Ocean Avenue development and the Ingleside Branch Library or via Lee Avenue.⁵⁵

Given the size of the mains and the configuration of the existing water distribution network in the project area, it is assumed that the system would also have hydraulic capacity to serve additional development at the project site. The SFPUC City Distribution Division would conduct a hydraulic analysis to confirm that the existing system is adequate to meet the project's water demands, including fire suppression system pressure and flow demands. If the existing infrastructure is found to be inadequate to meet the project's demand, the SFPUC would modify the water conveyance system, such as upsizing the water mains and appurtenances. The construction of the larger facilities could require a limited amount of excavation, trenching, soil movement, and other activities typically associated with construction of development projects in San Francisco and generally within public rights-of-way. These activities, if determined to be required, would be similar to those associated with construction of the project, and these activities would not result in significant environmental effects not already disclosed in the EIR and initial study for the proposed project. Therefore, impacts related to requiring the construction of new water treatment facilities or expansion of existing facilities would be *less than significant*, and no mitigation measures are required. Thus, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

-

AECOM, Balboa Reservoir Study, December 19, 2014, p. 19, http://default.sfplanning.org/plans-and-programs/planning-forthe-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

AECOM, Balboa Reservoir Study, December 19, 2014, p. 19 http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

Wastewater/Stormwater Collection and Treatment

Impact UT-2: The proposed project would not exceed wastewater treatment requirements of the Oceanside Treatment Plant. (Less than Significant)

Construction

During construction, workers would use portable toilets and hand washing facilities for their sanitary needs and there would be no related discharges to the combined sewer system. If excavation occurs when groundwater is elevated to the design high groundwater level of 20 bgs, groundwater discharges would be subject to San Francisco Public Works Code article 4.1, as supplemented by Public Works Order No. 158170, which regulates the quantity and quality of discharges to the combined sewer system (see Impact HY-1, p. B-101). Construction activities would be required to implement an erosion and sediment control plan for construction activities in accordance with San Francisco Public Works Code article 4.2 and the General Construction Stormwater Permit (discussed in more detail in Section E.17, Hydrology and Water Quality) to reduce the impacts of runoff from the construction site. Therefore, there would be minimal flows to the combined sewer system and impacts related to exceeding the wastewater treatment requirements of the Oceanside Treatment Plant during construction would be *less than significant*.

Operation

To analyze projected potable and non-potable water needs of the proposed project, the SFPUC prepared a water supply assessment for the proposed project. Implementation of the proposed project would incrementally increase wastewater flows from the project site due to a net increase in the onsite population. SFPUC estimates that approximately 90 percent of water supplied is discharged as wastewater into the sewer system; therefore, the project would discharge around 0.09 mgd of wastewater for the Developer's Proposed Option and 0.13 mgd of wastewater for the Additional Housing Option.⁵⁷

Since certification of the PEIR in 2008, the City adopted the Onsite Water Reuse for Commercial, Multifamily, and Mixed Use Development Ordinance. Commonly known as the Non-Potable Water Ordinance, it added article 12C to the San Francisco Health Code, allowing for the collection, treatment, and use of alternate water sources for non-potable applications. In July 2015, article 12C became a mandatory requirement for all new construction of 250,000 square feet or more of gross floor area.⁵⁸ Under San Francisco's Non-potable Water Ordinance, the proposed project would also be required to use non-potable water for appropriate purposes such as toilet flushing, cooling, and landscape irrigation. The water supply assessment determined that approximately 17 percent of the total water demand could be met by the onsite non-potable rainwater and graywater⁵⁹ system for the Developer's Proposed Option and 15 percent for the Additional Housing Option. Because the proposed project would comply with the

⁵⁷ ESA, Balboa Reservoir Project: Water Supply Assessment Request, February 6, 2019.

⁵⁸ San Francisco Public Utilities Commission, Non-potable Water Program, https://sfwater.org/index.aspx?page=686, accessed December 5, 2018.

⁵⁹ Graywater is "untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. Graywater includes, but is not limited to, wastewater from bathtubs, showers, bathroom sinks, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers." Source: San Francisco Health Code, article 12C, Alternate Water Sources for Non-Potable Applications, http://sfwater.org/Modules/ShowDocument.aspx?documentID=10422, accessed December 5, 2018.

City's Nonpotable Water Ordinance, the average wastewater flow would be 0.04 mgd for the Developer's Proposed Option. Under the Additional Housing Option, the average wastewater flow would be 0.06 mgd.⁶⁰

The project site is currently served by SFPUC's combined sewer system, which collects both sanitary and storm drainage. Balboa Reservoir is within the Lake Merced urban watershed and the Ocean subwatershed. All wastewater flow from project site would be collected and diverted to the Westside Pump Station for treatment by the Oceanside Treatment Plant or discharged as combined sewer discharges during large storm events. The Oceanside Treatment Plant has capacity to treat up to 17 mgd of dry-weather flow and up to 175 mgd of wet-weather flow. The plant currently treats approximately 15 mgd of dry-weather flow and is assumed to have adequate capacity to accommodate additional wastewater flows from the proposed project. For comparison, the PEIR noted an 18 mgd annual average dry-weather flow to the Oceanside Treatment Plant, which is higher than current average dry-weather flows. Therefore, impacts related to exceeding the wastewater treatment requirements of the plant during operation would be *less than significant*, and no mitigation is necessary. Thus, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Impact UT-3: The proposed project would not require or result in the construction of new wastewater treatment facilities, new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects, nor would the project result in a determination by the SFPUC that it has inadequate capacity to serve the project's projected demand in addition to its existing commitments. (Less than Significant)

The project site is currently served by SFPUC's combined sewer system, which collects both sanitary and storm drainage. The project site is within the Lake Merced urban watershed and the Ocean subwatershed. All stormwater and wastewater flow from project site would be collected and diverted to the Westside Pump Station for treatment by the Oceanside Treatment Plant or discharged as combined sewer discharges during large storm events.⁶²

The project would include construction of wastewater collection lines throughout the site. There are no known sewer connections at the project site. The most likely point of connection of the project site to the sewer system is at the 2-by-3-foot concrete box sewer main in the Ocean Avenue public right-of-way. To connect the project site to the Ocean Avenue sewer main, the connection would occur via the SFPUC parcel between the 1150–2000 Ocean Avenue development and the Ingleside Branch Library or Lee Avenue. However, this sewer main is designated as high risk and is slated for replacement through SFPUC's Collections System Asset Management Program (CSAMP). CSAMP assets with a ranking of "very high" are considered a priority for replacement based on multiple criteria such as age, type of construction, and consequences of failure. A CSAMP ranking of "high" indicates a potential need for

⁶⁰ ESA, Balboa Reservoir Project: Water Supply Assessment Request, February 6, 2019.

⁶¹ AECOM, Balboa Reservoir Study, December 19, 2014, p. 21, http://default.sfplanning.org/plans-and-programs/planning-forthe-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

⁶² AECOM, Balboa Reservoir Study, December 19, 2014, p. 21, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

replacement. The project team would be required to confirm with SFPUC and the San Francisco Department of Public Works' Engineering Hydraulics Division that adjacent sewer infrastructure has adequate capacity and integrity to serve the potential development program.⁶³

While the project could affect the frequency and volume of combined stormwater and sewer discharges from the city's combined sewer system during wet weather as a result of the addition of stormwater, this would not be considered an exceedance of wastewater treatment capacity. If an increase of stormwater and wastewater flows during wet weather caused an increase in the long-term average of combined sewer discharge frequency, a National Pollutant Discharge Elimination System (NPDES) permit violation could occur. The water quality effects related to changes in combined sewer discharges are analyzed in Section E.17, Hydrology and Water Quality. In addition, the project would be required to comply with PEIR Improvement Measure WQ-1, related to incorporating green stormwater management technologies into area plan open spaces. Since certification of the PEIR in 2008, the city has adopted new regulations that require the reduction of stormwater flows from project sites. Improvement Measure WQ-1 would be superseded by the Stormwater Management Ordinance, which was adopted in in 2010, and amended in 2016.

The proposed project would be required to comply with the San Francisco Stormwater Ordinance, which calls for retaining a portion of stormwater runoff on the project site for reuse or infiltration. The ordinance requires that a new development or redeveloped site served by the combined sewer system achieve a 25 percent reduction of both peak-flow and runoff volumes between the existing and proposed conditions. The proposed project would also be required to design and prepare a Stormwater Control Plan for review and approval by SFPUC prior to issuance of the site or building permit. The stormwater management system would be designed with low-impact design concepts and designed to retain and reuse some of the stormwater captured on site. As required, proposed streets would also incorporate bio-filtration via bioswales in bulbouts or pervious surfaces where feasible. Compliance with these mandatory requirements would further reduce peak stormwater runoff flows, and could contribute to a reduction in combined sewer overflow volumes.

Further, as discussed in Impact UT-2, the Oceanside Treatment Plant has sufficient capacity to treat wastewater flows from the proposed project. Therefore, the project would not require new or expanded wastewater facilities to accommodate the anticipated wastewater demand of the project and impacts related to the construction of new or expanded wastewater treatment facilities and wastewater treatment capacity would be *less than significant*.

For the reasons above, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

⁶³ AECOM, Balboa Reservoir Study, December 19, 2014, p. 21, http://default.sfplanning.org/plans-and-programs/planning-forthe-city/public-sites/balboareservoir/Balboa-Reservoir-Study_Existing-Conditions-Infrastructure-and-Environment.pdf, accessed December 3, 2018.

Solid Waste

Impact UT-4: Project construction and operation would result in increased generation of solid waste but would be served by a landfill with sufficient capacity to accommodate the proposed project's solid waste disposal needs. (Less than Significant)

The PEIR estimated that the new residences in the plan area would generate approximately 4,450 pounds of solid waste per day, or approximately 1.6 million pounds of solid waste per year that would be disposed of at the Altamont Landfill in Alameda County. Since certification of the PEIR in 2008, a number of changes have occurred with respect to solid waste disposal in the city; all of which would reduce the total volume of solid waste to be disposed of in a landfill and described below.

Recology, Inc. currently provides residential and commercial solid waste collection, recycling, and disposal services for the City of San Francisco. Recyclable materials are taken to Recology's Pier 96 facility, where they are separated into commodities (e.g., aluminum, glass, and paper) and transported to other users for reprocessing. Compostables (e.g., food waste, plant trimmings, soiled paper) are transferred to a Recology composting facility in Solano County, where they are converted to soil amendment and compost. The remaining material that cannot otherwise be reprocessed (*trash*) is primarily transported to a landfill.

In September 2015, San Francisco approved an agreement with Recology, Inc., for the transport and disposal of the City's municipal solid waste at the Recology Hay Road Landfill in Solano County. 64,65 The City began disposing the vast majority of its municipal solid waste at Recology Hay Road Landfill in January 2016, and is anticipated to continue for approximately nine years, with an option to renew the agreement thereafter for an additional six years. The Recology Hay Road Landfill is permitted to accept up to 2,400 tons of waste per day, and, at this maximum rate of acceptance, the landfill has permitted remaining capacity of 30,433,000 cubic yards and is expected to continue to receive waste approximately through the year 2077. 66 In 2017, San Francisco generated a total of about 627,000 tons of landfill waste (approximately 1,720 average tons per day), 423,000 tons of which were directed to the Hay Road Landfill with the remaining 204,000 tons received at roughly 23 other landfills; Potrero Hills Landfill received most of this remaining volume (107,000 tons). 67

Construction

Case No. 2018-007883ENV

Construction and demolition debris must be transported by a registered transporter to a registered facility that can process mixed construction and demolition debris pursuant to the City and County of San Francisco Construction and Demolition Ordinance. The ordinance requires that at least 65 percent of

Balboa Reservoir Project Draft SEIR B-66 April 2019

City and County of San Francisco, Notice of Availability of and Intent to Adopt a Negative Declaration for the Agreement for Disposal of San Francisco Municipal Solid Waste at Recology Hay Road Landfill in Solano County, Case No 2014.0653E, March 4, 2015.

⁶⁵ San Francisco Planning Department, Agreement for the Disposal of San Francisco Municipal Solid Waste and Recology Hay Road Landfill in Solano County, Case No. 2014.0653E, Final Negative Declaration, July 21, 2015.

⁶⁶ California Integrated Waste Management Board, Solid Waste Information System, https://www2.calrecycle.ca.gov/swfacilities/Directory/48-AA-0002, accessed December 3, 2018.

⁶⁷ California Department of Resources Recycling and Recovery (CalRecycle) Disposal Reporting System, Jurisdiction Disposal by Facility, https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility, accessed December 3, 2018.

construction and demolition debris from a site go to a registered construction and demolition recycling facility. This requirement has been augmented by the Green Building Ordinance, which requires that at least 75 percent of construction and demolition debris be diverted from landfills.

Over the six-year duration of the proposed project construction phases, construction and demolition activities would generate construction debris at the project site, some of which would require disposal. The project would be subject to the city's various solid waste diversion requirements, including the San Francisco Construction and Demolition Debris Recovery Ordinance, the 2016 Green Building Ordinance (enforced by the Department of Building Inspection), and California Code of Regulations title 24. Compliance with these mandatory diversion requirements, would ensure construction of the project would not exceed permitted landfill capacity. The impact from construction would therefore be *less than significant*.

Operation

Since certification of the PEIR in 2008, the City adopted a Mandatory Recycling and Composting Ordinance (San Francisco Ordinance No. 100-09) in 2009, which requires all San Francisco residents and commercial landlords to separate their refuse into recyclables, compostables, and trash, thereby minimizing solid waste disposal and maximizing recycling. During operation, the project would be subject to the City's Mandatory Recycling and Composting Ordinance, thereby minimizing solid waste disposal and maximizing recycling and composting. Although the project would increase total waste generation from the City by increasing the number of residents and employees at the project site, the increasing rate of diversion through recycling and other methods would result in a decreasing share of total waste that requires deposition into the landfill.

Operation of the project would increase generation of solid waste and recyclables at the project site compared to existing conditions. According to CalRecycle, in 2017 San Francisco residents generated approximately 3.9 pounds of solid waste for disposal in a landfill per resident per day, while commercial uses generate approximately 4.9 pounds for disposal in a landfill per employee per day.⁶⁸ Based on the existing city waste generation rates the Developer's Proposed Option and Additional Housing Option would be expected to generate a net increase of approximately 10,014 and 14,051 pounds of solid waste per day, respectively.^{69,70}

Under the maximum development scenario (i.e., the Additional Housing Option) the total operational solid waste that would be generated under the project that would require disposal in a landfill would represent less than 1 percent of City's generated landfill waste, and less than 1 percent of the landfill's 2,400-ton maximum throughput per day. Furthermore, this landfill has a remaining capacity of over

⁶⁸ CalRecycle, Disposal Rate Calculator, https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator, accessed December 3, 2018.

⁶⁹ The volume of waste generated under the Proposed Developer's Option is based on the following: (2,530 residents x 3.9 pounds/day) + (30 employees x 4.9 pounds/day) = 10,014 pounds/day. Note this is a conservative assumption of solid waste landfill generation for the life of the project as the City will implement new measures to achieve their 2020 land diversion targets.

The volume of waste generated under the Additional Housing Option is based on the following: (3,565 residents x 3.9 pounds/day) + (30 employees x 4.9 pounds/day) = 14,050.5 pounds/day. Note this is a conservative assumption of solid waste landfill generation for the life of the project as the City will implement new measures to achieve their 2020 land diversion targets.

30.4 million cubic yards, with an anticipated closure in 2077; and therefore can accommodate solid waste disposal needs of the project through the duration of the proposed project.

Given the above, construction and operation of the project would not exceed available permitted landfill capacity; the impact would be *less than significant*. Therefore, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Impact UT-5: The construction and operation of the proposed project would comply with all applicable statutes and regulations related to solid waste. (Less than Significant)

The PEIR did not specifically address compliance with solid waste regulations. The California Integrated Waste Management Act of 1989 requires municipalities to adopt an integrated waste management plan to establish objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. Reports filed by the San Francisco Department of the Environment showed that the City generated approximately 873,000 tons of waste material in 2000. By 2017 that figure was decreased to approximately 627,000 tons, despite growth in population and employment.⁷¹ Waste diverted from landfills is defined as recycled or composted. San Francisco has a goal of 75 percent landfill diversion by 2010 and 100 percent by 2020. As of 2012, 80 percent of San Francisco's solid waste was being diverted from landfills, having met the 2010 diversion target.⁷²

San Francisco Ordinance 27-06 requires a minimum of 65 percent of all construction and demolition debris to be recycled and diverted from landfills. The San Francisco Green Building Code also requires certain projects to submit a recovery plan to the Department of the Environment demonstrating recovery or diversion of at least 75 percent of all demolition debris. Furthermore, the project would be required to comply with City Ordinance 100-09, the Mandatory Recycling and Composting Ordinance, which requires everyone in San Francisco to separate their refuse into recyclables, compostables, and trash.

The Recology Hay Road and Potrero Hills landfills, along with the other facilities serving the City, are required to meet federal, state, and local solid waste regulations. The proposed project would comply with the solid waste disposal policies and regulations identified above and the project would have a *less-than-significant* impact with respect to solid waste statutes and regulations, and no mitigation measures are necessary. Therefore, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

-

CalRecycle, Disposal Reporting System (DRS): Jurisdiction Disposal and Alternative Daily Cover Tons by Facility, Information for San Francisco, years: 2000, 2010, and 2017 (updated 2017), https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility, accessed December 3, 2018.

USEPA, Zero Waste Case Study: San Francisco, https://www.epa.gov/transforming-waste-tool/zero-waste-case-study-san-francisco, accessed December 3, 2018.

Cumulative Impacts

Impact C-UT-1: The proposed project, in combination with other reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on utilities and service systems. (Less than Significant)

The geographic context for impacts to utilities and service systems are the service areas for the applicable service providers. The proposed project, when combined with reasonably foreseeable future development, would increase demand for water, wastewater, and solid waste services.

Water Supply

As described above in Impact UT-1, the SFPUC approved and adopted a water supply assessment for the proposed project. This assessment is a cumulative analysis of the project's water supply demand within the overall context of the City's overall cumulative water demand through 2040 based on current water supply planning. The SFPUC's approval of the water supply assessment for the proposed project indicates that cumulative impacts on water supply would be *less than significant*. [Note to Reviewer: To be confirmed upon receipt of WSA from SFPUC and further direction from EP.]

Wastewater and Stormwater

As with the proposed project, the reasonably foreseeable cumulative projects would be required to comply with all San Francisco regulations regarding wastewater and stormwater generation. Although each cumulative project would result in increased wastewater flows, each would also be required to reduce stormwater flows by 25 percent over existing conditions.⁷³ The 25 percent reduction in stormwater flows would result in an overall reduction in combined flows during peak wet weather flow events. As a result, cumulative impacts related to wastewater and stormwater flows would be *less than significant*.

Solid Waste

The proposed project, in combination with reasonably foreseeable future projects, would incrementally increase total waste generation from the city by increasing the number of residents and construction activities, the increasing rate of diversion citywide through recycling, composting and other methods would result in a decreasing share of total waste that requires deposition into the landfill. Cumulative project numbers 1 through 4 and other development throughout the city would be subject to the same recycling and composting, and construction demolition and debris ordinances applicable to the proposed project. Although the City College is a separate entity from the City and County of San Francisco and not subject to local regulations, City College's Recycling Center complies with both city and state ordinances related to recycling and composting.⁷⁴ City College also requires a minimum of 50 percent of construction

Local regulations are applicable to City College pursuant to California Government Code section 53097: "the governing board of a school district shall comply with any city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans as these ordinance provisions relate to the design and construction of onsite improvements which affect drainage, road conditions, or grading, and shall give consideration to the specific requirements and conditions of city or county ordinances relating to the design and construction of offsite improvements."

⁷⁴ City College of San Francisco, Recycle Center – About Us, https://www.ccsf.edu/en/about-city-college/administration/vcfa/facilities_planning/buildings---grounds/the-recycle-center/about-us.html, accessed February 16, 2019.

and demolition debris to be diverted from landfills.⁷⁵ Given the city's progress to date on diversion and waste reduction, and given the future long-term capacity available at the Recology Hay Road Landfill and other area landfills, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate its solid waste disposal needs. For these reasons, the proposed project, in combination with reasonably foreseeable future projects, would have *less-than-significant* cumulative impacts related to solid waste.

Conclusion

For the reasons described above, the project in combination with reasonably foreseeable future development would not result in significant cumulative impacts related to available water supply; the construction of new or expanded water, wastewater, or stormwater systems; exceeding the wastewater treatment requirements of the regional board or the wastewater capacity of the combined sewer system; solid waste disposal; or compliance with solid waste laws, and the cumulative impacts on these utilities and service systems would be *less than significant*.

To	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
14	. PUBLIC SERVICES. Would the project:				
a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services such as fire protection, police protection, schools, parks, or other public facilities?				

Issues related to parks, which is referred to in criterion E.14(a), are addressed above in Section E.12, Recreation. Issues related to access for emergency vehicles are discussed in SEIR Section 3.B, Transportation and Circulation. Issues related to wildland fires are addressed in initial study Section E.22, Wildfire.

Summary of Comments Received in Response to the Notice of Preparation

Several comments were received in response to the NOP concerning potential impacts to response times for fire and other emergency services associated with the increase in population at the project site. This issue is addressed in SEIR Section 3.B, Transportation and Circulation. Multiple comments on the NOP expressed concern regarding the loss of parking at the project site for City College, and the purported secondary financial and access impacts on City College and its students. This issue is addressed in Impacts PS-1 and C-PS-1 below.

⁷⁵ City College of San Francisco, Sustainability Plan Part 1 for Construction, Retrofitting, and Operations, December 17, 2009.

Summary of Public Services Impacts in the PEIR

Police and Fire Protection

PEIR initial study Section 7, Utilities/Public Services, indicated that the increase in population and job growth within the area plan would increase demand for police and fire protection services due to an increase in the number of calls and the level of oversight required due to the increase in population. The PEIR concluded that the increase in fire and police responsibilities from the area plan would not represent a substantial increase in light of the demand for fire and police protection services at the time. Additionally, the PEIR noted that buildout of the area plan would introduce new population, employees, commercial uses, and improved pedestrian facilities which would be expected to increase activity in some less active areas of the plan area which could help deter crime. The PEIR concluded that no additional fire or police facilities would be required due to the increase in demand and the area plan's effect on these services would be less than significant.

Public Schools

PEIR initial study Section 7, Utilities/Public Services, described existing San Francisco Unified School District school services, and noted that there were no public schools operating in the plan area at the time of preparation of the PEIR. Schools identified within the proximity of the area plan included: Sunnyside Elementary School, Commodore Sloat Elementary School, James Denman Middle School, Aptos Middle School, and Balboa High School. The PEIR concluded that the implementation of the area plan would have a less-than-significant impact to public schools because the school district had excess capacity at most schools in the district, enrollment was projected to decline, and the increase in students associated with the area plan would not substantially change the demand for the schools that would be likely attended by new students within the area plan, nor for the entire school system overall.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar land uses (with varying amounts of residential units and parking square footages) within the project site. The two project options are analyzed together, using the growth assumptions derived in initial study Section E.3, Population and Housing.

Impact Evaluation

Impact PS-1: The proposed project would not be expected to increase demand for public services (in order to maintain acceptable service ratios, response times, or other performance objectives for public services) to the extent that it would require new or physically altered governmental facilities, the construction of which could result in significant environmental impacts. (Less than Significant)

Fire Protection Services

The San Francisco Fire Department (fire department) provides fire suppression services and unified emergency medical services and transport, including basic life support and advanced life support services, in the city. The project site is within the service area of the fire department's Battalion 9, and the

closest fire station is Fire Station No. 15 at 1000 Ocean Avenue, immediately southeast of the project site at the northwest corner of Ocean Avenue and Frida Kahlo Way.^{76,77} Other stations in Battalion 9 include Station 19 (390 Buckingham Way), Station 33 (8 Capitol Avenue), and Station 43 (720 Moscow Street). Of these three, Station 21 is the closest fire station, located approximately 0.9 mile south of the project site.

The fire department does not have a personnel-to-residents ratio goal. As of 2013, the fire department had approximately 1,392 uniformed and 57 civilian members.^{78,79} Resources include 43 engine companies, 19 truck companies, a dynamically deployed fleet of ambulances, two heavy rescue squad units, two fireboats, and multiple special purpose units.⁸⁰ Staffing at each station is based on the station's types of firefighting equipment and the number of engines, trucks, and ambulances on duty at any time is based on staffing availability.

According to policy set forth by San Francisco's Emergency Medical Services Agency, ambulances should arrive at the scene of a life-threatening emergency medical incident within 10 minutes of dispatch 90 percent of the time. The ambulance-on-time performance rate has steadily improved since the lowest rate of 76 percent in July 2014, and as of the fiscal year 2018–2019 is now meeting the target.⁸¹ This improvement is attributed to ongoing working group meetings through the participation of all stakeholders, and resulting operational improvements, such as additional fire department staffing and coordinated scheduling between the fire department and private providers.

Construction

The PEIR did not specifically address impacts on fire protection services during construction. Construction activities have the potential to result in accidental onsite fires from such sources as the operation of mechanical equipment and the use of flammable construction materials. However, in compliance with Occupational Safety and Health Administration and fire and building code requirements, construction managers and personnel would be trained in emergency response and fire safety operations, which include the monitoring and management of life safety systems and facilities. Additionally, fire suppression equipment (e.g., fire extinguishers) would be maintained onsite throughout the construction duration. Furthermore, construction would occur in compliance with all applicable federal, state, and local requirements concerning the handling, disposal, use, storage, and management of hazardous waste. Thus, impacts to fire protection during construction would be temporary and *less than significant*.

Operation

The fire department and San Francisco Department of Building Inspection would review building plans to ensure that proposed buildings comply with the latest California Building Code requirements for fire and life safety measures as specified in the San Francisco Fire Code. These requirements include

⁷⁶ San Francisco Fire Department, Fire Station Locations, http://sf-fire.org/fire-station-locations, accessed December 1, 2018.

⁷⁷ San Francisco Fire Department, About SFFD Operations, https://sf-fire.org/about-sffd-operations, accessed December 1, 2018.

San Francisco Fire Department, Annual Report: FY 2012–2013, p. 8, http://www.sffire.org/modules/showdocument.aspx?documentid=3584, accessed December 1, 2018.

⁷⁹ The 2012–2013 San Francisco Fire Department Annual Report is the most recent data source.

⁸⁰ San Francisco Fire Department, About SFFD Operations, https://sf-fire.org/about-sffd-operations, accessed December 1, 2018.

City and County of San Francisco, City Performance Scorecards, Ambulance Response to Life-Threatening Emergencies, https://sfgov.org/scorecards/public-safety/ambulance-response-life-treatening-emergencies, accessed December 1, 2018.

measures related to emergency access and egress; fire hydrants and sprinkler systems; fire-rated design, construction, and materials; restrictions on occupant loads; emergency lighting; smoke alarms; and mechanical smoke control and emergency notification systems. The project sponsor would work with the fire department to determine utility and access requirements for fire protection and emergency services at the project site. Adherence to San Francisco Fire Code requirements as part of the project design would minimize demand for future fire protection services.

The project would be constructed in a fully developed area of San Francisco. However, implementation of the project would result in more intensive use of the project site than currently exists. As discussed in initial study Section E.3, Population and Housing, the proposed project would result in an increase of approximately 1,380 and 2,415 more residents than were analyzed in the PEIR for the Developer's Proposed Option and the Additional Housing Option, respectively. The project's increase in development, use, and service population at the project site would therefore increase demand for public fire protection and emergency medical services. However, the increase would be incremental compared to citywide population projections, would be funded largely through project-related increases to the city's tax base⁸², and would not be substantial given the overall demand for such services on a citywide basis. As noted above, fire protection and medical emergency resources are regularly reassessed based on need in order to maintain acceptable service performance standards.

The proposed project would be required to comply with applicable building and fire codes, and would not result in a substantial demand for service and oversight. For these reasons, implementation of the proposed project would not require the construction of new, or alteration of existing, fire protection facilities. This impact would be *less than significant*, and no mitigation measures are necessary. Therefore, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Police Protection Services

The San Francisco Police Department provides police protection in the city. Police department services include responding to calls for police assistance, monitoring and managing traffic, and performing general surveillance duties. The police department consists of the Golden Gate and Metro divisions and the Operations, Special Operations, and Administration bureaus. The Golden Gate and Metro divisions contain ten separate districts that cover the City.

The project site is within the police department's Ingleside District, and the closest police station is the Ingleside Police Station at 1 Sgt. John V. Young Lane, 0.4 mile east of the project site, adjacent to Balboa Park.⁸³ The police department does not have an adopted standard for the ratio of officers to population or developed acreage, and bases its staffing levels on the number of service calls and crime incidents. Total call volume, comprised of emergency and non-emergency calls, began to increase in September 2011 and continued to grow at a rapid rate through 2017, but has slightly decreased in 2018. Between July 2018 and September 2018, the city received an average of 1,945 daily 911 calls, up from approximately 1,439 calls

Berkson Associates, *Balboa Reservoir Project Findings of Fiscal Responsibility and Feasibility,* February 9, 2018. This report found that required police, fire, and emergency services would be funded by increased general fund revenues generated by the project, and was presented to the Board of Supervisors Budget and Finance Subcommittee to assist the Board in considering a resolution that the proposed development of the Balboa Reservoir site is fiscally feasible. The corresponding resolution (Resolution No. 85-18, File No. 180163) was adopted by the Board of Supervisors on April 3, 2018.

⁸³ San Francisco Police Department, Ingleside Station, http://sanfranciscopolice.org/ingleside-station, accessed December 1, 2018.

per day during the same period in 2011. A 2015 Department of Emergency Management investigation indicated an increase in multiple 911 calls for the same incident, accidental cell phone dials to 911, and an increase in police-reported incidents, as well as the comparable increase in nonemergency calls, and provided recommendations to address these issues including improvements to computer-aided dispatch system functionality, automating the callback process for dispatchers, and tracking accidental dials. As of August 2018, the police department met the goal of 90 percent of calls answered within 10 seconds after performing below the goal from April to October 2017.84 Thus, while there has been an increase in the total volume of calls, the police department has adapted accordingly to meet performance goals.

In compliance with city charter mandate, police department resources are regularly redeployed based on need in order to maintain charter-mandated staffing and acceptable service ratios. In 2014, the police department averaged approximately 1,691 sworn officers.^{85,86} The police department has experienced a large number of retirements in recent years and is projecting a significant number of annual retirements. To address attrition, the city adopted a multiyear hiring plan for a total of 400 new police officer hires over two fiscal years to backfill retirements and bring the number of full-duty sworn staff to the city charter-mandated 1,971 staff.⁸⁷ As of July 2018, the police department had approximately 2,247 full-time sworn officers on duty.⁸⁸

Construction

The PEIR did not specifically address impacts on police protection services during construction. Construction sites can attract theft and vandalism if not properly secured and contribute to a temporary increase in demand for police protection services. The construction contractor would implement temporary security measures including security fencing, lighting, and locked entry to secure the project site during construction, in accordance with standard construction practices. Impacts to police protection during construction would, therefore, be temporary and *less than significant*.

Operation

The project would be constructed in a fully developed area of San Francisco. However, implementation of the project would result in more intensive use of the project site than currently exists. As discussed in initial study Section E.3, Population and Housing, the proposed project would result in an increase of approximately 1,380 and 2,415 more residents than were analyzed in the PEIR for the Developer's Proposed Option and the Additional Housing Option, respectively. The project's increase in development, use, and service population at the project site would therefore increase demand for police

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

⁸⁴ City and County of San Francisco, City Performance Scorecards, 911 Call Volume and Response, http://sfgov.org/scorecards/911-call-volume-and-response, accessed December 1, 2018.

San Francisco City Charter section 4.127 states that the City is to maintain a staffing level of a minimum of 1,971 sworn officers, excluding officers at San Francisco International Airport, and officers not available for field duty (e.g., due to onduty injuries, temporary modified duty, medical leave, and administrative leave).

⁸⁶ San Francisco Police Department, Annual Report 2014, p. 34, https://sanfranciscopolice.org/annual-reports, accessed December 1, 2018. The 2014 Annual Report is the most recent data source.

San Francisco Police Department, Fiscal Year 2017–2018 Budget Presentation to the Police Commission on February 8, 2017, p. 5, https://sanfranciscopolice.org/sites/default/files/Documents/PoliceCommission/PoliceCommission020817-SFPDBudgetPresentationFY17-18.pdf, accessed November 2, 2017.

Commission on Peace Officer Standards and Training, Current Employed Full-Time Sworn, Reserve & Dispatcher Personnel All Post Participating Agencies, https://post.ca.gov/Data/Sites/1/post_docs/hiring/le-employment-stats.pdf, accessed December 1, 2018.

protection services. The Ingleside Police District has a population of 135,288 and covers 15.4 percent of the land mass in the city. From 2008 to 2013, the Ingleside District handled 9.4 percent of all calls and 9.0 percent of the incidents in the city.⁸⁹ The Ingleside Police District had the second lowest number of reported crimes in the city from January through October 2018.⁹⁰ The increased demand generated by the proposed project would be small relative to the existing service population, would not impact a high-demand district, and could be accommodated by existing services.

The increased demand for police services related to the proposed project's new residents, workers, and visitors would be incremental, funded largely through project-related increases to the city's tax base. The increased demand would not be considered substantial given the relatively low demand for such services at the district level and the ongoing staffing analysis and dynamic resource deployment that occurs on a citywide basis. In compliance with city charter mandate, police department resources are regularly redeployed based on need in order to maintain charter-mandated staffing and acceptable service ratios. Therefore, implementation of the proposed project would not require the construction of new or alteration of existing police facilities. This impact would be *less than significant*, and no mitigation measures are necessary. Thus, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Schools

As described above, the PEIR initial study concluded that school district enrollment was projected to decline, and the increase in students associated with the area plan would not substantially change the demand for the schools that would be likely attended by new students within the area plan. Subsequent to the certification of the PEIR in 2008, a decade-long decline in school district enrollment ended in the 2008–2009 school year, and total enrollment in the district has increased to about 57,531 in the 2016–2017 school year, an increase of approximately 1,415 students since 2010.91 According to a 2015 enrollment study, the projected student generation rates for the project area through 2040 are 0.40 kindergarten through 12th grade students per unit for inclusionary affordable housing and 0.20 students per unit for market-rate housing.92

The Additional Housing Option would increase the project site population by an estimated 3,565 residents (2,530 residents under the Developer's Proposed Option) of which a portion would be schoolaged children who would be anticipated to attend public schools in San Francisco. The project would

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

⁸⁹ City and County of San Francisco, District Station Boundary Analysis Report, March 3, 2015.

San Francisco Police Department, COMPSTAT, http://sanfranciscopolice.org/sites/default/files/Documents/PoliceDocuments/CompStat/SFPD%20CompStat%20October%202018. pdf, accessed December 1, 2018.

San Francisco Unified School District, Growing Population, Growing Schools. SPUR Forum Presentation, Slide 14, dated August 31, 2016, https://www.spur.org/sites/default/files/events_pdfs/SPUR%20Forum_August%2031%202016.pptx_.pdf, accessed December 2, 2018.

Lapkoff & Gobalet Demographic Research, Inc., Demographic Analyses and Enrollment Forecasts for the San Francisco Unified School District, published February 16, 2018, p. 36, Table II-10, http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/ demographic-analyses-enrollment-forecast.pdf, accessed December 2, 2018.

result in approximately 465 students at buildout under the Additional Housing Option and approximately 330 students under the Developer's Proposed Option.^{93,94}

According to a facilities survey, the San Francisco Unified School District has capacity for approximately 63,400 students. Student enrollment as of fall 2016 was approximately 57,500 students, with an expected enrollment increase to 64,000–73,000 by 2030. 95 Given the district's overall capacity, the increase of 330 or 465 students associated with the project could contribute to the overall demand for schools but would not by itself result in the need for new facilities.

The Leroy F. Greene School Facilities Act of 1998, or SB 50, restricts the ability of local agencies to deny land use approvals on the basis that public school facilities are inadequate. SB 50, however, permits the levying of developer fees to address local school facility needs resulting from new development. Local jurisdictions are precluded under state law from imposing school-enrollment-related mitigation beyond the school development fees. The San Francisco Unified School District collects statutory school fees from new residential and commercial/industrial development in amounts determined by the board of the school district. The school district collects these fees, which are used in conjunction with other school district funds, to support efforts to complete capital improvement projects within the city. The proposed project would be subject to these school impact fees.

Ultimately, given the school district's overall capacity of approximately 63,400 students, the estimated increase of up to 465 students under the Additional Housing Option and 330 students under the Developer's Proposed Option would not substantially change the demand for schools. Project-generated growth would be within the existing available capacity of school district system. Therefore, implementation of the proposed project would not necessitate the need for new school facilities or the expansion of existing school facilities and the impacts would be *less than significant*, and no mitigation measures are necessary. Thus, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Other Public Facilities - Libraries

The PEIR did not specifically address impacts to libraries. Residential and nonresidential development associated with the project would increase demand for local library services. The Ingleside Branch of the San Francisco Public Library is located on Ocean Avenue less than 100 feet from the project's southwestern border. The Ingleside Branch Library opened in 2009 as part of San Francisco Public

_

⁹³ Student generation rates are calculated based on the following: of 1,550 units, 775 units would be affordable and 775 would be market-rate, therefore (775 units x 0.40 students/unit) + (775 units x 0.20 students/unit) = 465 students. This is based on data provided by: Lapkoff & Gobalet Demographic Research, Inc., Demographic Analyses and Enrollment Forecasts for the San Francisco Unified School District, February 16, 2018, p. 36, table II-10, http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf, accessed December 2, 2018.

⁹⁴ Student generation rates are calculated based on the following: of 1,100 units, 550 units would be affordable and 550 would be market-rate, therefore (550 units x 0.40 students/unit) + (550 units x 0.20 students/unit) = 330 students. This is based on data provided by: Lapkoff & Gobalet Demographic Research, Inc., Demographic Analyses and Enrollment Forecasts for the San Francisco Unified School District, February 16, 2018, p. 36, table II-10, http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf, accessed December 2, 2018.

San Francisco Unified School District, Growing Population, Growing Schools. SPUR Forum Presentation, Slide 14, dated August 31, 2016, https://www.spur.org/sites/default/files/events_pdfs/SPUR%20Forum_August%2031%202016.pptx_.pdf, accessed December 2, 2018.

Library's Branch Library Improvement Program, managed by San Francisco Public Works. Given that the Ingleside Branch was recently constructed and expanded, this resource would satisfy the demand for library services generated by the project site population of an estimated 3,565 residents (2,530 residents under the Developer's Proposed Option). Demand would also be absorbed by other nearby neighborhood libraries including the Ocean View, Excelsior, and Merced Branch libraries. Therefore, the project would not require construction of new or expanded library facilities. Therefore, impacts on library services would be *less than significant*, and no mitigation measures are necessary.

Other Public Facilities - City College

The following discussion is included to address comments regarding the loss of parking at the project site for City College within the framework of CEQA and its requirements.

Background on Parking and CEQA

As noted in the City's Transportation Impact Analysis Guidelines Update, in the transit-rich urban context of San Francisco, parking loss or deficit in and of itself does not result in direct physical changes to the environment.⁹⁷ In other words, the social inconvenience of a person searching in their vehicle for an available parking space is not an environmental impact under the purview of CEQA. The secondary effect of searching for parking could, however, be an environmental impact in relation to other topics (e.g., safety, air quality, noise).

Until 2009, the CEQA Guidelines Appendix G environmental checklist included a question regarding the adequacy of parking capacity as a matter to consider in CEQA documents. The state removed this question, consistent with a 2002 Court of Appeal ruling that upheld San Francisco's determination that parking deficits in themselves are not a physical effect on the environment. In 2013, Governor Brown signed California SB 743, which amended the CEQA statute itself with respect to parking, among other things. Specifically, the bill stated that, effective January 1, 2014, parking (and aesthetics) shall not be considered significant impacts on the environment for residential, mixed-used residential, or employment center projects on an infill site within a transit priority area, as defined in CEQA. As described in initial study Section E.2, Aesthetics, p. B-16, the proposed project meets the criteria set forth in the bill; thus, this initial study and SEIR do not consider parking in determining the significance of project under CEQA.

City College Transportation Performance Objectives

City College looked at parking issues in the 2004 City College of San Francisco Facilities Master Plan including for the Ocean campus. The master plan included TDM measures to reduce reliance on automobile travel and reduce the vehicle trip-generation rate to and from the Ocean campus and the associated parking demand. The master plan also suggested that reducing the need to devote significant

Balboa Reservoir Project Draft SEIR B-77 April 2019
Case No. 2018-007883ENV

⁹⁶ San Francisco Public Library, Ingleside Branch Facts, https://sfpl.org/pdf/blip/inglesidefaq.pdf, accessed December 2, 2018.

⁹⁷ San Francisco Planning Department, Transportation Impact Analysis Guidelines Update: Summary of Changes, February 14, 2019, http://default.sfplanning.org/publications_reports/TIA_Guidelines_Summary_of_Changes_Memo.pdf, accessed February 20, 2019.

⁹⁸ San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002), 102 Cal. App.4th 656.

land and finances to on-campus parking could be a key component of a campus sustainability program, aimed at encouraging sustainable design and building principles.⁹⁹

The City College master plan also stated, "As existing parking lots in the reservoir, Cloud Circle, and elsewhere on campus are converted to other uses, replacement parking will be provided in structured parking facilities at the periphery of campus, primarily in the reservoirs and lower campus, allowing the campus core to develop a stronger pedestrian orientation."¹⁰⁰The EIR for the master plan assumed that the western portion of the reservoir could be developed as public open space or housing and open space; thus, the master plan did not consider parking on the project site as a long-term option, but rather as a short-term strategy.¹⁰¹ Therefore, since 2004, it has been anticipated that City College parking on the project site would be replaced, at least in part, elsewhere on the campus.

City College Travel Behavior

A transportation consulting firm collected travel data for City College students and employees via a survey in 2016 to determine the typical mode of choice when traveling to the City College campus. The majority or 54 percent of respondents used public transit (Muni or BART) as their primary travel mode to campus; 27 percent of participants drove, and 12 percent walked or biked.¹⁰²

Parking at the Site and in the Vicinity

The project site currently functions as a surface parking lot that City College uses under the terms of a nofee revocable license with the SFPUC. The cost of a parking permit for student is \$40 per semester (or \$20 for students on financial aid), and employees do not pay for a semester or annual parking permit. Parking costs for other day-use parkers, such as visitors, costs \$3 per day. 103

For this SEIR, a transportation consultant collected parking occupancy data in 2017 and 2018 for the project site and the east basin. The project site and east basin currently contain 1,007 and 1,167 surface vehicle parking spaces, respectively.¹⁰⁴ Parking occupancy on the project site peaked at 33 percent during the 11 a.m. hour.¹⁰⁵ The parking occupancy data showed that the east basin parking lot would be able to accommodate the combined number of vehicles in both the project site and the east basin during most periods throughout the weekday, except for a four-hour period from 10 a.m. to 2 p.m. During this shortfall period, there would be a minimum shortfall of 37 spaces and a maximum shortfall of 239 spaces.¹⁰⁶

⁹⁹ City College of San Francisco, Ocean Avenue Campus Master Plan – Transportation and Parking Element, p. 76, June 10, 2004.

¹⁰⁰ City College of San Francisco, Ocean Avenue Campus Master Plan - Transportation and Parking Element, p. 76, June 10, 2004.

¹⁰¹ City College of San Francisco, CCSF Master Plan Draft EIR, pp. 3.0-14 to 3.0-15, January 30, 2004.

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 4-2, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-35, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

Although the west basin (project site) is larger than the east basin (City College property), large areas of the west basin are occupied by the west basin's berm and sloped perimeters, which is why City College's east basin parking lot contains more parking spaces than does the project site.

¹⁰⁵ Kittelson & Associates, Balboa Reservoir –Travel Demand Memorandum, p. 13, April 29, 2019.

¹⁰⁶ Kittelson & Associates, Balboa Reservoir – Travel Demand Memorandum, p. 13, April 29, 2019.

A portion of on-street parking in the project vicinity is generally regulated through established Residential Parking Permit (RPP) zones: RPP zone D which is north of City College Ocean Campus and stretches along Circular Avenue to areas northeast of the plan area, north of Monterey Boulevard; and RPP zone V which is largely located south of Ocean Avenue, generally in the northern portion of the Ingleside Neighborhood and crosses over I-280 to the Outer Mission Neighborhood. Permits are provided to residents by SFMTA for an annual cost of \$136 and allow for unrestricted parking for permit holders within the permit zone (with exception for street cleaning times). 107,108 For non-permit holders, vehicles are allowed to park on-street for up to two hours; parking beyond two hours is subject to a fine. All other areas outside of the RPP zones and outside of metered, commercial areas on Ocean Avenue are unregulated. 109 Some campus students and visitors may utilize unpaid on-street parking located north of the campus. In these areas, parking data show that there is an increase in on-street parking occupancies from the midday to late-evening periods, which may indicate that on-street parking is occupied by day-users or short-term parkers, such as City College students, faculty, and other visitors. 110

Project Analysis

Under the Developer's Proposed Option, a 750-space parking garage would be constructed near the southern end of the project site, which could more than accommodate the shortfall of 37 to 239 parking spaces.

Under the Additional Housing Option, no public parking structure is proposed. Thus, in a worst-case scenario, the proposed project would result in an increase of 239 people driving looking for parking during a short period of time. The shortfall in parking supply would cause some drivers to shift to another mode of travel, others to rearrange their schedules to travel at other times of the day, and some to find parking at another City College lot or on-street parking in the surrounding neighborhoods. Student parking is available in the D and S lots (221 and 15 spaces, respectively) on the eastern side of the City College campus, which according to the 2016 parking occupancy studies showed a 73 and 94 percent average utilization, respectively, between the hours of 10 a.m. and 4 p.m. This is during the shortfall period. Additionally, as described above the areas north of the City College campus have some capacity

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-32, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

SFMTA, Residential Parking Permits (RPP), https://www.sfmta.com/permits/residential-parking-permits-rpp, accessed April 23, 2019.

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-32, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-33, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

¹¹¹ City College of San Francisco, CCSF Ocean Campus Map, https://www.ccsf.edu/Info/Map/, accessed February 21, 2019.

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-36, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson Nygaard Balboa TDM-Existing Conditions Memo.pdf, accessed February 20, 2019.

to accommodate on-street parking during the shortfall period, as average on-street parking utilization during this time period in these areas varies from 70 to 71 percent. 113

Nevertheless, the additional time needed for cars to find alternative spots or additional time cars are circling for parking would not be enough to result in significant secondary physical adverse impacts. Furthermore, it would be speculative to conclude that the loss of parking would lead to substantial adverse impacts related to new or physically altered facilities at City College. Even assuming no policy changes would occur for parking pricing and the same number of drivers would continue to drive under the Additional Housing Option, and those people would not be able to locate parking elsewhere on-street or on City College, this shortfall would be minor and only occur over a three- to four-hour period during 174 days of year with City College classes. Thus, the proposed project would not – in order to maintain acceptable service ratios, response times, or other performance objectives – be expected to increase demand for public services to the extent that would require new or physically altered public facilities, the construction of which could result in significant environmental impacts, and the proposed project would not result in new or substantially more-severe impacts than those identified in the PEIR.

Thus, secondary impacts related to the loss of City College parking would be *less than significant*, and no mitigation measures are necessary.

Cumulative Impacts

Impact C-PS-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in cumulative impacts on public services. (Less than Significant)

Cumulative development in the project vicinity would result in an intensification of land uses and a cumulative increase in the demand for fire protection, police protection, school services, and other public services. The fire and police departments, the school district, libraries, and other city agencies respond to growth and other changing service needs through ongoing analysis of applicable metrics, such as staffing, capacity, response times, and call volumes. As a result, projected future development would not result in any service gap in citywide police, fire, and emergency medical services. Because there is no shortfall with respect to school or library services in the surrounding, and because reasonably foreseeable projects would be subject to the same school impact fees as the project, there would not be any service gaps in citywide school and library services.

As discussed in initial study Section E.1, Land Use and Land Use Planning, p. B-12, and as noted above, City College is currently preparing an updated Facilities Master Plan that would be subject to separate CEQA review. Among the projects described in the draft recommendation for the City College facilities master plan is an east basin parking structure, which is anticipated to provide approximately 877 parking spaces. This garage and another anticipated facilities master plan project, a performing arts education center,¹¹⁴ would replace a portion of the City College parking on the project site, as anticipated since 2004.

Balboa Reservoir Project Draft SEIR B-80 April 2019
Case No. 2018-007883ENV

Nelson\Nygaard Consulting Associates Inc., Balboa Area Transportation Demand Management (TDM) Plan Existing Conditions, p. 3-33, October 2016, http://default.sfplanning.org/plans-and-programs/planning-for-the-city/public-sites/balboareservoir/Nelson_Nygaard_Balboa_TDM-Existing_Conditions_Memo.pdf, accessed February 20, 2019.

The number of existing east basin surface parking spaces that would be displaced by these two projects is not known, but is estimated to be about half of the existing 1,167 east basin spaces. An 877-space garage would replace these approximately 585 spaces plus about 290 of the project site (west basin) spaces to be lost under the project analyzed in this SEIR.

and the east basin parking structure would merely replace existing surface parking. Any effects of construction and operation of an east basin parking structure would be fully analyzed by City College if and when the college formally proposes to build a garage.

As noted above, the draft recommendation for the City College facilities master plan identifies a potential parking garage on the northernmost portion of the eastern reservoir (east basin parking structure). (Although not identified as reasonably foreseeable for purposes of the cumulative analysis, the facilities master plan identifies two additional future surface parking lots located on the eastern side of campus.) The total amount of net new parking spaces that might be provided by City College is unknown. However, as described above, an 877-space east basin parking structure would replace the spaces lost to the garage itself and the City College performing arts education center, as well as approximately 290 of the project site (west basin) spaces to be lost under the project analyzed in this SEIR. Therefore, it appears that the 37 to 239 parking space shortfall described under Impact PS-1 could be accommodated by the facilities master plan, should the east basin parking structure be developed as currently foreseen. As stated under Impact PS-1, p. B-71, parking conditions are not static, as parking supply and demand vary over time, and there is a high potential for travel mode shift when parking becomes less convenient. Additionally, it would be speculative to quantify what the increased parking demand would be that includes the facilities master plan projects, as various factors affect travel behavior. The facilities master plan would also be subject to a separate CEQA review, which would analyze potential physical impacts of constructing new facilities.

Therefore, the proposed project would not combine with reasonably foreseeable future projects in the project vicinity to create a significant cumulative impact on public services. This impact would be *less than significant*, and no mitigation measures are necessary.

Topics:		Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
15.	BIOLOGICAL RESOURCES. Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?				

There are no applicable adopted habitat conservation plans, natural community conservation plans, or other approved habitat conservation plans that apply to the project area. Therefore, criterion E.15(f) does not apply to the proposed project, and this topic is not discussed further in this initial study or in the EIR.

Summary of Comments Received in Response to the Notice of Preparation

Comments received in response to the NOP expressed concern with the impacts related to migratory and common resident birds, such as white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorhous mexicanus*), California scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), and Anna's hummingbird (*Calypte anna*). These species were either noted within the project area or mentioned as potentially present in scoping comments. This issue is discussed further in the protection of nesting birds under Impact BI-4. Commenters were also concerned with the loss of habitat such as native coyote bush (*Baccharis pilularis*). This is addressed under Impact BI-1 and Impact BI-5. No special-status plants, insects, amphibians, reptiles, birds, or mammals are expected on the site due to lack of suitable habitat.

Summary of Biological Resource Impacts in the PEIR

PEIR initial study Section 8, Biology, addressed the biological resources significance criteria. Relevant information from this section is summarized below. The PEIR initial study reported that the project area is a developed urban area that does not support or provide habitat for any rare or endangered plant or wildlife species, and that the project area is completely covered by impervious surfaces. Additionally, the PEIR concluded that implementation of the plan would not interfere with the movement of any resident or migratory special-status species, or contribute to any cumulative effects. The PEIR initial study also stated that if the proposed development would require the removal of trees, that the proposed project would need to comply with the City of San Francisco's Urban Forestry Ordinance (City's tree ordinance) and the federal Migratory Bird Treaty Act (MBTA) in regards to nesting birds.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar land uses, site plans, building configurations (with the exception of buildings heights), and construction characteristics within the project site. The differences between the proposed project options would not result in any meaningful differences in potential impacts on biological resources. Therefore, the following analysis applies to both project options.

Impact Evaluation

Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or through habitat modification, on any special-status species. (Less than Significant)

A qualified biologist conducted a site reconnaissance on November 12, 2018. The reconnaissance visit consisted of a pedestrian survey within the project site's boundary and visual observations of the adjacent environments to identify the presence or absence of suitable habitat or supportive communities for special-status¹¹⁵ plant and wildlife species. General habitat conditions were noted and incidental species observations were recorded. Prior to the reconnaissance survey, a review of database queries was conducted for special-status species occurrences documented in the regional project vicinity (i.e., San Francisco South 7.5-minute U.S. Geological Survey quadrangles and surrounding six quadrangles) including the California Department of Fish and Wildlife (CDFW¹¹⁶) California Natural Diversity Database (CNDDB), and California Native Plant Society (CNPS). Lists compiled of sensitive plant and animal species from these databases were further analyzed based on the likelihood of the species occurring on the project site based on known species occurrences, natural history parameters, including but not limited to the species' range, habitat, foraging needs, migration routes and reproductive requirements. Of these identified special-status species, none were determined to have a moderate or

_

The term "special-status" species includes those species that are listed and receive specific protection defined in federal or state endangered species legislation, as well as species not formally listed as Threatened or Endangered, but designated as "Rare" or "Sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations, or local agencies such as counties, cities, and special districts. A principal source for this designation is the California "Special Animals List."

The California Department of Fish and Game (CDFG) changed its name on January 1, 2013 to the California Department of Fish and Wildlife (CDFW). In this document, references to literature published by CDFW prior to Jan. 1, 2013 are cited as 'CDFG'. The agency is otherwise referred to by its new name, CDFW."

high potential to occur in the project area partly due to the lack of suitable habitat or supportive vegetation communities which these species require for sustained use (see SEIR Appendix G, Biological Resources Supporting Information).

The 17.6-acre project site is located in a dense urban setting and currently does not contain desirable habitat that could support sensitive species. The site is bounded on three sides by sloping western, northern, and eastern edges that surround a sunken paved surface at the center. An approximately 30-foot-tall earthen berm is located at the western edge of the property. The site does not contain any permanent structures and currently contains 1,007-space surface vehicular parking spaces. A cargo storage container is located on the west side of the site, at the foot of the berm slope. The parking lot is entirely paved with no vegetation. The western and northern slopes contain scattered trees and shrubs, with paved and gravel pathways along the tops of these slopes. Paved walkways, stairs, vegetation, landscaping, and lighting are located on the eastern slope.

Vegetation on the western and northern slopes has grown in between the formed concrete and on the earthen berm. Vegetation is dominated by non-native annual grasses and opportunistic weedy species that thrive in such ruderal environments and include rattlesnake grass (*Briza maxima*), wildoats (*Avena fatua*), Bermuda grass (*Cynodon dactylon*), fennel (*Foeniculum vulgare*), pampas grass (*Cortaderia jubata*), narrowleaf firethorn (*Pyracantha angustifolia*), Himalayan blackberry (*Rubus armeniacus*), bristly ox tongue (*Helminthotheca echioides*), iceplant (*Carpobrotus edulis*), black mustard (*Brassica nigra*), belladonna lily (*Amaryllis belladonna*), cut leaf plantain (*Plantago coronopus*), prickly lettuce (*Lactuca serriola*), cheeseweed (*Malva parviflora*), French broom (*Genista monspessulana*) and iris (*Iris* sp.). Native coyote bush (*Baccharis pilularis*) and the native Canada horseweed (*Erigeron canadensis*), were also prevalent throughout the site. Trees observed in the landscaped eastern slope and on the western and northern slopes include, silk tree (*Albizia julibrissin*), Italian stone pine (*Pinus pinea*), juniper (*Juniperus chinensis*), Sydney golden wattle (*Acacia longifolia*), myoporum (*Myoporum laetum*), and a yucca (*Yucca* sp.).

Birds commonly found in such areas with limited habitat value are seed-eating and non-native. Bird species observed during the site reconnaissance in 2018 include house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), California towhee (*Melozone crissalis*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), white-crowned sparrow (*Zonotrichia leucophrys*), and a gull (*Larus sp.*). Other bird species that can be expected to be found in the vicinity of the project site include: European starling (*Sturnus vulgaris*), lesser goldfinch (*Spinus psaltria*), Brewer's blackbird (*Euphagus cyanocephalus*), California scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), and rock pigeon (*Columba livia*). Gray squirrel (*Sciurus carolinensis*) and the western fence lizard (*Sceloporus occidentalis*) were also observed during the survey. Common species, other than actively nesting birds, do not receive protection under CEQA and do not require mitigation and are, therefore, not discussed further in the analysis.

Based on the data above and similar to the conclusions of the PEIR, the proposed project would not have a substantial adverse effect on special-status species due to the lack of suitable habitat. This impact would be *less than significant*, and no mitigation is required. Thus, the proposed project would not result in any new impacts, or increase the severity of any previously identified impacts, to special-status species.

Impact BI-2: The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations. (No Impact)

As described in Impact BI-1, above, the project area does not contain riparian habitat or other sensitive natural community, which is consistent with the description in the PEIR of no notable vegetative habitat in the project area. Thus, the proposed project would have *no impact* on any riparian or other sensitive natural community. No changes in conditions at the project site were observed from the site reconnaissance in 2018, or any new information has become available that would result in new or more severe impacts associated with the proposed project with respect to sensitive natural communities.

Impact BI-3: The proposed project would not have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act or navigable waters as defined in section 10 of the Rivers and Harbors Act through direct removal, filling, hydrological interruption, or other means. (No Impact)

The PEIR did not specifically address the issues of wetlands and navigable waters. However, as described above in Impact BI-1, the project area does not contain any water features exhibiting the hydrology and vegetation characteristics of wetlands or navigable waters. Therefore, the proposed project would have *no impact* to wetlands or navigable waters.

Impact BI-4: The proposed project would not interfere with the movement of native resident or migratory wildlife species resident or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant)

As stated in the PEIR initial study Section 8, Biology, the implementation of the area plan would not interfere with the movement of any resident or migratory special-status species.

San Francisco is within the Pacific Flyway, a major north-south route of travel for migratory birds along the western portion of the Americas. The project site is not considered an *urban bird refuge*.¹¹⁷ Balboa Park, located approximately 0.4 mile east of the project site is the closest urban bird refuge.¹¹⁸ Multi-story buildings are potential obstacles that can injure or kill birds in the event of a collision, and bird strikes are a leading cause of worldwide declines in bird populations. Since certification of the PEIR, the City adopted Planning Code section 139, Standards for Bird-Safe Buildings. Planning code section 139 establishes building design standards to reduce avian mortality rates associated with bird strikes. This ordinance focuses on location-specific hazards and building feature-related hazards. Location-specific hazards apply to buildings in, or within 300 feet of and having a direct line of sight to, an urban bird refuge. The project site is not in or within 300 feet of an urban bird refuge, therefore the standards related to location-specific hazards are not applicable to the proposed project. Feature-related hazards, which can occur on buildings anywhere in San Francisco, are defined as freestanding glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments of 24 square feet or larger. The proposed

An urban bird refuge is defined by Planning Code section 139(c)(1) as "open spaces two acres and larger dominated by vegetation, including vegetated landscaping, forest, meadows, grassland, or wetlands, or open water."

San Francisco Planning Department, Urban Bird Refuge Poster, http://sfplanning.org/ftp/files/publications_reports/library_of_cartography/Urban_Bird_Refuge_Poster.pdf, accessed December 6, 2018.

project would comply, as necessary, with the feature-related standards of Planning Code section 139 by using bird-safe glazing treatment on 100 percent of any feature-related hazards.

The trees and vegetation within the project site may provide suitable habitat for migratory and resident birds which breed locally in San Francisco. Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) and native resident nongame birds and their nests are protected from take under the California Fish and Game Code (CFGC). While overall habitat is of marginal quality due to its urban context and disturbed soils, the composition of non-native vegetation can be attractive to seed eating birds. The presence of native coyote bush, narrowleaf firethorn, silk tree, Sydney golden wattle, and non-native pampas grass can provide cover and nesting substrate for smaller passerine species. The Italian stone pines, juniper, and myoporum trees at the project site could provide nesting habitat for larger passerine and raptor species, such as red-tailed hawk (*Buteo jamaicensis*). In the absence of surveys, removal of the trees and vegetation and construction-related activities during the nesting season could result in nest abandonment, destruction, injury or mortality of nestlings, and disruption of reproductive behavior during the breeding season. However, the project would be required to comply with the requirements of the MBTA and CFGC, which would ensure that there would be no loss of active nests or bird mortality and no significant effects would occur. To comply with the CFGC and the MBTA, the project sponsor would:

- Undertake tree removal during the non-breeding season (i.e., September through February) to avoid
 nesting birds or conduct preconstruction surveys for work scheduled during the breeding season
 (March through August);
- Conduct preconstruction surveys by a qualified biologist no more than 15 days prior to the start of work during the nesting season to determine if any birds are nesting in or in the vicinity of the vegetation to be removed or construction to be undertaken;
- Avoid any nests identified and establish (by a qualified biologist) a construction-free buffer zone, to be maintained until nestlings have fledged.

Compliance with existing regulations would ensure that the proposed project would not result in any new or substantially more severe significant impacts associated with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors than those identified in the PEIR. This impact, therefore, would be *less than significant*.

Impact BI-5: The proposed project would not conflict with any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (No Impact)

As stated in the PEIR, development projects within the area plan would be required to comply with the San Francisco Urban Forestry Ordinance, which is codified as article 16 of the San Francisco Public Works Code. This ordinance protects San Francisco's street trees, significant trees and landmark trees regardless of species. Landmark trees are designated by the San Francisco Board of Supervisors upon the recommendation of the Urban Forestry Council, which uses criteria established in section 810 of the public works code to determine whether a nominated tree meets the qualifications for designation. As under the ordinance, "significant" trees must be located on a property under the jurisdiction of the Department of Public Works, or on privately owned property with any portion of its trunk within 10 feet of a public right-of-way and satisfying at least one of the following criteria: (a) a diameter at breast height in excess of 12 inches, (b) a height in excess of 20 feet, or (c) a canopy in excess of 15 feet. Street trees are

any tree growing within the public right-of-way, including unimproved public streets and sidewalks, and any tree growing on land under the jurisdiction of the public works department as defined in section 802(w) of the public works code.

The project site is owned by the City and County of San Francisco and is under the jurisdiction of SFPUC. Therefore, the project site is not under the jurisdiction of the Department of Public Works or within any public right-of-way. The basic tree inventory survey conducted in February 2019 identified 22 trees with a diameter at breast height of 4 inches or larger; however, the survey did not identify any trees that would be considered "significant" due to right-of-way boundary locations. Also, there are no landmark trees or street trees on the project site. Therefore, no on-site trees are protected under the City's tree ordinance.

Implementation of the proposed project would result in the removal of trees that are not protected by the Urban Forestry Ordinance and therefore, the project sponsor would not be required to submit a tree removal permit in accordance with the Urban Forestry Ordinance. However, as described in Section 2.E.4, Design Standards and Guidelines, the proposed project would also include planting of street trees along the new internal roadways, as part of San Francisco Public Works' approval of street dedication and easements for public improvements. The proposed project would comply with the Urban Forestry Ordinance by following these requirements. Thus, the project would not conflict with applicable local policies or ordinances protecting biological resources, and would have *no impact*. The proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Cumulative Impacts

Impact C-BI-1: The project, in combination with other reasonably foreseeable future projects, would not result in cumulative impacts on biological resources. (Less than Significant)

The geographic scope of potential cumulative biological resources impacts encompasses a 0.5-mile radius area from the project site and identified in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11. Potential cumulative impacts on biological resources relate to the removal of protected trees; modification or interference with existing habitats, sensitive natural areas, riparian habitats, or federally protected wetlands and migratory wildlife corridors; and conflicts with adopted regulations, plans, or policies intended to protect and preserve rare or endangered species and their habitats. As described above in Impacts BI-1 through BI-5, the project area predominantly consists of an impervious concrete surface with some landscaping, non-native vegetation, and the overall habitat supportive of sensitive wildlife and plants is of marginal quality. The proposed project, would have little or no potential to affect sensitive plants or wildlife, and therefore would not contribute to cumulative impacts on biological resources in the project area.

Construction of the proposed project and cumulative projects would occur in developed areas, and limited removal of trees and vegetation could occur. The removal of vegetation and trees during nesting seasons could result in a significant cumulative impact on nesting birds. Tree removal could also have a significant cumulative impact if the other reasonably foreseeable projects were to conflict with any local policies or ordinances protecting trees or other biological resources. However, similar to the proposed project, cumulative projects 1 through 4, would be required to comply with the requirements of the Urban Forestry Ordinance, CDFW, and MBTA. As an agency of the state, City College is not under the jurisdiction of the City and County of San Francisco; therefore, the Urban Forestry Ordinance is not applicable. Although cumulative projects 5 and 6 would not be subject to local regulations, City College

would be required to comply with the state and federal requirements of CDFW and MBTA, respectively, related to nesting birds. Therefore, the proposed project would not combine with cumulative development projects to create or contribute to a cumulative impact on biological resources, and cumulative impacts would be *less than significant*.

Τοι	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
16	GEOLOGY AND SOILS.				
	Would the project:				5
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Ц	Ш	Ш	
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii) Strong seismic ground shaking?				\boxtimes
	iii) Seismic-related ground failure, including liquefaction?				\boxtimes
	iv) Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?				\boxtimes
c)	Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes

The PEIR initial study did not specifically address having soils capable of supporting the use of septic tanks or alternative waste disposal systems. However, the proposed project would connect to the combined sewer system, and would not use septic tanks or other on-site land disposal systems for sanitary sewage. Therefore, criterion E.16(e) is not applicable to the proposed project.

Summary of Comments Received in Response to the Notice of Preparation

During the scoping period, there were no geology- or soils-related concerns raised by the public and responsible agencies.

Summary of Geology and Soils Impacts in the PEIR

PEIR initial study Section 9, Geology/Topography, addressed the geology and soils significance criteria, with the exception of paleontological resources, which were not evaluated in the PEIR. Relevant information from the PEIR is summarized below. The PEIR characterized existing soil and geologic conditions in the plan area, described existing seismic and geologic hazards, and concluded that impacts related to geologic and seismic hazards would be less than significant through compliance with regulatory requirements.

The PEIR indicated the plan area is underlain by small areas of slope debris and artificial fill and sands of the Colma Formation that overly the Franciscan bedrock located at depth in some portions of the plan area. The PEIR initial study noted the plan area is not located within an Alquist-Priolo Fault Zone or a Seismic Hazards Zone for liquefaction as defined in the City's General Plan Community Safety Element. No areas of potential landslide hazards or earthquake-induced landslides within the plan area were identified in the PEIR initial study. No earthquake fault zones or active faults crossing the area or projected towards the area were identified in the PEIR initial study; however, the areas underlain by sands of the Colma Formation would be subject to moderate to violent ground shaking in the event of a major earthquake on regional faults. The PEIR initial study concluded that implementation of design and structural recommendations from an approved geotechnical investigation and compliance with appropriate code requirements, subject to review by the San Francisco Department of Building Inspection, would reduce the potential impacts related to existing seismic hazards to less-than-significant levels.

Similarly, while the PEIR identified potential expansive or corrosive soils, and soils subject to erosion in the plan area, it concluded that compliance with building code requirements for addressing impacts related to these soil concerns would reduce these potential impacts to less-than-significant levels. The PEIR noted that for development projects on or near the Balboa Reservoir site, the building code contains provisions which require that grading on slopes of greater than 2:1 must be done in accordance with the recommendations of a soil engineering report, and that implementation of such recommendations along with compliance with building code requirements would reduce potential impacts associated with excavation on slopes to less-than-significant levels. No mitigation measures were identified.

The PEIR initial study Section 9, Geology/Topography, reported that there are no known unique geologic features in the plan area. The PEIR estimated that groundwater dewatering from excavations may be necessary during construction, which could result in settlement or subsidence. The PEIR initial study determined that this dewatering would cause no substantial change in the largely flat character of the site's topography. Given these factors, the PEIR initial study concluded the area plan's effect on changes in topography and unique geologic features would be less than significant. No mitigation measures were identified.

Since certification of the PEIR in 2008, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,¹¹⁹ the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing seismic

¹¹⁹ California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369. Opinion Filed December 17, 2015.

hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Thus, the following analysis evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact is considered significant if the proposed project would exacerbate existing or future seismic hazards or unstable soils by increasing the severity of these hazards that would occur or be present without the project.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar extents of ground disturbance and construction characteristics within the project site. Due to the similar ground disturbance areas and construction characteristics of the project options, the two project options would not result in different impacts related to geology and soils. The two project options are therefore analyzed as one.

Impact Evaluation

Earthquake and Landslide Hazards

Impact GE-1: The proposed project would not exacerbate the potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic ground shaking, seismically induced ground failure, or landslides. (Less than Significant)

The preliminary geotechnical investigation prepared for the project site identified similar geologic materials to those identified in the PEIR initial study. The non-embankment portion of the project site is underlain by the Colma Formation (silty sand with clay interbeds), which extends to a depth of at least 46 feet bgs at the maximum depth explored. The embankment consists of dense to very dense sand fill which was likely excavated onsite and re-worked.

Free groundwater was not observed in borings taken at the project site (two of which extended to 26 feet bgs); however, previous investigations in nearby areas were used to estimate a design high groundwater level for the site. Previous investigations encountered groundwater at depths of 22 feet bgs to the east of the project site and at a depth equivalent to 38 feet bgs west of the project site.¹²¹ The groundwater level at the site is expected to fluctuate several feet seasonally with potentially larger fluctuations annually; a design

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir
Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be
updated if new geotech report is made available prior to publication].

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

high groundwater level of 20 feet bgs was selected as the design groundwater level for preliminary design.¹²²

Fault Rupture

As analyzed in the PEIR, no active faults as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known fault or potentially active fault exists within the project site. In a seismically active area, such as the San Francisco Bay Area, the remote possibility exists for future faulting in areas where no faults previously existed; however, the geotechnical investigation concluded that the risk of surface faulting and consequent secondary failure from previously unknown faults is very low. 123 Therefore, this impact would be *less than significant*.

Ground Shaking

The San Andreas, Hayward, and Calaveras faults are the major faults closest to the site. As analyzed in the PEIR initial study, the entire plan area would be subject to strong ground shaking in the event of an earthquake on one of the regional faults. However, as determined in the PEIR initial study, the impact of strong seismic ground shaking would be less than significant with implementation of design and structural recommendations from an approved geotechnical investigation and compliance with appropriate code requirements, subject to review by the San Francisco Department of Building Inspection.

In accordance with the state and local building code requirements, the geotechnical investigation analyzed the potential for very strong seismic shaking and recommended that the proposed project's seismic design be in accordance with the provisions of the building code. With implementation of these recommendations, as incorporated into and required by the building code, the impact of strong seismic ground shaking would be less than significant.

The proposed project would comply with the latest requirements of the state and local building codes and the building department's implementing guidance and procedures. The final building plans (construction documents) would be reviewed by the building department for conformance with recommendations in the site-specific, design-level geotechnical investigation(s) to ensure compliance with state and local building code provisions related to structural safety. The building department permit review process to ensure that the project's structural and foundation plans comply with applicable building code provisions and are in conformance with the measures recommended in the project-specific geotechnical reports would result in *less-than-significant* impacts related to strong seismic ground shaking.

Landslides, Liquefaction, Lateral Spreading, and Seismic Settlement

Regional faults generating seismicity have not changed since completion of the PEIR initial study and the risk of surface faulting at the site remains very low; however, the probability of at least one magnitude 6.7 or greater earthquake occurring within the San Francisco Bay Area before 2044 has increased slightly to

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

72 percent. Ground shaking intensity could range from strong to violent during the life of the project, given regional seismicity. Strong shaking during an earthquake could result in ground failure such as that associated with soil liquefaction, lateral spreading, and cyclic densification, all of which were discussed in the PEIR initial study.

While the project site does not include mapped areas of liquefaction potential, a liquefaction triggering analysis was conducted as part of the geotechnical investigation of the project site, assuming the design depth to groundwater of 20 feet bgs. The analysis indicated that earth materials at the site are sufficiently dense to resist liquefaction, and the potential for liquefaction or other associated surface manifestations (such as lateral spreading, settlement, and loss of bearing capacity) is very low.¹²⁴ The dense and very dense silty sand underlying the project site are also not susceptible to cyclic densification.

Conclusion

Project design would incorporate recommendations identified in site-specific geotechnical investigations required in accordance with San Francisco Building Code chapters 16 and 18. The proposed project would not exacerbate the potential for people or structures to be exposed to substantial adverse effects associated with seismic hazards, including fault rupture, seismic ground shaking, liquefaction and seismically induced ground failure, seismically induced lateral spreading, or seismically induced landslides. In addition, the project would not exacerbate existing or future seismic hazards. This impact would be *less than significant*. The project therefore would not result in any new or substantially more severe effects related to seismic hazards than those identified in the PEIR.

Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion. (Less than Significant)

As noted in the PEIR initial study, construction conducted within the plan area could increase the potential for erosion and loss of sediment. PEIR initial study Section 9, Geology/Topography, and Section 10, Water, concluded that impacts related to erosion and loss of top soil during and after construction would be less than significant through the implementation of measures specified in the Stormwater Pollution and Prevention Plan and compliance with erosion control requirements in the building code.

Construction-related activities such as grading, excavation, and soil movement could create the potential for wind- and water-borne erosion. The project sponsor would be required to develop and implement an erosion and sediment control plan for construction activities in accordance with San Francisco Public Works Code article 4.2 and the General Construction Stormwater Permit (discussed in more detail in initial study Section E.17, Hydrology and Water Quality) to reduce the impact of runoff from the construction site. The SFPUC must review and approve the erosion and sediment control plan completed in accordance with article 4.2 prior to implementation, and would conduct periodic inspections throughout construction to ensure compliance with the plan. Once constructed, the project site would be occupied by buildings or covered with pavement or landscaped areas, and runoff would drain to the existing combined sewer system, or infiltrate in landscaped areas or other features designed for

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

stormwater runoff control. The project would be required to comply with state and local building code requirements to address adequate drainage at the site and to comply with the City's Stormwater Management Ordinance for management of post-construction stormwater runoff (discussed in initial study Section E.17, Hydrology and Water Quality). Impacts related to loss of topsoil or erosion would be *less than significant* through compliance with applicable regulations. The project would not result in any new or substantially more severe effects related to soil erosion and loss of topsoil than those identified in the PEIR initial study. No new mitigation measures would be required.

Impact GE-3: The project site would not be located on a geologic unit or soil that is unstable, or that could become unstable, as a result of the proposed project. (Less than Significant)

The PEIR initial study noted that for development projects on or near the Balboa Reservoir site, the building code contains provisions which require that grading on slopes of greater than 2:1 must be done in accordance with the recommendations of a soil engineering report, and that implementation of such recommendations along with compliance with building code requirements would reduce potential impacts associated with excavation on slopes to less-than-significant levels. As discussed in SEIR Chapter 2, Project Description, the project would require removal of the west side berm, and north and east embankments, with the soil redistributed and used as fill to raise the grade of the project site such that once constructed, the ground floor levels of the buildings, pathways, and roadways would match the grades of adjacent areas along each side of the site. Construction of a below-grade garage in the Developer's Proposed Option would require excavation to a depth of up 20 feet. The Additional Housing Option would require excavation to a depth of approximately 5 feet. No deep excavation or pile driving would be required for project construction, and the underlying earth materials are only minimally compressible;¹²⁵ for these reasons, only small amounts of settlement, if any, are anticipated to result from the project. With implementation of the recommendations in the geotechnical report to address foundations and settlement at the site, impacts related to settlement would be less than significant. The project would not result in any new or substantially more severe effects related to settlement or soil stability than those identified in the PEIR initial study.

Impact GE-4: The proposed project would not create substantial risks to life or property as a result of being located on expansive or corrosive soils. (Less than Significant)

While the PEIR initial study identified potential expansive or corrosive soils in the plan area, it concluded that compliance with the building code requirements for addressing impacts related to these soil concerns would reduce these potential impacts to less-than-significant levels. The project has not been modified in ways that alter impacts related to expansive soils. With implementation of the recommendations in the geotechnical report, which note that loose sand and weak clay encountered during excavation should be removed and replaced with compacted fill or lean concrete, the impacts would be *less than significant*. The project would not result in any new or substantially more severe effects related to expansive soils than those identified in the PEIR.

. .

The project site is underlain by dense to very dense silty sand with occasional clay beds (Rockridge Geotechnical, *Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California*, prepared for BRIDGE Housing Corporation, January 22, 2018 [to be updated if new geotech report is made available prior to publication].

Impact GE-5: The proposed project would not substantially change the topography or any unique geologic or physical features of the site. (Less than Significant)

The PEIR initial study did not identify any unique geologic features in the plan area and concluded that implementation of development under the area plan would not substantially alter the topography or change any unique geologic of physical features. The project site is generally flat, with a gentle slope to the southwest. There are no unique geologic or physical features at the site. The project site is bounded on three sides by sloping western, northern, and eastern edges that surround a sunken paved surface at the center. An approximately 30-foot-tall earthen berm is located at the western edge of the property. The asphalt-paved surface is relatively level with a slope of 0 to 5 percent, sloping gently up from west to east. There is an approximately 18- and 30-foot increase in elevation between the project site bottom and the top of the eastern and northern slopes, respectively. The project would alter site topography by removing the west side berm, and north and east embankments, and redistributing the soil as fill to raise the grade of the project site such that once constructed, the ground floor levels of the buildings, pathways, and roadways would match the grades of adjacent areas. The project would not result in any new or substantially more severe effects related to topography and unique geologic features than those previously identified and this impact would be *less than significant*.

Impact GE-6: The proposed project could directly or indirectly destroy a unique paleontological resource or site. (Less than Significant with Mitigation)

The PEIR did not address impacts related to paleontological resources. The preliminary geotechnical investigation indicates that the project site is mapped in a zone of early Pleistocene alluvium (the Colma formation) underlain by Franciscan Complex bedrock.¹²⁷ Pleistocene sediments situated over the Franciscan Complex bedrock have moderate paleontological potential as they have contained fossil remains of mammoth and horse in other parts of San Francisco.¹²⁸ Although the project site is developed, the excavation for the planned below-grade levels for both project options could reach previously undisturbed depths. Although the likelihood is low, given the moderate paleontological potential of the Pleistocene sediments, paleontological resources could exist in the Pleistocene sediments that underlie portions of the project site.

The Developer's Proposed Option (with below grade public parking) would involve approximately 171,000 cubic yards of cut and excavated material (concrete, asphalt, and soil from the berms and embankments and the parking lot). Excavation would go to a maximum depth of approximately 20 feet below grade for the public parking garage. The Additional Housing Option (no below grade public parking) would involve approximately 108,000 cubic yards of cut and excavated material (concrete, asphalt, and soil from the berms and embankments and the parking lot). Excavation would go to a maximum depth of 5 feet below grade.

_

SCS Engineers, Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California, January 27, 2018.

¹²⁷ Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

University of California Museum of Paleontology, Specimen search for San Francisco County, https://ucmpdb.berkeley.edu/, accessed December 2, 2018.

The central portion of the project site was previously excavated up to 15 feet below original grade and the soil was removed from all but the outer edges of the parcel. The excavated materials were redeposited as part of the construction of the berm and embankments. The areas beneath the west side berm, north and east embankments, and part of the southern end of the project site were not excavated and are identified as having potentially intact undisturbed soil in these areas. ¹²⁹ As described in SEIR Chapter 2, Project Description, construction would require removal of the west side berm, and north and east embankments, with the soil redistributed and used as fill to raise the grade of the project site such that once constructed, the ground -floor levels of the buildings, pathways, and roadways would match the grades of adjacent areas along each side of the site. This would occur prior to excavation for the proposed building foundations. Excavation for Blocks C, D, E, F, and G at the center of the site for both project options would go to a depth of approximately 5 feet below grade and would take place within the fill that has been distributed on the side. A small portion of the easternmost excavation area for Blocks C and F would be within previously undisturbed areas under the east embankment, and the lowest 3 to 4 feet of excavation could extend into undisturbed soil in the Colma formation. ¹³⁰

Along the western portion of the project site, Blocks TH-1, TH-2, and H for the Developer's Proposed Option and Blocks TH-1, TH-2, H, I, and J for the Additional Housing Option would be constructed within what is currently the footprint of the west side berm. The northern portion of Block G for both project options would be constructed within the north embankment footprint. After the west side berm and north embankment are removed, excavation for these blocks would go to a depth of approximately 5 feet below grade within previously undisturbed areas.

At the south end of the site, the Developer's Proposed Option would excavate a maximum depth of 20 feet below existing grade, and could disturb previously undisturbed soils at a depth of approximately 18 feet.¹³¹ Therefore, the lowest 2 feet of excavation on Blocks A and B for the Developer's Proposed Option could potentially extend into previously undisturbed soil in the Colma formation.¹³² Excavation for the Additional Housing Options on Blocks A and B would go to a depth of approximately 5 feet, and therefore would not reach undisturbed soil.

Therefore, the proposed construction activities under both project options could disturb significant paleontological resources if such resources are present within the project site. Site disturbance could impair the ability of the project site to yield important scientific information. Implementation of the either proposed project option could impair the significance of unknown paleontological resources on the project site; this would be considered a significant impact under CEQA.

Implementation of Mitigation Measure M-GE-6: Inadvertent Discovery of Paleontological Resources would ensure that the proposed project would not cause a substantial adverse change to the scientific significance of a paleontological resource. This measure would reduce adverse effects on paleontological resources by recovering fossils and associated contextual data prior to and during ground-disturbing

¹²⁹ Archeo-Tec Inc., Archeological Sensitivity Assessment for the Balboa Reservoir Project, City and County of San Francisco. Prepared for the San Francisco Planning Department, December 2018.

Archeo-Tec Inc., Archeological Sensitivity Assessment for the Balboa Reservoir Project, City and County of San Francisco. Prepared for the San Francisco Planning Department, December 2018.

Archeo-Tec Inc., Archeological Sensitivity Assessment for the Balboa Reservoir Project, City and County of San Francisco. Prepared for the San Francisco Planning Department, December 2018.

Archeo-Tec Inc., Archeological Sensitivity Assessment for the Balboa Reservoir Project, City and County of San Francisco. Prepared for the San Francisco Planning Department, December 2018.

activities. Therefore, the potential impact of project construction on paleontological resources would be *less than significant with mitigation*.

Mitigation Measure M-GE-6: Inadvertent Discovery of Paleontological Resources. Before the start of excavation activities, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in on-site construction worker training. The qualified paleontologist shall complete an institutional record and literature search and train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, the proper notification procedures should fossils be encountered, and the laws and regulations protecting paleontological resources. If potential vertebrate fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 25 feet of the find shall stop immediately and the monitor shall notify the Environmental Review Officer. The fossil should be protected by an "exclusion zone" (an area approximately 5 feet around the discovery that is marked with caution tape to prevent damage to the fossil). Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius and the monitoring level of effort based on the nature of the find, site geology, and the activities occurring on the site, and in consultation with the Environmental Review Officer. If treatment and salvage is required, recommendations shall be consistent with Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, and currently accepted scientific practice, and shall be subject to review and approval by the Environmental Review Officer. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection (e.g., the University of California Museum of Paleontology), and may also include preparation of a report for publication describing the finds. Upon receipt of the fossil collection, a signed repository receipt form shall be obtained and provided to the planning department. The project sponsor shall be responsible for the costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The planning department shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.

Cumulative Impacts

Impact C-GE-1: The proposed project, in combination with reasonably foreseeable future projects, would not result in significant cumulative impacts on geology and soils or paleontological resources. (Less than Significant)

The PEIR initial study did not identify significant cumulative impacts related to geology and soils, and impacts on paleontological resources were not evaluated. Geology, soils, and paleontological resources impacts are generally site-specific and localized. Cumulative project number 5 (City College Performing Arts Center) and 6 (East Basin Parking Structure) would be adjacent to the proposed project site; all other projects would not be adjacent to the proposed project. Cumulative projects could require various levels of excavation and grading, which would affect local geologic conditions and may affect paleontological resources. However, the cumulative projects with the exception of the City College projects are also subject

to the same building department requirements for geotechnical review and would be required to comply with the state and local building codes. City College projects would be required to comply with the California Building Code requirements for geotechnical review and building construction. The Department of Building Inspection will review the project-specific geotechnical report during its review of the building permit for the project. The requirement for a geotechnical report and review of the building permit application pursuant to the building code, local implementing procedures, and state laws, regulations and guidelines, and the actions specified above in Mitigation Measure M-GE-6 for paleontological resources would reduce each individual project's impacts associated with geology, seismic safety, and paleontological resources, and that site-specific mitigation would be developed, when necessary, based on site conditions. Similar to the proposed project, all projects listed in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, would be subject to mandatory state or local seismic safety standards and design review procedures. Compliance with these standards and procedures would ensure that the combined effects of the proposed project and nearby cumulative projects would be reduced to less-than-significant levels. Therefore, in combination with cumulative projects, the proposed project would result in a less-than-significant cumulative impact and would not result in any new or substantially more severe effects related to geology and soils than those identified in the PEIR initial study.

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
17.	HYDROLOGY AND WATER QUALITY. Would the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition or impervious surfaces, in a manner which would:				
	(i) Result in substantial erosion or siltation on- or off- site;				\boxtimes
	(ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding onor off-site;				
	(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	(iv) Impede or redirect flood flows?				\boxtimes
d)	In flood hazard or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

Summary of Comments Received in Response to the Notice of Preparation

A commenter expressed concern about impacts to hydrology and water quality including water supply, emergency water supply, groundwater, and stormwater runoff. Another commenter requested the SEIR address the extent to which the project would degrade water quality. The project's impacts on water quality are evaluated in Impacts HY-1 and HY-2, pp. B-101 and B-102. Impact HY-3, p. B-104, discusses the project's impacts on groundwater. Impacts HY-1, HY-2, and HY-4, p. B-106, discuss impacts related to stormwater runoff. Impacts related to water supply are discussed in initial study Section E.13, Utilities and Service Systems.

Summary of Hydrology and Water Quality Impacts in the PEIR

Impacts to hydrology and water quality were evaluated in PEIR initial study Section 10, Water, and PEIR Section IV.G, Hydrology and Water Quality. The PEIR initial study Section 10, Water, described impacts on water quality, groundwater, flooding, and erosion, and determined that implementation of the area plan or specific development projects would not have significant effects on area hydrology or water quality. Findings of PEIR Section IV.G are summarized below.

Changes in Sanitary Sewage Flows

PEIR Section IV.G, Hydrology and Water Quality, found that, while development would result in a localized increase in sanitary sewage generated by new residents and employees, the overall population growth in San Francisco would remain the same as was projected without implementation of the area plan, and the localized increase in dry weather flow associated with implementation of the area plan development proposals would not substantially contribute to an increase in the average volume of combined sewer overflow discharges during wet weather beyond that expected as a result of overall growth in the city.

Changes in Stormwater Runoff

The PEIR concluded that none of the individual development proposals under the area plan would result in an increase in impervious surfaces, and redevelopment could reduce the volume of runoff and quantity of stormwater pollutants entering the combined sewer system by incorporating updated stormwater control measures.

Compliance with the combined sewer overflow Control Policy and Water Pollution Prevention Program, incorporation of unpaved open space into the plan area, and application of new development and redevelopment guidelines would increase infiltration of rainwater, delay peak stormwater runoff flows, and provide reduction of pollutants in stormwater runoff. The PEIR concluded that no significant adverse environmental effects related to stormwater drainage would result from the area plan.

Effects on Flooding

PEIR Section IV.G, Hydrology and Water Quality, found that, based on project characteristics and the water resources in the plan area, the criteria pertaining to the placement of housing in a 100-year flood zone and inundation by seiche, tsunami, or mudflow were not applicable to the plan area.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar extents of ground disturbance and construction characteristics within the project site, and would both drain to the combined sewer system and add new sewer connections. Due to these similarities, the two project options would not result in different impacts related to hydrology and water quality. The two project options are therefore analyzed as one.

Impact Evaluation

Topography of the project site is generally flat, with a gentle slope to the southwest.¹³³ The project site overlies both the Regional San Francisco Bay Westside Groundwater Basin, whose primary aquifer is the Islais formation, and the Islais Valley Groundwater Basin. Recent borings to a depth of 46 feet bgs did not

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

¹³³ SCS Engineers, Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California, January 27, 2018.

encounter groundwater at the project site.¹³⁴ Previous investigations at adjacent and nearby sites to the southeast and west encountered groundwater at depths of over 20 feet bgs (relative to the proposed project location); it is estimated that the seasonally high groundwater elevation at the site is 20 feet bgs.¹³⁵ Groundwater near the site flows predominantly toward the south, with variable flow to the west and southeast.¹³⁶ The *Water Quality Control Plan for the San Francisco Bay Basin* identifies agricultural water supply as an existing beneficial use of both groundwater basins, and municipal/domestic supply, industrial process supply, and industrial service supply as potential beneficial uses of both groundwater basins.¹³⁷

There are no natural surface water bodies or streams in the immediate site vicinity. Lake Merced, located approximately 2.5 miles west, is the nearest water body. The project site is currently served by SFPUC's combined sewer system, which collects both sanitary and stormwater drainage. Balboa Reservoir is within the Lake Merced urban watershed and the Ocean subwatershed. All runoff and sanitary flow from the project site is collected and diverted to the Westside Pump Station for treatment by the Oceanside Treatment Plant, which has a peak secondary treatment capacity of 43 million gallons per day. Treated effluent from the Oceanside Plant is discharged to the Pacific Ocean at the Southwest Ocean Outfall. During wet weather periods of high influent flow, up to 73.5 million gallons of combined flow capacity is available in three large storage/transport structures called the "Westside Wet Weather Facilities." Combined wastewater flows greater than 175 million gallons per day receive wet weather primary treatment in the storage/transport structures and are discharged at seven near-shore combined sewer overflow discharge structures. There are no known sewer connections at the project site. 140

The project site is not located in an area identified as subject to potential inundation in the event of a tsunami or a dam or levee failure as shown on Map 6 of the Community Safety Element of the San Francisco General Plan.¹⁴¹ The project site is approximately 2.8 miles east of the Pacific Ocean at an elevation of 282 feet above sea level, and would therefore be distant enough and at an elevation that

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 to-be updated if new geotech report is made available prior to publication.

Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

SCS Engineers, Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California, January 27, 2018.

Regional Water Quality Control Board, San Francisco Bay Region, Table 2-2 in Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin, adopted May 4, 2017. Listings for Groundwater Basins Islais Valley B and Westside B.

Regional Water Quality Control Board, San Francisco Bay Region, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037681, Order No. R2-2009-0062, for City and County of San Francisco Oceanside Water Pollution Control Plan (Southwest Ocean Outfall) and Collection System, including the Westside Wet Weather Facilities, adopted August 12, 2009. (Oceanside NPDES Permit)

Regional Water Quality Control Board, San Francisco Bay Region, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0037681, Order No. R2-2009-0062, for City and County of San Francisco Oceanside Water Pollution Control Plan (Southwest Ocean Outfall) and Collection System, including the Westside Wet Weather Facilities, adopted August 12, 2009.

SCS Engineers, Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California, January 27, 2018.

¹⁴¹ City and County of San Francisco, San Francisco General Plan, Community Safety, an Element of the General Plan of the City and County of San Francisco, October 2012.

would not be subject to inundation by seiche.¹⁴² A portion of the project site is within a 100-year flood hazard area identified by the SFPUC.¹⁴³ The flood map shows parcels that are highly likely to experience "deep and contiguous" flooding, meaning flooding that is at least 6-inches deep and spanning an area at least the size of half an average City block, during the 100-year storm. A 100-year storm means a storm with a 1 percent chance of occurring in a given year. The project would develop an existing, unused reservoir, which was intended for potable water storage (not flood control).¹⁴⁴

Impact HY-1: Construction of the proposed project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. (Less than Significant)

Without proper controls, grading and earthmoving for construction of utilities and infrastructure and construction of new facilities would expose soil during construction and could result in erosion and excess sediment carried in stormwater runoff. Stormwater runoff from temporary on-site use and storage of vehicles, fuels, wastes, and building materials during construction could also carry pollutants if these materials were improperly handled or stored.

However, the federal Clean Water Act effectively prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The PEIR initial study did not evaluate construction water quality impacts, indicating that erosional effects during construction would be addressed through City permitting requirements. During construction, stormwater from the project site would drain to the City's combined sewer system. Construction and demolition activities at the project site would be subject to the Construction Site Runoff requirements of San Francisco Public Works Code article 4.2, section 146. Proposed construction activities that are covered under this regulation include site grading and excavation for construction of utilities, roadways, other infrastructure, and buildings.

Pursuant to this regulation, the project sponsor or its contractor must obtain a Construction Site Runoff Control Permit. This permit is required for any project that includes any land-disturbing activities such as building demolition, clearing, grading, grubbing, filling, stockpiling, excavating, and transporting soil. The permit application must include a site-specific erosion and sediment control plan that provides a vicinity map showing the location of the site in relationship to the surrounding area's water courses, water bodies, and other significant geographic features; a site survey; suitable contours for the existing and proposed topography, area drainage, proposed construction and sequencing, and drainage channels; proposed erosion and sediment controls; dewatering controls where applicable; soil stabilization measures where applicable; maintenance controls; sampling, monitoring, and reporting schedules; and any other information deemed necessary by the SFPUC as the administering agency. The requirements also specify that the contractor must provide adequate dust controls in conformance with applicable air pollution laws and regulations (including San Francisco Health Code article 22B). Improvements to any existing grading, ground surface, or site drainage must also meet the requirements of article 4.2 for new grading, drainage, and erosion control.

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV
April 2019

California Emergency Management Agency, CGS, and USC, Tsunami Inundation Map for Emergency Planning, San Francisco North Quadrangle, June 15, 2009; City and County of San Francisco, Emergency Response Plan, Tsunami Response Annex, Attachment B, September 2008.

SFPUC, 100-Year Storm Flood Risk map, available online at https://sfgov.maps.arcgis.com/apps/webappviewer/index.html?id=eb10e6e5e05e4bce983be68cf81e5e5a, accessed April 19, 2019.

¹⁴⁴ AECOM, 2014, Balboa Reservoir Study Task 1: Planning Context, December 19, 2014.

While no groundwater was encountered in geotechnical investigations conducted at the project site, if excavation of the parking area occurs when groundwater is elevated to the design high groundwater level of 20 feet bgs, temporary groundwater dewatering during excavation may be required. If discharged to the combined sewer system, groundwater discharges would be subject to Public Works Code article 4.1, as supplemented by Public Works Order No. 158170, which regulates the quantity and quality of discharges to the combined sewer system. In accordance with article 4.1 and Public Works Order No. 158170, the discharger would be required to obtain a permit for the discharges and the permit would contain appropriate discharge standards. The permit may also require installation of meters to measure the volume of the discharge.

During construction, the project sponsor or its contractors could store hazardous materials and fuels at the project site. The erosion and sediment control plan for construction activities would include the appropriate best management practices to prevent stormwater contact with these materials and limit the potential for a release of hazardous materials that could affect surface or groundwater quality.

Implementation of the regulatory requirements relating to stormwater and groundwater discharges to the combined sewer system described above would ensure that the water quality effects of construction-related stormwater runoff and dewatered groundwater would not result in new or substantially more severe significant effects related to construction-phase water quality than those identified in the PEIR. Impacts on water quality would be *less than significant*.

Impact HY-2: Operation of the proposed project would not violate a water quality standard or waste discharge requirement or otherwise substantially degrade surface or groundwater quality, and runoff from the proposed project would not provide a substantial source of stormwater pollutants. (Less than Significant)

Water Quality Effects of Discharges to the Combined Sewer System

The proposed project is located in the western basin of the City's combined sewer system, within the Lake Merced watershed. During operations, stormwater and wastewater would be discharged from the project site to the City's combined sewer system. These discharges would not violate water quality standards or otherwise degrade water quality because all discharges would be in accordance with City regulatory requirements that have been developed to ensure compliance with the Oceanside NPDES permit.

Stormwater. The PEIR acknowledged in Section IV.G, Hydrology and Water Quality, that the SFPUC was developing new policies to encourage stormwater runoff management in a manner that minimizes effects on combined sewer overflows and reduces pollutant loads in stormwater runoff. The PEIR concluded that none of the individual development proposals under the area plan would result in an increase in impervious surfaces, and redevelopment could reduce the volume of runoff and quantity of stormwater pollutants entering the combined sewer system by incorporating updated stormwater control measures. Since certification of the PEIR in 2008, the City adopted Public Works Code article 4.2, section 147, and published associated stormwater design guidelines in 2010. Any San Francisco development that creates or replaces more than 5,000 square feet of impervious surface, and is located on a property that is connected or proposing to connect to the combined sewer system must implement post-construction stormwater controls in accordance with San Francisco Public Works Code article 4.2, section 147, and must comply with the SFPUC's stormwater management requirements and design guidelines. The proposed project would include a stormwater management system that would comply with the City's

Stormwater Management Ordinance. The system would be designed with low-impact design concepts and stormwater management systems, designed to retain and reuse some of the stormwater captured on site. As required, proposed streets would also incorporate bio-filtration via bioswales in bulbouts or pervious surfaces where feasible.

Wastewater. The project could result in long-term changes in the volume of discharges to the City's combined sewer system in this sub-basins due to new residents, employees, and visitors who would increase the amount of wastewater generation. PEIR Section IV.G, Hydrology and Water Quality, found that, while development would result in a localized increase in sanitary sewage generated by new residents and employees, the overall population growth in San Francisco would remain the same as was projected without implementation of the area plan, and the localized increase in dry weather flow associated with implementation of the area plan development proposals would not substantially contribute to an increase in the average volume of combined sewer overflow discharges during wet weather beyond that expected as a result of overall growth in the City. The project would include construction of wastewater collection lines throughout the site. These wastewater pipelines would connect to the existing combined sewer system in Ocean Avenue and Frida Kahlo Way. The wastewater from the site would be collected and conveyed to the Westside Pump Station for treatment at the Oceanside Treatment Plant. Discharges of non-sewage wastewater from the proposed project would be subject to the permit requirements of San Francisco Public Works Code article 4.1 as supplemented by Public Works Order No. 158170. Accordingly, future commercial users of the site would be required to develop and implement a pollution prevention program and comply with the pretreatment standards and discharge limitations specified in article 4.1. These dischargers would also be required to monitor the discharge quality for compliance with permit limitations.

All wastewater discharges to the combined sewer system would be treated at the Oceanside Treatment Plant and wet-weather facilities in compliance with the Oceanside NPDES permit. The Oceanside NPDES permit limitations in part inform the determination by the wastewater treatment provider as to whether the existing collection system has adequate capacity to serve the project's projected demand; refer to initial study Section E.13, Utilities and Service Systems, for a discussion of impacts related to wastewater treatment capacity. As described there, the project would generate at maximum an estimated wastewater treatment demand of 0.06 mgd. During wet weather, combined sewer system flows in excess of the combined 138 mgd capacity of the Oceanside Plant and Westside Wet Weather Facilities are discharged through combined sewer discharge structures. The Westside Wet Weather Facilities discharge directly to the Pacific Ocean via seven combined sewer discharge structures. All of these discharge facilities are designed to result in a long-term average of no more than eight overflow events per year. The excess flows receive "flow-through treatment" in the City's storage and transport boxes to remove settleable solids and floatable materials. Project-related wastewater discharges to the combined sewer system would not cause a violation of water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Because stormwater and wastewater discharges from the project would not result in an increase in the frequency of combined sewer discharges, the project's impacts related to changes in combined sewer discharges would be *less than significant*.

Water Quality Effects Related to Exceeding the Capacity of the Stormwater System

The PEIR concluded that none of the individual development proposals under the area plan would result in an increase in impervious surfaces, and redevelopment could reduce the volume of runoff and quantity of stormwater pollutants entering the combined sewer system by incorporating updated stormwater control measures.

Since certification of the PEIR in 2008, the City adopted the Stormwater Management Ordinance in 2010. The Stormwater Management Ordinance was amended in 2016. In compliance with the ordinance, the proposed project must reduce the existing volume and rate of stormwater runoff discharged from the project site. Projects with existing imperviousness of greater than 50 percent must reduce the stormwater runoff rate and volume by 25 percent relative to pre-development conditions for the two-year, 24-hour design storm. Therefore, water quality effects related to exceeding the capacity of the stormwater system would be *less than significant*.

Impact Summary

Impact HY-2 discusses the water quality impacts associated with operation of the proposed project, including the water quality effects of stormwater and wastewater discharges, additional sources of polluted runoff, and the potential to exceed the capacity of the storm drain system. These impacts would be *less than significant* through compliance with legal requirements as implemented through numerous permits. These legal requirements include San Francisco Public Works Code article 4.2, section 147; the Stormwater Management Requirements and Design Guidelines; and San Francisco Public Works Code article 4.1 as supplemented by Public Works Order No. 158170. Operation and maintenance of the project would not result in any new or substantially more severe effects related to water quality than those identified in the PEIR.

Impact HY-3: The proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Less than Significant)

The project site overlies the Regional San Francisco Bay Westside Groundwater Basin and the Islais Valley Groundwater Basin. The depth to groundwater at the project site is estimated to be at least 20 feet below current ground surface. Groundwater flows predominantly toward the south, with variable flow to the west and southeast. The site currently drains to the combined sewer system.

_

All projects after May 2016 use the Stormwater Management Requirements and Design Guidelines to comply with City stormwater control requirements (San Francisco Public Utilities Commission, Archived 2010 – Stormwater Design Guidelines, available online at https://sfwater.org/index.aspx?page=446 accessed November 30, 2018).

San Francisco Public Utilities Commission, San Francisco Stormwater Management Requirements and Design Guidelines, Chapter 5. Combined Sewer Area Performance Requirements, May 2016.

¹⁴⁷ Rockridge Geotechnical, Draft Preliminary Geotechnical Investigation Proposed Residential Development at Balboa Reservoir Phelan and Ocean Avenues, San Francisco, California, prepared for BRIDGE Housing Corporation, January 22, 2018 [to-be updated if new geotech report is made available prior to publication].

SCS Engineers, Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California, January 27, 2018.

The California Sustainable Groundwater Management Act¹⁴⁹ defines sustainable groundwater management as the "management and use of groundwater in a manner that be maintained during the planning and implementation horizon without causing undesirable results." "Undesirable Results" are defined in SGMA and may be summarized as any of the following effects caused by groundwater conditions occurring throughout the basin:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality;
- Significant and unreasonable land subsidence; and/or
- Surface water depletions that have significant and unreasonable adverse impacts on the beneficial uses of surface water.

While no groundwater was encountered in geotechnical investigations conducted at the project site, if excavation of the below-grade parking area occurs when groundwater is elevated to the design high groundwater level of 20 feet bgs, temporary groundwater dewatering may be required and conducted as described in Impact HY-1, p. B-101. The period of temporary dewatering would occur for a maximum of one month during excavation, which would not result in chronic lowering of groundwater levels or an unreasonable depletion of groundwater supply.

The PEIR initial study Section 10, Water, noted that construction of new buildings would not substantially change the amount of impervious surface coverage in the plan area, and concluded that there would be no change in the rate of infiltration that could interfere with groundwater recharge. The project would replace the existing impervious area with new pervious and impervious area, and would be required to incorporate low-impact design measures for stormwater management, in accordance with the Stormwater Management Requirements; pursuant to these requirements, the low-impact design measures included in the project design would reduce the stormwater runoff rate and volume by 25 percent relative to pre-development conditions for the two-year, 24-hour design storm. These measures would encourage stormwater infiltration at the project site, thus improving groundwater recharge relative to existing conditions. The impact of the project on groundwater levels and recharge would be *less than significant*, and would not result in new or substantially more severe effects related to groundwater supplies and recharge than those discussed in the PEIR.

-

¹⁴⁹ California Water Code Division 6, Part 2.74, Sections 10720-10737.8.

SFPUC, San Francisco Stormwater Management Requirements and Design Guidelines, Chapter 5. Combined Sewer Area Performance Requirements, May 2016.

Impact HY-4: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion, siltation, or flooding on or off site, and would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or impede or redirect flood flows. (Less than Significant)

Stormwater runoff from the project site currently drains to the city's combined sewer system. The project site does not include any existing streams or water courses that could be altered or diverted. Therefore, the proposed project would have no impact related to alteration of drainage patterns by altering the course of a stream in a manner that would cause erosion, flooding, or siltation on or offsite. The PEIR did not specifically address impacts resulting from altering the course of a stream or river.

Since certification of the PEIR, the northwestern portion of the project site has been mapped by SFPUC as part of the 100-year flood hazard area. This is an area which, under existing conditions, flooding that is at least 6 inches deep may occur during a 100-year storm. PEIR initial study Section 10, Water, concluded that, since implementation of the area plan would not substantially change the amount of impervious surface in the plan area, there would be no change in the rate of runoff that could cause flooding. As noted previously, in 2010, subsequent to 2008 PEIR certification, the city adopted Public Works Code article 4.2, section 147, and published associated stormwater design guidelines. Under the proposed project, stormwater would continue to be routed to the City's combined sewer system. San Francisco Public Works Code article 4.2, section 147, and the Stormwater Management Requirements and Design Guidelines require that the stormwater controls for individual development projects reduce or maintain existing stormwater runoff flow rates and volumes.

The project would construct new combined sewer lines to collect storm water and waste water from the project site. The City implements a review process to avoid flooding and conveyance capacity problems associated with new developments.¹⁵¹ Building permit applications for new construction in flood-prone areas must be reviewed by the SFPUC to determine whether the project would result in ground-level flooding during storms. The combined sewer connection permits for such projects also need to be reviewed and approved. The permit applicant must comply with all requirements, which may include provision of a pump station for the sewage flow, raised elevation of entryways, special sidewalk construction, and deep gutters.

Furthermore, as discussed in Impact HY-2, the project would include combined sewer system components that would comply with the City's Stormwater Management Ordinance. The proposed combined sewer system would collect and convey stormwater runoff from the site to the existing combined sewer system in Ocean Avenue. The proposed combined sewer facilities would be designed and sized to convey runoff from the 5-year storm event, and the new public streets would be designed to convey the 100-year flood within the curb lines to an overland release point to Ocean Avenue. The system would be designed with low-impact design concepts and stormwater management systems to retain and reuse some of the stormwater captured on site. As required, proposed streets would also incorporate bio-filtration via bioswales in bulbouts or pervious surfaces where feasible.

¹⁵¹ San Francisco Administration Code section 2A.280 – 2A.285.

Compliance with these design requirements, subject to approval by Public Works, would ensure that no on- or off-site flooding, erosion, or siltation would occur, and that the new combined sewer system capacity would be sufficient to accommodate runoff from the project site.

Therefore, the proposed project would not result in substantial erosion or flooding associated with changes in drainage patterns, would not create runoff water which would exceed the capacity of existing or planned stormwater drainage systems, and would not impede or substantially redirect flood flows compared with existing conditions. The impact of the proposed project related to potential erosion, drainage system capacity, or flooding would be *less than significant* through compliance with the City's regulatory requirements. The project would not result in any new or substantially more severe effects related to erosion, siltation, drainage system capacity, or flooding than those identified in the PEIR initial study.

Impact HY-5: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)

As discussed in Section C, Compatibility with Existing Zoning and Plans, the project is not obviously inconsistent with the Regional Water Quality Control Board's *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan). Impacts HY-1 and HY-2, pp. B-101 and B-102, describe how the project would comply with existing regulations designed to be protective of the beneficial uses and water quality objectives identified in the Basin Plan.

In 2015 the SFPUC submitted a notice of intent to become the exclusive groundwater sustainability agency for groundwater basins within the city limits of San Francisco, including the northern portion of the Westside Groundwater Basin and the majority of the Islais Valley Groundwater Basin. The SFPUC intends to prepare a groundwater sustainability plan for San Francisco groundwater basins but has not yet adopted such a plan. As discussed in Impact HY-3, p. B-104, the project would not result in chronic lowering of groundwater levels, an unreasonable depletion of groundwater supply, or adverse changes in groundwater recharge. Impacts would be *less than significant*.

Cumulative Impacts

Impact C-HY-1: The proposed project, in combination with reasonably foreseeable future projects in the site vicinity, would not result in a considerable contribution to cumulative impacts on hydrology and water quality. (Less than Significant)

The PEIR did not identify significant cumulative impacts related to hydrology and water quality. As discussed above, the proposed project would not result in any significant impacts with respect to hydrology and water quality during construction or operation with implementation of and compliance with applicable regulatory requirements for hydrology and water quality. The project's less-than-significant impacts on hydrology and water quality include the release of stormwater pollutants during

San Francisco Public Utilities Commission, Letter to Mark Nordberg, GSA Project Manager, Re: Notice of Intent to Become a Groundwater Sustainability Agency (GSA) and to Prepare a Groundwater Sustainability Plan for the North Westside Basin, April 8, 2015.

construction activities, temporary dewatering of groundwater, and the addition of wastewater and stormwater to the combined sewer system.

Water quality impacts are related to changes in wastewater and stormwater flows to the Lake Merced Drainage Basin of the City's combined sewer system. Therefore, the geographic scope of potential cumulative impacts on water quality encompasses the Lake Merced Drainage Basin of the combined sewer system where the project is located and the Pacific Ocean where the Oceanside Treatment Plant effluent is discharged. As discussed above, compliance with applicable regulatory requirements designed to reduce the cumulative effects of development on water quality would ensure that the project would not result in any significant water quality impacts as a result of construction-related discharges and operational stormwater discharges.

The projects listed in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, all could result in temporary groundwater dewatering from the same groundwater basins as the proposed project. Dewatering associated with the construction of all cumulative projects in the cumulative scenario, if needed, would occur only during construction and therefore would not result in chronic lowering of groundwater levels or an unreasonable depletion of groundwater supply.

The projects listed in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, all would likely drain to the Lake Merced Drainage Basin of the City's combined sewer system and could result in drainage system capacity or flooding impacts. As discussed above, compliance with applicable regulatory requirements designed to reduce the cumulative effects of development on drainage system capacity and flooding would ensure that the project would not result in any significant drainage system capacity or flooding impacts as a result of impervious area installed at the project site.

All cumulative development in San Francisco would be subject to the same regulatory framework as described for the project for these impacts,¹⁵³ and compliance with existing regulations would serve to ensure that any cumulative impacts on hydrology and water quality as a result of the cumulative projects in combination with the proposed project would be *less than significant*.

_

Local regulations are applicable to City College pursuant to California Government Code section 53097: "the governing board of a school district shall comply with any city or county ordinance (1) regulating drainage improvements and conditions, (2) regulating road improvements and conditions, or (3) requiring the review and approval of grading plans as these ordinance provisions relate to the design and construction of onsite improvements which affect drainage, road conditions, or grading, and shall give consideration to the specific requirements and conditions of city or county ordinances relating to the design and construction of offsite improvements."

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
18.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5, and would not be located within an airport land use plan or within two miles of a public or public use airport.¹⁵⁴The project site does not include and is not adjacent to areas at risk of wildland fire and therefore would not alter exposure to wildland fires. The project would not result in safety hazards related to these topics, and therefore criteria E.17(d), E.17(e), and E.17(g) are not applicable to the proposed project.

Summary of Comments Received in Response to the Notice of Preparation

One comment received during the scoping period requested that the EIR consider herbicide use and its effect on groundwater. The use and regulation of hazardous materials is addressed under Impact HZ-1.

¹⁵⁴ The nearest airport, San Francisco International Airport, is located over six miles from the project site.

Summary of Hazards and Hazardous Materials Impacts in the PEIR

Impacts related to hazards and hazardous materials were evaluated in the PEIR initial study Section 12, Hazards. The PEIR initial study described historic and existing uses of hazardous materials, hazardous building materials, and naturally occurring asbestos in rock and soil. The PEIR initial study summarized permitted users of hazardous materials, including City College, Muni, and other facilities known to have had leaking underground storage tanks. The PEIR initial study described plan impacts related to creating a public health hazard; the use, production, or disposal of hazardous materials; interference with emergency response or evacuation plans; and creating fire hazards. Potential sources of hazards included potential exposure to hazardous building materials during demolition and the release of naturally occurring asbestos during earthwork. The PEIR initial study discussed the procedures by which the potential for hazardous materials to be present in the soil and groundwater at the site would be evaluated and managed in compliance with existing laws and regulations. With regard to emergency response plans and fire hazards, the PEIR initial study determined that impacts associated with emergency access would be less than significant through compliance with the building and fire codes and review by the fire department and department of building inspection.

The PEIR identified four mitigation measures related to hazardous materials and hazards. Mitigation Measure HM-1 requires the preparation of a phase 1 environmental site assessment and, if indicated by the phase 1 investigation, follow-up investigations and remediation in conformance with state and local laws, regulations and guidelines. Mitigation Measure HM-2 requires the proper removal and disposal of hazardous building materials (e.g., polychlorinated biphenyls [PCBs], di(2-ethylhexyl) phthalate [DEHP], fluorescent light ballasts) in accordance with applicable regulations prior to renovation or demolition. Mitigation Measure HM-3 requires evaluation for the potential presence of naturally occurring asbestos for future development that includes excavation. Mitigation Measure HM-4 was applicable only to the Kragen Auto Parts Site development project and not the Balboa Reservoir site. The PEIR initial study concluded that with implementation of Mitigation Measures HM-1 through HM-4 impacts related to hazards and hazardous materials would be less than significant.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar extents of ground disturbance and construction characteristics within the project site, and would include the same land use types. Due to the similar ground disturbance areas, construction characteristics, and land use types, the two project options would not result in different impacts related to hazards and hazardous materials. The two project options are therefore analyzed as one.

Impact Evaluation

Impact HZ-1: Construction and operation of the proposed project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials. (Less than Significant)

Construction

During construction of the proposed project, diesel fuel and hazardous materials such as paints, fuels, solvents, and adhesives would be used. An inadvertent release of large quantities of these materials into the environment could adversely affect soil and water quality. During construction, stormwater from the project site would drain to the City's combined sewer system. Demolition, excavation, and construction activities at the project site would be subject to the construction site runoff requirements of San Francisco Public Works Code article 4.2, section 146. In accordance with this regulatory requirement, the project sponsor would be required to prepare and implement an erosion and sediment control plan to minimize construction-related water quality impacts. As described in greater detail in Impact HY-1, p. B-101, the erosion and sediment control plan for construction activities would include the appropriate best management practices to prevent stormwater contact with these materials and limit the potential for a release of hazardous materials that could affect water quality.

Further, the vendors and contractors responsible for delivery of hazardous materials would be required to comply with the regulations of the California Highway Patrol and the California Department of Transportation related to the transportation of hazardous materials during construction.

With implementation of these regulatory requirements, including any applicable future updates, impacts related to the routine use, transport, and disposal of hazardous materials during construction would be *less than significant*, and would not result in any new or substantially more severe effects related to use, transport, and disposal of hazardous materials than those identified in the PEIR.

Operation

The proposed project's residential, retail, and childcare/community facilities would require the use of hazardous materials that are typical of such uses. Relatively small quantities of hazardous materials, such as cleaners, disinfectants, and chemicals for landscaping maintenance such as herbicides, would be used for routine purposes. These commercial products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. Most of these materials are consumed through use, resulting in relatively little hazardous waste. In addition, programs are in place in San Francisco to provide opportunities for residents to dispose of household hazardous waste. The businesses associated with the proposed retail use and childcare facility would also be subject to San Francisco Health Code articles 21 and 22, implemented by the San Francisco Department of Public Health. Under Health Code articles 21 and 22, businesses are required to ensure employee safety by identifying hazardous materials in the workplace, providing safety information to workers who handle hazardous materials, and adequately training workers. For these reasons, hazardous materials used during project operation would not pose any substantial public health or safety hazards resulting from hazardous materials. In addition, transportation of hazardous materials would be regulated by the California Highway Patrol and the California Department of Transportation.

With implementation of these regulatory requirements, including any applicable future updates, impacts related to the routine use, transport, and disposal of hazardous materials during operation would be *less than significant*, and would not result in any new or substantially more severe effects related to use, transport, and disposal of hazardous materials than those identified in the PEIR initial study.

Impact HZ-2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant)

Soil Contamination

Since certification of the PEIR in 2008, San Francisco Health Code article 22A, commonly referred to as the Maher Ordinance, was subsequently revised in 2013 and expanded to include properties throughout the City where there is potential to encounter hazardous materials, primarily industrial zoning districts, sites with industrial uses or underground storage tanks, sites with historic bay fill, and sites in close proximity to freeways or underground storage tanks. ¹⁵⁵ The over-arching goal of the Maher Ordinance is to protect public health and safety by requiring appropriate handling, treatment, disposal and when necessary, remediation of contaminated soils that are encountered in the building construction process.

The project site is located within an area now covered by Health Code article 22A and would involve approximately 171,000 cubic yards of soil disturbance and excavation up to 20 feet. Therefore, the project is subject to the Maher Ordinance, which is administered and overseen by the San Francisco Department of Public Health (the health department), and compliance with Health Code article 22A supersedes PEIR Mitigation Measure HM-1 related to contaminated soils and groundwater. The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare a phase I environmental site assessment.

The purpose of the assessment is to determine the potential for site contamination and level of exposure risk associated with the project. Based on that information, the project sponsor may be required to conduct soil and/or groundwater sampling and analysis. Where such analysis reveals the presence of hazardous substances in excess of state or federal standards, the project sponsor would be required to submit a site mitigation plan (SMP) to the health department or other appropriate state or federal agency(ies), and to remediate any site contamination in accordance with an approved SMP prior to the issuance of any building permit.

In accordance with the Maher Ordinance, the project sponsor enrolled in the Maher program and submitted a phase I environmental site assessment for the project site.¹⁵⁶

The phase I environmental site assessment states that while multiple underground storage tanks are known to be present or have been present historically within 0.25 mile of the project site, none of these facilities were located on site.¹⁵⁷ The historic underground storage tank sites are located generally along the southern or southeastern sides of the project site; as noted above, shallow groundwater generally is

Balboa Reservoir Project Draft SEIR
Case No. 2018-007883ENV

April 2019

¹⁵⁵ City and County of San Francisco, Ordinance No. 155-13, passed July 16, 2013.

¹⁵⁶ The project sponsor submitted the Maher Application to the San Francisco Department of Public Health in accordance with San Francisco Health Code article 22A on September 17, 2018.

SCS Engineers, *Draft Phase 1 Environmental Site Assessment Balboa Reservoir, 11 Phelan Street San Francisco, California,*January 27, 2018. Unless otherwise noted, information in subsequent paragraphs of Impact HZ-2 is from this document.

inferred to flow away from the project site in these areas. For this reason, the likelihood of release of hazardous materials/waste or petroleum that may be present in soil or groundwater is low. Since adoption of the PEIR, no land uses presenting obvious indications of the use, storage, or generation of hazardous materials/wastes or petroleum products have occurred at the site.

However, eight historic dry cleaning facilities are located in the immediate site vicinity. There are no records of spills or releases associated with the former dry cleaners and each location is considered to be hydraulically downgradient from the project site; however, if releases of these chemicals occurred without recordation, project operation could result in vapor intrusion within the project buildings. The site assessment indicated that a release of hazardous materials could have affected soil or groundwater quality at the site, and recommended follow-up investigations be conducted in conformance with state and local laws, regulations, and guidelines.¹⁵⁸ A phase II environmental site assessment to obtain sitespecific soil information was conducted on August 17, 2018 and submitted to the San Francisco Department of Public Health, which did not identify the presence of significant residual chemicals in site soil vapor. 159 Arsenic was detected in all soil samples at levels within the range considered to represent background conditions for alluvial soils in the San Francisco Bay Area, and hexavalent chromium was detected in three soil samples at concentrations slightly above residential land use environmental screening limits.¹⁶⁰ Pursuant to Health Code article 22A, a Site Mitigation Plan was prepared that describes practices and procedures to reduce potential environmental or health and safety risks to construction workers, the public, and the environment due to the presence of generally low levels of contaminated materials in site soils, in compliance with state and federal standards. 161 The Site Mitigation Plan also contains contingency plans to be implemented during soil excavation if unanticipated hazardous materials are encountered. The San Francisco Department of Public Health found the Site Mitigation Plan to be in compliance with Health Code Sections 22A and 22B.¹⁶² With implementation of the Site Mitigation Plan, the project's effects related to the release of hazardous materials in soil or groundwater would be less than significant and would not result in any new or substantially more severe effects related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials than those identified in the PEIR initial study.

Hazardous Building Materials

PEIR initial study Section 12, Hazards, noted that hazardous building materials may be present in structures to be demolished as part of area plan development, particularly asbestos-containing materials, lead-based paint, and PCBs. The PEIR initial study described the state requirements controlling the release of asbestos containing building materials and the City's requirements controlling the release of lead from demolition of structures coated in lead-based paint, and concluded that the area plan would not result in significant environmental impacts due to release of hazardous building materials given these

San Francisco Department of Public Health, Letter regarding Phase II Work Plan Request Balboa Reservoir (11 Phelan Avenue/11 Frida Kahlo Way, SF) EHB-SAM No. SMED: 1766, January 14, 2019.

SCS Engineers, Summary Report, Limited Phase II Site Investigation, Balboa Reservoir, 11 Phelan Avenue, San Francisco, California (APN – 22-3180-005-001), for Reservoir Community Partners, LLC, March 27, 2019.

¹⁶⁰ Ibid.

SCS Engineers, Site Mitigation Plan, Reservoir Community Partners, LLC, 600 California Street, Suite 900, San Francisco, California 94108, March 2019.

San Francisco Department of Public Health, Environmental Health, SFHC Article 22A Compliance Balboa Reservoir (11 Phelan Avenue/11 Frida Kahlo Way, SF) EHB-SAM No. SMED: 1766, April 17, 2019.

requirements. As described previously, a phase I environmental site assessment was completed for the proposed project. The site assessment concluded that because there are no permanent structures on the site, there is very low likelihood to encounter asbestos-containing building material or lead based paint at the site. Because there are no hazardous building materials at the site, PEIR Mitigation Measure HM-2 is not applicable and the project would not result in exposure of workers or the public to hazardous building materials and the impact would be *less than significant*.

Serpentinite (Naturally Occurring Asbestos)

PEIR initial study Section 12, Hazards, noted that outcrops of the rock serpentinite, which is known to contain naturally occurring asbestos minerals, are present south of the City College area, and that fill used in the plan area may have been derived from serpentinite. As described in Impact GE-1, the project sponsor conducted a site-specific geotechnical investigation, which found that the site is underlain by at least 46 feet of the Colma Formation (silty sand with clay interbeds). The existing embankments, which may be used as fill for the proposed project, are also sand, which was likely excavated onsite and reworked. The maximum depth of disturbance that would occur by the project options is approximately 20 feet, which would be within the Colma Formation and is very unlikely to disturb the deeper Franciscan formation.

Although not anticipated, should naturally occurring asbestos be present in fill materials at the project site, the public would also be protected against exposure to naturally occurring asbestos in airborne dust because the contractor would be required to implement the requirements of San Francisco Health Code article 22B, San Francisco's Dust Control Ordinance. In accordance with the Dust Control Ordinance, the construction contractor(s) would submit a Dust Control Plan for approval by the health department for construction activities at the project site. The plan would describe dust suppression activities to prevent dust from becoming airborne, dust monitoring requirements, action levels that would require implementation of corrective actions, and corrective actions that would be implemented if action levels are exceeded or a dust complaint is received. Compliance with the Dust Control Ordinance supersedes PEIR Mitigation Measure HM-3 related to exposure to naturally occurring asbestos in airborne dust. The requirements of article 22B are discussed in more detail in SEIR Section 3.D, Air Quality.

Therefore, naturally occurring asbestos would not be expected to be released during project construction or operation. The project would have a *less-than-significant* impact related to release of naturally occurring asbestos.

Impact HZ-3: The proposed project would not handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)

CEQA Guidelines section 15186 requires that the environmental document for projects that are located within one-quarter mile of a school address the use of extremely hazardous materials and hazardous air emissions. Certain consultation and notification requirements apply if either of these activities would result in a health or safety hazard to persons who would attend or work at a school. The project would be located within one-quarter mile of Archbishop Riordan High School, located at 175 Frida Kahlo Way, Seventh Day Adventist Elementary School located at 66 Geneva Avenue, and Lick Wilmerding High School at 755 Ocean Avenue. In addition to these schools, the proposed project would include an on-site

childcare facility in Block B (constructed during Phase 2). Operation of the childcare facility therefore would not coincide with project construction activity.

The State of California defines extremely hazardous materials and other regulated substances in Health and Safety Code section 25532(i). Construction of the proposed project would only use common hazardous materials: paints, solvents, cements, adhesives, and petroleum products (such as asphalt, oil, and fuel). None of these materials is considered extremely hazardous under the state's definition. Further, extremely hazardous materials would not be used during operation of the project. Impacts HZ-1 and HZ-2 above describe the regulatory requirements which would ensure that hazardous materials are handled and transported safely. Therefore, there is no impact related to the use of these materials within one-quarter mile of a school during either construction or operation of the proposed project.

Therefore, for the purposes of this hazardous materials analysis, impacts related to the use of extremely hazardous materials within one-quarter mile of a school would be *less than significant*. The project would not result in any new or substantially more severe effects related to handling or use of hazardous materials or waste near schools than those identified in the PEIR. Impacts related to construction emissions are discussed in SEIR Section 3.D, Air Quality.

Impact HZ-4: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and would not expose people or structures to a significant risk of loss, injury, or death involving fires. (Less than Significant)

The proposed project would extend Lee Avenue along the eastern side of the project site, which would connect to the internal street network. The project is an infill development and would not alter or impede access to existing roads in the area. Emergency vehicles would have access to the project site via Lee Avenue, and North, South, and West streets.

San Francisco ensures fire safety primarily through provisions of the building code and fire code. During the review of the building permit application, the building department and the fire department would review the project plans for compliance with all regulations related to fire safety to ensure conformance with the applicable life-safety provisions, which may include the development of an emergency procedure manual or an exit drill plan for the residents of the proposed project. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan or expose people or structures to a significant risk of loss, injury, or death involving fires.

Although not adopted by legislative action, the City has a published Emergency Response Plan, prepared by the Department of Emergency Management as part of the City's Emergency Management Program, which includes plans for hazard mitigation and disaster preparedness and recovery. The Emergency Response Plan contains 16 annexes (similar to appendices) that cover a number of emergency topics. The Transportation Annex includes operations concepts for evacuation of people in an emergency, including the process for designating evacuation routes during an emergency. Ocean Avenue is considered a "primary" emergency priority route in the Plan. SEIR Section 3.B, Transportation and Circulation, evaluates impacts of project construction and operations on emergency access. The proposed project is required to include provisions for emergency response for visitors and residents of the completed project. These provisions would be integrated and be compatible with existing emergency response plans, and

would neither obstruct implementation of the City's Emergency Response Plan, nor interfere with emergency evacuation planning.

Through compliance with the existing codes and regulations and implementation of project provisions for emergency response that account for and are compatible with the City's Emergency Response Plan, the proposed project's impacts would be *less than significant*. Therefore, the proposed project and would not result in any new or substantially more severe effects related to fires or implementation of emergency response or evacuation plans than those identified in the PEIR initial study.

Cumulative Impacts

Impact C-HZ-1: The proposed project, in combination with reasonably foreseeable future projects in the project vicinity, would not result in a cumulative impact related to hazards and hazardous materials. (Less than Significant)

Impacts related to hazards and hazardous materials are generally site-specific and typically do not result in cumulative impacts.

As discussed above, the proposed project would not result in any significant impacts with respect to hazards or hazardous materials during construction or operation with implementation of and compliance with applicable regulatory requirements for hazardous materials. The cumulative projects would be required to comply with applicable local, state, and federal regulations regarding the storage, handling, and disposal of hazardous materials and emergency access. Therefore, the proposed project, in combination with other reasonably foreseeable projects, would not result in a cumulative impact related to hazards and hazardous materials. This impact would be *less than significant*.

Topics:		Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
19.	MINERAL RESOURCES. Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\boxtimes

The PEIR did not specifically address potential impacts of the area plan on mineral resources. However, the project site does not contain any known mineral resources delineated in the San Francisco General Plan or any other land use plans and does not include mineral resources that are of value to the region and the residents of the state.¹⁶³ Therefore, criteria E.18(a) and E.18(b) do not apply to the proposed project, and these topics are not discussed further in this SEIR, including this initial study.

¹⁶³ California Department of Conservation, Division of Mines and Geology, Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Zone, Open File Report 96-03, 1996.

Topics:		Potentially Significant Effects Not Identified in Prior EIR	gnificant Effects in Severity of to Add Not Identified in Significant Impact Mitigati	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
20.	ENERGY. Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

Potentially

Summary of Comments Received in Response to the Notice of Preparation

No energy-related concerns were raised by the public and responsible agencies during the NOP scoping period.

Summary of Energy Resource Impacts in the PEIR

PEIR initial study Section 11, Energy/Natural Resources, found that development projects in the plan area would not result in the use of large amounts of fuel, water, or energy. Development projects in the plan area would be subject to state and local standards regarding energy consumption (including title 24). With regard to electricity, the PEIR discussed that despite the rising costs and uncertainties in electricity supply for San Francisco customers, increased conservation efforts along with applications for new electricity generating facilities under consideration by the California Energy Commission would be part of a statewide effort to achieve energy sufficiency. Development projects in the plan area were found not use fuel or water in an atypical or wasteful manner. PEIR initial study Section 11, Energy/Natural Resources, also found less-than-significant impacts on the use, extraction, or depletion of natural resources. Therefore, the PEIR identified no significant impacts to energy resources from the area plan, and accordingly, did not require any mitigation measures related to energy resources.

Project Options

This analysis considers the development that could occur under the Developer's Proposed Option as well as the Additional Housing Option. As described in SEIR Chapter 2, Project Description, the two options would involve similar land uses (with varying amounts of residential units and parking square footages) within the project site. The two project options are therefore analyzed as one, except where the differences between the assumptions would result in a different conclusion with respect to potential impacts on energy resources.

Impact Evaluation

Impact EN-1: The project would not result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

Construction Energy

Construction of the proposed project would require the use of fuel, energy, and water. The PEIR did not estimate energy consumption specific to the development of proposed on the project site or the amount of water that would be used during construction. However, the amount of these resources used for construction of the proposed project would be typical of normal construction projects in San Francisco. Therefore, the use of these resources during construction would not be wasteful, and impacts related to the use of energy resources during construction would be *less than significant*. No new mitigation would be required.

Operational Energy and Water Resources

Fuels. The project could contribute to the estimated increase in the use of transportation fuels by introducing new residents, employees, and site visitors to the project site. However, as described in SEIR Chapter 2, Project Description, the proposed project would be served by multiple public transportation opportunities and improve pedestrian and bicycle infrastructure on the project site. With these features, the residents, employees, and site visitors would be encouraged to use public transportation or use alternative transportation methods. Should one travel in a personal vehicle, the use of low emission and fuel-efficient vehicles would be encouraged by providing designated parking spots in the resident and potential public parking garages in accordance with San Francisco Green Building Code section 5.103.1.10. Therefore, the proposed project would not result in the wasteful use of transportation fuels and this impact would be less than significant. No new mitigation is necessary.

Energy. The PEIR did not estimate energy consumption specific to the proposed project, but concluded that compliance with Title 24, Energy Conservation Standards, would ensure that the increase in energy use at full build out in the plan area would not result in a wasteful use of energy.

The proposed project would require the use of energy for purposes such as lighting, heating, cooling, ventilation, and equipment operation. Since certification of the PEIR, San Francisco adopted its own green building code, implementing the California Green Building Code and California Building Energy Efficiency Standards, with amendments. Accordingly, the design of the buildings would need to meet or exceed the energy efficiency requirements of the 2016 San Francisco Green Building Code which, at a minimum, would require compliance with the 2016 California Building Energy Efficiency Standards. The project would comply with the state's Title 24 and San Francisco Green Building Code requirements for energy efficiency, renewable energy, and solar and living roofs.

No new mitigation measures or alternatives are required because, as with the PEIR, compliance with Title 24 regulations and now the San Francisco Green Building Code would ensure that the proposed project would not use energy in a wasteful manner.

Water. The proposed project would require the indoor use of water for toilet flushing and other sanitary needs, food preparation, and other indoor activities. However, the project would be required to comply with the water conservation measures specified in the 2016 California Green Building Code and the 2016

San Francisco Green Building Code. Under San Francisco's Nonpotable Water Ordinance, the proposed project would also be required to use non-potable water for appropriate purposes such as toilet flushing, cooling, and landscape irrigation.

For outdoor water use (landscape irrigation), the project sponsor would be required to use climate-appropriate plants and submit the required landscape documentation to the SFPUC in accordance with the San Francisco Water Efficient Irrigation Ordinance and the San Francisco Green Landscaping Ordinance. Installation of weather- or soil moisture-based irrigation controllers that would automatically adjust irrigation in response to changes in plants' needs as weather conditions change would also be required. Compliance with the above standards would ensure that water is not used wastefully during operation of the proposed project. No mitigation measures are required.

The PEIR found less-than-significant impacts with regard to energy and natural resources. The proposed project would not cause a wasteful use of energy, and effects related to use of fuel, water, and energy would be *less than significant*. Thus, the proposed project would not result in new or substantially more severe impacts than those identified in the PEIR.

Cumulative Impacts

Impact C-EN-1: The project, in combination with other reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on energy resources. (Less than Significant)

The proposed project would use fuel, energy, and water. Although other projects in the region would also use these resources, cumulative impacts would be less than significant as all of the regional projects, including the proposed project and all cumulative projects identified in SEIR Section 3.A, Impact Overview, Table 3.A-1, Cumulative Projects in the Project Vicinity, p. 3.A-11, would be required to comply with the California Green Building Standards Code and Building Energy Efficiency Standards at a minimum. Furthermore, many of the projects, including cumulative project numbers 1 through 4, would also be subject to local green building requirements such as those of the City and County of San Francisco, which must be as stringent as the state requirements and are often more stringent. These building codes encourage sustainable construction and operational practices related to planning and design, energy efficiency, water efficiency, and conservation. Therefore, cumulative impacts related to wasteful use of fuel, energy, and water resources would be *less than significant*.

Тој	pics:	Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
21.	AGRICULTURE AND FOREST RESOURCES.				
	In determining whether impacts to agricultural resour refer to the California Agricultural Land Evaluation an Department of Conservation as an optional model to udetermining whether impacts to forest resources, include agencies may refer to information compiled by the Cathe state's inventory of forest land, including the Fore Assessment project; and forest carbon measurement California Air Resources Board. Would the project:	d Site Assessme use in assessing uding timberland lifornia Departm est and Range As	ent Model (1997) pi impacts on agricu d, are significant e ent of Forestry and ssessment Project	repared by the Cai ulture and farmlan nvironmental effe d Fire Protection r and the Forest Le	lifornia d. In cts, lead egarding egacy
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or forest land to non-forest use?				

The PEIR did not specifically address potential impacts of the area plan on agriculture and forest resources. However, the project site does not contain any prime farmland, unique farmland, farmland of statewide importance, forest, or timberlands; does not support agricultural or timber uses; is not zoned for agricultural or timber uses; and is not under a Williamson Act contract.^{164,165} Therefore, none of the agriculture and forest resources significance criteria is applicable to the proposed project, and these topics are not discussed further in this SEIR, including this initial study.

Balboa Reservoir Project Draft SEIR B-120 April 2019
Case No. 2018-007883ENV

California Department of Conservation, San Francisco Bay Area Important Farmland 2010, ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/regional/2010/bay_area_fmmp2010.pdf, accessed December 3, 2018.

The Williamson Act is a California law enacted in 1965 that provides property tax relief to owners of farmland and open space land in exchange for a 10-year agreement that the land will not be developed or converted into another use.

Topics:		Potentially Significant Effects Not Identified in Prior EIR	Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR	Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives	No New or More-Severe Significant Effects
22.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

Dotontially

The PEIR did not specifically address potential impacts to the plan area on wildfire. However, San Francisco County does not contain any State Responsibility Area land or lands classified as very high fire severity zones. ¹⁶⁶ There are no landslide-prone areas in the immediate vicinity of the site. ¹⁶⁷ Therefore, none of the wildfire significance criteria are applicable to the proposed project, and these topics are not discussed further in this SEIR, including this initial study.

F. PUBLIC NOTICE AND COMMENT

On October 10, 2018, the planning department mailed a notice of preparation of an EIR and notice of public scoping meeting to property owners within 300 feet of the project site, tenants, and other potentially interested parties. In addition, the planning department held a public scoping meeting on October 30, 2018 to receive input on the scope of the environmental review for this project. During the scoping period, a total of 84 comment letters and emails were submitted to the planning department and 16 speakers provided oral comments at the public scoping session. The topics raised in the comment letters are addressed in this initial study and this SEIR to which this initial study is attached, as appropriate (refer to SEIR Chapter 1, Introduction, for additional detail on the public noticing and comments). The notice of preparation is included as SEIR Appendix A.

Balboa Reservoir Project Draft SEIR B-121 April 2019
Case No. 2018-007883ENV

¹⁶⁶ California Department of Forestry and Fire Protection (CAL FIRE), San Francisco County Fire Hazard Severity Zone (FHSZ) Map, November 2008, http://www.fire.ca.gov/fire_prevention/fhsz_maps_sanfrancisco, accessed February 11, 2019.

¹⁶⁷ City and County of San Francisco, San Francisco General Plan, Community Safety, an Element of the General Plan of the City and County of San Francisco, October 2012.

G. MITIGATION MEASURES AND IMPROVEMENT MEASURES

This section lists the mitigation measures identified in this initial study to reduce potentially significant impacts resulting from the proposed project to less-than-significant levels. The listed mitigation measures include those measures originally identified in the PEIR that are applicable to the proposed project, as well as certain new mitigation measures identified in this initial study to reduce potential impacts to less than significant. Mitigation measures are numbered to correspond to the initial study impact number, with a cross reference to the impact numbering system from the PEIR where appropriate.

Other potentially significant impacts are fully analyzed in SEIR Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, and mitigation measures are identified for significant impacts. The project sponsor has agreed to implement all mitigation measures identified in the initial study.¹⁶⁸

Mitigation Measure M-CR-2: Accidental Discovery of Archeological Resources (PEIR Mitigation Measure AM-1). The project sponsor shall distribute the planning department archeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils-disturbing activities within the project site. Prior to any soils-disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel including, machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archeological resource be encountered during any soils-disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils-disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.

If the ERO determines that an archeological resource may be present within the project area, the project sponsor shall retain the services of an archeological consultant from the pool of qualified archeological consultants maintained by the planning department archeologist. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify and evaluate the archeological resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archeological resource; an archeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. The ERO may also require

Agreement to Implement Mitigation Measures, Case No. 2018-007883ENV, Balboa Reservoir Project, [date]. [To be completed prior to publication]

that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describing the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archeological Site Survey Northwest Information Center (NWIC) shall receive one copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CR-3: Accidental Discovery of Human Remains. The treatment of human remains and of associated or unassociated funerary objects discovered during any soilsdisturbing activity shall comply with applicable state and federal laws. Federal laws, including 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 who shall appoint a Most Likely Descendant (Public Resources Code section 5097.98). The Environmental Review Officer (ERO) shall also be immediately notified upon discovery of human remains. The archeological consultant, project sponsor, ERO, and Most Likely Descendant shall have up to but not beyond six days after the discovery to 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 section 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the ERO to accept recommendations of a Most Likely Descendant. The archeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects as specified in the treatment agreement if such as agreement has been made or, otherwise, as determined by the archeological consultant and the ERO. If no agreement is reached state regulations shall be followed including the reinternment of the human remains and associated burial objects with appropriate dignity on the property in a location not subject to further subsurface disturbance (Public Resources Code section 5097.98).

Mitigation Measure M-TC-1: Tribal Cultural Resources Interpretive Program. If the Environmental Review Officer (ERO) determines that a significant archeological resource is present, and if in consultation with the affiliated Native American tribal representatives, the ERO determines that the resource constitutes a tribal cultural resource and that the resource could be

adversely affected by the proposed project, the proposed project shall be redesigned so as to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the ERO determines that preservation-in-place of the tribal cultural resource is both feasible and effective, then the archeological consultant shall prepare an archeological resource preservation plan (ARPP). Implementation of the approved ARPP by the archeological consultant shall be required when feasible.

If the ERO, in consultation with the affiliated Native American tribal representatives and the project sponsor, determines that preservation-in-place of the tribal cultural resources is not a sufficient or feasible option, the project sponsor shall implement an interpretive program of the tribal cultural resource in consultation with affiliated tribal representatives. An interpretive plan produced in consultation with the ERO and affiliated tribal representatives, at a minimum, and approved by the ERO would be required to guide the interpretive program. The plan shall identify, as appropriate, proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifacts displays and interpretation, and educational panels or other informational displays.

Mitigation Measure M-GE-6: Inadvertent Discovery of Paleontological Resources. Before the start of excavation activities, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in on-site construction worker training. The qualified paleontologist shall complete an institutional record and literature search and train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, the proper notification procedures should fossils be encountered, and the laws and regulations protecting paleontological resources. If potential vertebrate fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 25 feet of the find shall stop immediately and the monitor shall notify the Environmental Review Officer. The fossil should be protected by an "exclusion zone" (an area approximately 5 feet around the discovery that is marked with caution tape to prevent damage to the fossil). Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius and the monitoring level of effort based on the nature of the find, site geology, and the activities occurring on the site, and in consultation with the Environmental Review Officer. If treatment and salvage is required, recommendations shall be consistent with Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, and currently accepted scientific practice, and shall be subject to review and approval by the Environmental Review Officer. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection (e.g., the University of California Museum of Paleontology), and may also include preparation of a report for publication describing the finds. Upon receipt of the fossil collection, a signed repository receipt form shall be obtained and provided to the planning department. The project sponsor shall be responsible for the costs necessary to prepare and identify collected fossils, and for any curation

fees charged by the paleontological repository. The planning department shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means. H. DETERMINATION On the basis of this Initial study: I find that the proposed project COULD NOT have a new or substantially more severe significant effect on the environment than identified in the PEIR, and a NEGATIVE DECLARATION will be prepared. I find that although the proposed project could have a new or substantially more severe significant effect on the environment than identified in the PEIR, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a new or substantially more severe significant effect

on the environment than identified in the PEIR, and an ENVIRONMENTAL IMPACT REPORT is required. \bowtie I find that the proposed project MAY have a "potentially new or substantially more severe significant impact" or "potentially new or substantially more severe significant unless mitigated" impact on the environment than identified in the PEIR, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a new or substantially more severe significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required. Lisa Gibson **Environmental Review Officer** John Rahaim DATE

Director of Planning

INITIAL STUDY PREPARERS

San Francisco Planning Department

Environmental Planning Division

1650 Mission Street, Suite 400 San Francisco, CA 94103

- Environmental Review Officer: Lisa Gibson
- Principal Planner: Wade Wietgrefe
- Senior Environmental Planner: Jeanie Poling
- **Environmental Planner: Jennifer** McKellar
- Preservation Planner: Stephanie Cisneros
- Archeologist: Allison Vanderslice
- Water Supply Assessment: Chris **Thomas**

Office of the City Attorney

City Hall, Room 234 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102

Deputy City Attorney: Robb Kapla

Environmental Consultant

Environmental Science Associates (ESA)

550 Kearny Street, Suite 800 San Francisco, CA 94108

- Susan Yogi, Project Manager
- Karl Heisler, Senior Technical Advisor
- Jill Feyk-Miney, Deputy Project Manager
- Karen Lancelle
- Brian Pittman
- Julie McNamara
- Johanna Kahn
- Heidi Koenig
- Joel Miller
- Ron Teitel
- James Songco
- Logan Sakai
- Lisa Laxamana

PreVision Design

Adam Phillips

Project Sponsor

Reservoir Community Partners LLC Van Meter Williams Pollack LLP

600 California Street, Suite 900 San Francisco, CA 94108

- Ioe Kirchofer
- Joel Roos
- Kearstin Dischinger
- Nora Collins

333 Bryant Street, Suite 300 San Francisco, CA 94107

Karen Murray

Farella Braun + Martel LLP

Russ Building 235 Montgomery Street San Francisco, CA 94104

- Steve Vettel
- C.J. Higley

[This page intentionally left blank]