4.11 Less-than-Significant Impacts

In the course of evaluating certain topics included in the California Environmental Quality Act (CEQA) Guidelines Appendix G checklist, the proposed 201 Haskins Way Project (project) was found to have less-than-significant impacts or no impacts due to the project type and location. This section briefly describes these effects, pursuant to CEQA Guidelines Section 15128. Note that some of the topics in which the proposed project was determined to have no impact or a less-than-significant impact are addressed in the various Draft Environmental Impact Report (EIR) sections (Sections 4.2 through 4.9) to provide a more comprehensive discussion as to why impacts would be less than significant and to provide more detail for decision-makers and the general public.

Each topic includes a brief description of the regulatory framework, significance criteria, approach to analysis, and impacts. Information about the environmental setting of the proposed project is incorporated within the impact analysis discussions for the impact areas below, where necessary, to provide a baseline context for the impact analysis.

4.11.1 Aesthetics

REGULATORY FRAMEWORK

Regional

San Francisco Bay Plan and the Bay Conservation and Development Commission

The San Francisco Bay Plan (Bay Plan) was prepared by the Bay Conservation and Development Commission (BCDC) from 1965 through 1969 and amended through 2007 in accordance with the McAteer-Petris Act.[1,2] The Bay Plan guides the protection and use of San Francisco Bay (Bay) and its shoreline. BCDC has permit jurisdiction for the nine Bay Area counties with Bay frontage over areas subject to tidal action up to the mean high tide line and including all sloughs, tidelands, submerged lands, and marshlands lying between the mean high tide and 5 feet above mean sea level, and the land lying between the Bay shoreline and a line drawn parallel to, and 100 feet from, the Bay shoreline, known as the 100-foot shoreline band.[3] Under the McAteer-Petris Act, BCDC has permit authority for the placement of fill, extraction of materials, or substantial changes in use of land, water, or structures within its jurisdiction, and to enforce policies aimed at protecting the Bay and its shoreline, as well as maximizing public access to the Bay.

[1] San Francisco Bay Conservation and Development Commission, 2010. The McAteer-Petris Act (website). Available online at: http://www.bcdc.ca.gov/plans/mcateer_petris.html. Accessed May 10, 2018.

[2] California Government Code Sections 66600–66682. The San Francisco Bay Conservation and Development Commission (BCDC), created by the McAteer-Petris Act, functions as the state's coastal management agency for San Francisco Bay.

[3] San Francisco Bay Conservation and Development Commission, 2012. *San Francisco Bay Plan*, p. 5. Available online at: http://www.bcdc.ca.gov/pdf/bayplan/bayplan.pdf. Accessed May 10, 2018.

APPEARANCE, DESIGN, AND SCENIC VIEW POLICIES

Several policies of the Bay Plan are aimed at protecting the Bay's scenic views and the appearance and design of the Bayfront and adjacent developments.[4] The Bay Plan policies that are most relevant with respect to appearance, design, and scenic views are as follows:

> **Policy 1:** To enhance the visual quality of development around the Bay and to take maximum advantage of the attractive setting it provides, the shores of the Bay should be developed in accordance with the Public Access Design Guidelines.
>
> **Policy 2:** All bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore. To this end, planning of waterfront development should include participation by professionals who are knowledgeable of the Commission's concerns, such as landscape architects, urban designers, or architects, in conjunction with engineers and professionals in other fields.
>
> **Policy 4:** Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline. However, some small parking areas for fishing access and Bay viewing may be allowed in exposed locations.
>
> **Policy 8:** Shoreline developments should be built in clusters, leaving areas open around them to permit more frequent views of the Bay. Developments along the shores of tributary waterways should be Bay-related and should be designed to preserve and enhance views along the waterway, so as to provide maximum visual contact with the Bay.
>
> **Policy 12:** In order to achieve a high level of design quality, the Commission's Design Review Board, composed of design and planning professionals, should review, evaluate, and advise the Commission on the proposed design of developments that affect the appearance of the Bay in accordance with the Bay Plan findings and policies on Public Access; on Appearance, Design, and Scenic Views; and the Public Access Design Guidelines. City, county, regional, state, and federal agencies should be guided in their evaluation of Bayfront projects by the above guidelines.
>
> **Policy 14:** Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view" of the Bay (shown in Bay Plan Map No. 8, Natural Resources of the Bay).[5]

The BCDC Design Review Board reviews and makes recommendations to the Commission on the appearance and design of proposed projects within its jurisdiction, evaluating them in light of the policies for appearance, design, and scenic views. Its recommendations are advisory only and are not themselves grounds for denying a permit. Outside the area of the Commission's jurisdiction where permits for development from the Commission are not required, the McAteer-Petris Act specifies that the provisions of the Bay Plan pertaining to such areas are simply advisory to the applicant.[6]

[4] San Francisco Bay Conservation and Development Commission, 2012. *San Francisco Bay Plan*, pp. 70–72.

[5] Bay Plan Map No. 8 has been removed from the Bay Plan. Bay Plan Map No. 5 provides current information on scenic and sensitive resources in the Central Bay.

[6] McAteer-Petris Act, Section 66663.

Local

City of South San Francisco General Plan

The *City of South San Francisco General Plan* (General Plan), originally adopted in 1999 and as amended in 2011, provides a vision for the long-range physical and economic development for the City, provides strategies and specific implementing actions, and establishes a basis for judging whether specific development proposals and public projects are consistent with the City of South San Francisco (City) plans and policy standards. The General Plan contains a Parks, Public Facilities, and Services Element, which includes Policy 5.1-I-9, to improve the accessibility and visibility of Sign Hill Park and the bayfront.

East of 101 Area Plan

The *East 101 Area Plan*, which was adopted by the City Council in 1994 and most recently amended in 2016, sets forth specific land use policies for the East 101 Area. Development standards and density determinations, including floor area ratio (FAR), are established in the General Plan, which was updated after the adoption of the *East of 101 Area Plan* and takes precedence over the Area Plan. Accordingly, where the General Plan and *East of 101 Area Plan* conflict, land use policies and designations of the General Plan supersede those outlined in the *East of 101 Area Plan*. The City has, however, retained the East of 101 Area Plan Design Element policies to be the design guidelines for development in the East of 101 Area.

City of South San Francisco Zoning Ordinance, 2017

The City zoning ordinance prescribes development and site regulations that apply to development in all districts. The zoning ordinance contains standards for lighting and illumination that apply to all new development and additions that expand existing floor area by 10 percent or more.[7] They include standards for non-residential buildings requiring that all exterior doors, during the hours of darkness, shall be illuminated with a minimum of one foot-candle of light. The standards also limit the maximum height of lighting fixtures to 25 feet in the Business Technology Park (BTP) district. The standards also require that all lighting fixtures shall be shielded so as to not produce obtrusive glare onto the public right-of-way or adjoining properties.

All projects that require a building permit for new construction, alterations, or other improvements to the exterior of a structure or parking area require design review approval—except for projects developed in compliance with a previous design review approval.[8] The Planning Commission has design review authority for all projects requiring Planning Commission approval (such as projects that require a conditional use permit) and all new commercial, employment, mixed-use, and office developments.[9] The Design Review Board has design review authority for all other projects, and will provide

[7] Municipal Code Section 20.300.008.
[8] Municipal Code Section 20.480.002.
[9] Municipal Code Section 20.480.003(C).

recommendations to the Planning Commission or Chief Planner, as required.[10] Decisions regarding design review made by the Chief Planner are appealable to the Planning Commission, and decisions made by the Planning Commission are appealable to the City Council.[11]

SIGNIFICANCE CRITERIA

Based on the CEQA Guidelines, Appendix G, a project is considered to have significant impacts if implementation of the project would:

a. have a substantial adverse effect on a scenic vista;

b. substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c. substantially degrade the existing visual character or quality of the site and its surroundings; or

d. create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

In addition, the City Design Review guidelines under South San Francisco Municipal Code (Municipal Code) Section 20.480.006 state that a project's design features would be reviewed in consideration of achieving a safe, efficient, and harmonious development, and shadow patterns, and that components considered in design review shall include safety. A comment on the Notice of Preparation (NOP) noted concerns about wind safety and shadow impacts as a result of the proposed project. The City does not have specific CEQA criteria for determining a project's wind and/or shadow impacts; however, this EIR provides an analysis of wind conditions and shadow patterns in response to the NOP comment and CEQA Guidelines Section 15128.

APPROACH TO ANALYSIS

The project site is not located within a locally or state- designated scenic vista. The proposed project is evaluated based on the potential to impact scenic vistas defined under the General Plan and the Bay Plan, Sign Hill Park, and the Bay. However, the proposed project is not on or near a designated vista point, wildlife refuge, or waterfront park mapped on Bay Plan Map 5. The nearest vista point, Point San Bruno, and its associated waterfront trail is located approximately 0.25 mile to the east of the project site. Point San Bruno provides east-facing views of the Bay and the project site is located 0.25 mile west of Point Saint Bruno. Therefore, the proposed project would not interfere with east-facing Bay views provided by Point San Bruno.

U.S. 101, located 1 mile west of the project site, is not an officially designated or eligible state scenic highway.[12] The nearest officially designated state scenic highway, Interstate 280 (I-280), is located 3 miles west of the project site. The project site is not within the I-280 viewshed. Furthermore, there are no

[10] Municipal Code Section 20.480.003.

[11] Municipal Code Section 20.480.010.

[12] California Department of Transportation, California Scenic Highway Mapping System – San Mateo County (website). Available online at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed April 22, 2018.

scenic resources such as protected trees, rock outcroppings, or historic buildings on the project site. Therefore, criterion (b) does not apply to the proposed project and is not discussed further.

IMPACT EVALUATION

Impact AE-1: The proposed project would not have a substantial adverse effect on a scenic vista. ***(Less than Significant)***

The site is in a low-lying developed urban area consisting of industrial and office/research and development (R&D) uses. San Bruno Mountain is a prominent visual landmark in South San Francisco that contains Sign Hill Park, and the mountain can be seen from many locations throughout the City, including many portions of the East of 101 Area. There are no designated scenic overlooks of the mountain in the project vicinity. The proposed project would involve construction of new structures of up to 99 feet in height, which would partially obscure existing views of Sign Hill Park on San Bruno Mountain as seen from the project site and vicinity. However, the project site is in a low-lying area where existing views of the mountain are obscured by existing buildings, trees, and topography. The areas from which views of the mountain may be blocked are not prominent places where people gather in order to gain a view of Sign Hill Park. Impacts related to views of Sign Hill Park would therefore be less than significant.

The project site also has views of the Bay. The proposed project would involve construction of new structures of up to 99 feet in height, which would partially obscure existing views of the Bay. However, the areas from which views of the Bay may be blocked are not designated scenic overlooks and are not places where people gather in order to gain a view of the Bay. The adjacent San Francisco Bay Trail (Bay Trail) would continue to serve as a public recreation amenity and a Bayside viewing resource that would not be affected by new buildings on the land-side of the trail. Furthermore, the Phase 1 site plan and the conceptual project buildout site plan would create a central visual spine and pedestrian link from the Bay to the 201 Haskins Way Building (during Phase 1) and from the 201 Haskins Way Building to the East Grand Building and East Grand Avenue (during project buildout). The proposed three-story central atrium building connector in the 201 Haskins Way Building and the East Grand Building would provide a visual link to the pedestrian path and Bay view corridor. New sidewalks would be constructed along East Jamie Court, Haskins Way, and East Grand Avenue at project buildout (portions of Haskins Way and East Jamie Court during Phase 1 development, and the remaining areas during Phase 2 development) and would improve access to the Bay Trail from the project site. Development of Phase 1 and project buildout would be subject to design review to ensure that development of the project supports General Plan policies. Therefore, effects on existing views under the proposed project during Phase 1 or project buildout would be less than significant. No mitigation is required.

Impact AE-2: The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. ***(Less than Significant)***

The site is in a low-lying developed urban area consisting primarily of industrial and office/R&D uses. There are no residential uses within 1 mile of the project site, and neither the project site nor the nearby area are zoned for residential use. The proposed project would involve office/R&D development

consistent with the existing office/R&D setting. No substantial change to the existing visual character of surrounding industrial or office/R&D uses would occur.

One parcel within the project site, the 400-450 East Jamie Court parcel, is adjacent to the Bay Trail and a portion of that parcel is within the 100-foot BCDC jurisdictional Bay shoreline band. As described above, the parcel is currently developed with existing office/R&D uses. Under the proposed project, additional office/R&D use on this parcel would be allowed through rezoning of the parcel. The remaining project parcels are not within 100 feet of the Bay shoreline and are not subject to BCDC jurisdiction. Impacts related to the existing visual character of the Bay shoreline from development on the 400-450 East Jamie Court parcel are discussed below.

Phase 1 Development

The proposed additional office/R&D use on the 400-450 East Jamie Court parcel would be consistent with the character of existing office/R&D uses in the East of 101 Area. The proposed two-story 25,000-square-foot (sq.-ft.) building addition to be constructed on the 400-450 East Jamie Court parcel during Phase 1 would be located north of the existing three-story 400 Jamie Court building, outside of the 100-foot shoreline band of BCDC jurisdiction.

The massing of the proposed building addition at 400-450 East Jamie Court would not extend further east or west than the existing building and would be within the existing building's silhouette against the Bay. The proposed site plan and building addition at the 400-450 East Jamie Court parcel would maintain compatibility with appearance, design, and scenic view policies established by the Bay Plan, and site development would not require issuance of a permit from BCDC.

The proposed new structures at 201 Haskins Way would also be typical of the office/R&D buildings and the parking facilities existing in the vicinity, and views down Haskins Way to Bay waters would not change as a result of development in Phase 1. Furthermore, the Phase 1 site plan would create a central visual spine and a pedestrian link from the Bay to the 201 Haskins Way Building, and new sidewalks would improve access to the Bay Trail from the project site.

In conclusion, Phase 1 of the proposed project would be typical of the existing industrial and office/R&D setting and would not substantially alter the existing visual character of the project site and its surroundings. The impact under the proposed project during Phase 1 would be less than significant. No mitigation is required.

Project Buildout

The Phase 1 site plan and the conceptual project buildout site plan would create a central visual spine and pedestrian link from the Bay to the 201 Haskins Way Building (during Phase 1) and from the 201 Haskins Way Building to the East Grand Building and East Grand Avenue (during project buildout). The proposed three-story central atrium building connector in the 201 Haskins Way Building and the East Grand Building would provide a visual link to the pedestrian path and Bay view corridor. New sidewalks would be constructed along East Jamie Court, Haskins Way, and East Grand Avenue at project buildout

(portions of Haskins Way and East Jamie Court during Phase 1 development, and the remaining areas during Phase 2 development) and would improve access to the Bay Trail from the project site.

Additional office/R&D use on the 400-450 East Jamie Court parcel would be consistent with the character of the existing industrial and office/R&D uses in the project vicinity. However, site-specific, project-level design of Phase 2 is not currently proposed and would be subject to a separate plan review and discretionary approval process. If Phase 2 development were proposed within the 100-foot shoreline band, that development would be subject to BCDC review and approval.

Inside the shoreline band, the 400-450 East Jamie Court parcel contains a portion of parking lot access road, asphalt walking paths, viewing and seating area, concrete plaza, landscaping, and assorted public access amenities (e.g., benches, tables).[13] Views of the Bay from local roads or from the project site may change with additional development of office/R&D uses at 400-450 East Jamie Court, such as new additions to existing buildings, new or taller buildings, or reduced open surface parking area.

Nonetheless, new development or changes to the existing site plan at the 400-450 East Jamie Court parcel that would occur under project buildout would involve BCDC consultation to determine consistency with Bay Plan policies and BCDC Permit No. M02-70 for any portions of the project site that could be within its permit jurisdiction. No development on other Phase 2 parcels would directly affect public vistas or major scenic views of the Bay, although existing occasional glimpses of Bay waters from various points along East Grand Avenue or East Jamie Court could change. Views of the Bay looking south on Haskins Way would not change. Therefore, project buildout would not substantially alter the existing character of views of the Bay. The impact under the proposed project during project buildout would be less than significant. No mitigation is required.

Impact AE-3: The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. ***(Less than Significant)***

The project site is located in an industrial area with no adjacent residential uses. The project site is located adjacent to the Bay Trail. Residential uses and natural areas are particularly sensitive to light and glare impacts, particularly from nearby non-residential sources. Sources of light and glare in the project vicinity include interior and exterior building lights, lighting for service areas and surface parking lots, and City street lights. Vehicular traffic along major thoroughfares in the area also creates sources of glare.

The proposed project would increase the active building area on the project site and therefore would increase the amount of nighttime lighting and glare. However, the proposed office/R&D uses would be consistent with existing office/R&D development in the East of 101 Area and would not substantially affect the overall ambient light levels in the project vicinity, which is a fully developed, urban context. The existing level and sources of light and glare are typical of those in a developed urban setting. New lighting would be required to conform to standards that limit the amount of light that can spill over to

[13] In 2003, BCDC issued a permit (BCDC Permit No. M02-70, originally issued on July 17, 2003, and currently consisting of Corrected Permit No. M02-70 dated October 30, 2003, and Amendment No. Two dated June 26, 2006; as corrected and amended, the "BCDC Permit") regarding the use of certain portions of the 400-450 East Jamie Court parcel for public Bay shore access.

other properties through the use of shielded lighting fixtures as required by Section 20.300.008 of the zoning ordinance.

In summary, since the project would consist of development and lighting treatments typical of the existing industrial and office/R&D setting and would incorporate standard lighting measures to address undue lighting on adjacent areas, it would not result in new sources of substantial adverse light or glare. The impact under the proposed project during Phase 1 or project buildout would be less than significant. No mitigation is required.

Impact C-AE-1: The proposed project would not result in a cumulatively considerable contribution to significant cumulative impacts on aesthetics. (*Less than Significant*)

The proposed project's potential contribution to cumulative impacts on aesthetics is evaluated in the context of past, present, and reasonably foreseeable probable future development expected in the City and includes the additional baseline and cumulative projects and plans listed in Section 4.1, pp. 4.1.4-4.1.9.

Aesthetics are dependent upon the location of users, the breadth of the viewshed, and the contiguousness of scenic vistas and views. The nearest cumulative project, the *Genentech Master Plan Update* project, adjacent to the project site, would involve new office/R&D development consistent with the existing character of the Genentech campus. The remaining cumulative projects would also primarily involve construction of additional office/R&D uses. These developments are consistent with past redevelopment of industrial uses in the East of 101 Area and would be consistent with the existing visual character of the area. There is no designated historic district or neighborhood that would be impacted by the development of the proposed project or past, present, and reasonably foreseeable probable future developments. Furthermore, the *Oyster Point Specific Plan Update* and *Downtown Station Area Specific Plan* projects would enhance the visual setting of their respective project sites by providing new pedestrian, bicycle, and recreational improvements. Therefore, cumulative impacts on aesthetic resources would be less than significant. The proposed project would not substantially contribute to a significant cumulative impact. No mitigation is required.

Wind Safety

Pursuant to Section 20.480.006(A)(6) of the Municipal Code, open space, pedestrian walks, and other amenities (signs, illumination, and landscaping) shall be designed to enhance the environmental quality of the site and achieve a safe, efficient, and harmonious development. Similarly, per Section 20.480.006(A)(8) of the Municipal Code, components considered in design review shall include safety. As such, one such component that may be considered in the design review process is wind safety for pedestrians and people in outdoor settings.

Winds can be relatively strong and turbulent gusts may affect a pedestrian's balance and footing. Wind gusts are usually rare events, but are given special attention due to their potential safety impact on pedestrians. To consider Municipal Code requirements regarding wind safety, Rowan Williams Davies & Irwin Inc. (RWDI) prepared a screening-level wind analysis to provide a qualitative evaluation of the

potential wind conditions under the proposed development.[14] This assessment was based on long-term meteorological data for the South San Francisco area, project design information, the proprietary Windestimator modeling tool, and other knowledge of wind flows around buildings. For the wind safety criterion, RWDI considered whether gust wind speeds would exceed 56 miles per hour for 0.1 percent of the time, or 9 hours on an annual basis. The City does not consider exceedances of the wind safety condition to be a significant impact for CEQA purposes. However, the results of this assessment are summarized in response to the NOP comment and CEQA Guidelines Section 15128. Potential conceptual wind control design features would be considered on an as-needed basis during the City design review process in accordance with the Municipal Code.

Impact AE-4: The proposed project would not alter wind conditions in a manner that would substantially, adversely affect public safety. ***(Less than Significant)***

Based on long-term wind data recorded at San Francisco International Airport (SFO) between 1948 and 2015, four primary wind directions have the greatest frequency occurrence and make up the majority of the strong winds that occur. These wind directions are west-northwest, west, northwest, and west-southwest.

The direction and speed of wind currents can be altered by natural features of the land or by buildings and structures. Groups of buildings clustered together tend to act as obstacles that reduce wind speeds. Tall buildings that stand alone or are much taller than the surrounding buildings can intercept and redirect strong winds at high elevations and redirect them down to ground level. In addition, wide building axes perpendicular to prevailing winds will intercept more wind and cause stronger ground-level wind than buildings oriented with a narrow axis perpendicular to prevailing winds. Lastly, buildings with more simple, slab building shapes can cause stronger winds than articulated, complex building shapes.

The existing buildings on-site are low (between one to three stories) and surrounded by dense buildings of similar height to the west and northwest directions from where the prevailing winds come. As a result, the existing conditions on and around the project site are generally appropriate for the existing uses and do not exceed the wind safety criterion.

Phase 1 Development

The Phase 1 site plan features the elongated 201 Haskins Way Building and parking garage, which would have their longer axes in an east-west direction, reducing exposure to prevailing west and west-northwest winds. The entrances to the 201 Haskins Way Building would also be recessed and protected by large frames extruding from the main façade. In addition, the proposed landscaping would likely reduce the wind activity on and around the 201 Haskins Way parcel.

However, due to the local wind climate and the increased building massing on the site, the future wind speeds on the site are expected to be higher than those that currently exist, particularly around the southwest corners of the proposed and existing buildings, and in exposed gaps between buildings. In particular, the proposed 201 Haskins Way Building would have a five-story, 99-foot-tall wing on the west

[14] Rowan Williams Davies & Irwin, 2018. 201 Haskins Way Screening-Level Wind Analysis, October 2018.

end. Wind speeds at the southwest corner of this building might be elevated, but would not exceed the wind safety criterion. However, conceptual wind control design features could be considered to further reduce wind speeds, such as protecting sidewalks with additional trees and canopies or trellises around west façades and building corners; increasing the distance between the southwest corner of the 201 Haskins Way Building and the proposed sidewalk; chamfering the southwest and northwest building corners; adding a setback on the five-story wing to provide a low podium along the west and north façades; or flipping the taller west wing with the lower east wing.

Another potential windy area is the open area between the proposed 201 Haskins Way Building and the parking garage. Wind speeds at west end of the gap between the two buildings might be elevated, but would not exceed the wind safety criterion. Conceptual wind control design features to proposed walkways in this area could include screens, fences, or dense landscaping, if feasible.

The roof above the center core of the proposed 201 Haskins Way Building would be used as a green roof and amenity space. This space would not be aligned with the prevailing winds and the future wind conditions would not exceed the safety criterion. However, due to the increased elevation, wind speeds in these areas are likely higher than ground level. Conceptual wind control design features could include tall guardrails or planters.

In addition, the wind conditions at the central plaza are expected to not exceed the wind safety criterion. However, to further reduce wind speeds, landscaping could be placed on the west side of the plaza, rather than the east side as proposed.

The proposed two-story building addition on the north side of the existing three-story 400 East Jamie Court building would reduce exposure of the existing building to the northwest winds. It would also protect the existing central plaza. In addition, the existing and proposed landscaping would reduce the wind activity on and around the 400-450 East Jamie Court parcel.

Project Buildout

Similar to the Phase 1 site plan, the conceptual Phase 2 site plan for project buildout would feature the East Grand Building, which would have its longer axes in an east-west direction. In addition, the Phase 1 parking garage, under the conceptual Phase 2 site plan, would be expanded further to the east. This design would continue the east-west axes of the garage. Wind flows around the proposed Phase 1 buildings are not expected to be altered by the East Grand Building or the expanded parking garage, and new wind conditions would not exceed wind safety criterion.

The conceptual East Grand Building would have three levels on the west wing and five levels on the east wing. The lower west wing of the conceptual East Grand Building would not redirect the west-northwest wind flows as much as the 201 Haskins Way Building, and would not exceed generate ground-level winds that would exceed the wind safety criterion.

The roof above the center core of the proposed East Grand Building would be used as a green roof and amenity space. The future wind conditions would not exceed the wind safety criterion. As with the 201 Haskins Way Building (see Phase 1, above), wind speeds on this amenity would be higher than ground

level. In addition, the five-level east wing façade might deflect the prevailing west and west-northwest winds down the amenity space. Therefore, in addition to guard rails or planters, conceptual horizontal wind control design features, such as trellises, may also be considered during design review.

If Phase 2 design differs from conceptual plan, subsequent design review would consider wind safety of that design.

Shadow

Per Section 20.480.006(A)(8) of the Municipal Code, components considered in design review shall include but not be limited to exterior design, materials, textures, colors, means of illumination, landscaping, irrigation, height, shadow patterns, parking, access, security, safety, and other usual on-site development elements. The City does not consider alteration of shadow patterns to be a significant impact for CEQA purposes. However, changes to shadow patterns as a result of the proposed project are summarized qualitatively in response to the NOP comment and pursuant to CEQA Guidelines Section 15128.

Impact AE-5: The proposed project would not create new shadow in a manner that would substantially, adversely affect the use of public open space. ***(Less than Significant)***

This discussion analyzes whether buildings associated with the proposed project would shade open spaces and pedestrian areas in a manner that would substantially affect outdoor activities. This discussion considers the following general characteristics: open space usage; time of day and/or time of year; physical layout of the affected facilities; duration, size, shape, and location of the shadow; and proportion of open space affected.

Shadow diagrams were prepared by WRNS and are the primary sources of the information presented in this section.[15] The shadow diagrams are a tool that plot the potential reach of project shadow over the course of a year (from 1 hour after sunrise until 1 hour before sunset for the spring and fall equinoxes and the summer and spring solstices) relative to the location of nearby open spaces. The shadow diagrams account for topographical variation and shadows cast by existing buildings.

The project site and vicinity is primarily characterized by industrial and office/R&D uses with a substantial existing daytime employee population. There are no City parks located within 1 mile of the project site. The project site, particularly the 400-450 East Jamie Court parcel, is adjacent to the Bay Trail to the south. Other existing pedestrian areas include public sidewalks. These public areas in the project vicinity are shadowed by existing buildings throughout the day as well as throughout the year. In general, these areas are shadowed in the early morning and the late afternoon, and receive the greatest amount of sunlight during the middle of the day.

[15] SWCA Environmental Consultants, 2018. 201 Haskins Way Shadow Memorandum, August 30, 2018; WRNS, 2018. *Shadow Study for the 201 Haskins Way Project*, August 27, 2018.

Phase 1 Development

The Bay Trail, located to the south of the project site, is primarily affected by shadows from the existing 400-450 East Jamie Court buildings. The proposed new 25,000-sq.-ft. building addition to be constructed in Phase 1 would be north of the existing 400 East Jamie Court building, and would not exceed the height of the existing structure. Therefore, this proposed building addition would not contribute substantial new shadows to the Bay Trail. Due to the moderate height and relatively far distance of other proposed project buildings, no other proposed structures would contribute substantially to shadows on the Bay Trail.

The remaining open spaces in the project vicinity are public sidewalks. Each of these areas experience existing shadow from existing one- to two-story light industrial buildings, in addition to existing trees. During Phase 1, the proposed project would involve construction of new office/R&D buildings up to five stories tall on the 201 Haskins Way parcel, which would exceed the average height of existing structures in the project vicinity. Shadows produced from the proposed 201 Haskins Way Building and parking garage would primarily occur on proposed new public sidewalks on Haskins Way in the early morning hours throughout the year and East Jamie Court in the late afternoon hours in the summer. Shadows produced from the proposed 201 Haskins Way Building would be typical of a mid-rise building, and would not produce shadows at a substantial distance from the project site. Therefore, the proposed project would not contribute substantial new shadows to existing sidewalks and other pedestrian areas.

A comment on the NOP inquired as to the proposed project's shadow impact on nearby existing building rooftops, and whether new shadows may impact the ability to install and operate rooftop photovoltaic solar systems. Rooftop photovoltaic solar systems are the most effective and efficient during peak daytime hours. As illustrated in the shadow study, the proposed project buildings would not create new shadows on existing building rooftops in the project vicinity between the hours of 9 a.m. and 3 p.m., when rooftop photovoltaic solar systems would be in peak use. Therefore, the proposed project would not contribute substantial new shadows to existing rooftops or prospective rooftops in the project vicinity.

As shown on Figure 3.4, p. 3.21, new sidewalks with street trees and landscaping buffers would be constructed along portions of Haskins Way and East Jamie Court during Phase 1 development. An outdoor eating area located along Haskins Way fronting the 201 Haskins Way parcel would also be used as pedestrian access through the northwest frontage of the 201 Haskins Way parcel. In addition, a new Central Plaza would be constructed on the 201 Haskins Way parcel during Phase 1 development with landscaping, seating areas, and a basketball court to provide outdoor recreation space for daytime office workers. The proposed office/R&D buildings would cast shadows on these new outdoor amenities, but the majority of shadows would be present during the early morning and later afternoon hours when outdoor amenities are less likely to be in use. Therefore, the proposed project would not contribute substantial new shadows to proposed open spaces.

Project Buildout

As discussed above, the Bay Trail located south of the project site is primarily affected by shadows from the existing 400-450 East Jamie Court buildings in the summer months in the late afternoon hours. During project buildout with the conceptual Phase 2 development plan, additional office/R&D use on the 400-

450 East Jamie Court parcel would be constructed in a manner consistent with the character of the existing industrial and office/R&D uses in the project vicinity. Phase 2 development on the 400-450 East Jamie Court parcel may change shadow patterns in the vicinity, including on the Bay Trail. Site-specific, project-level design of Phase 2 is not currently proposed and would be subject to a separate plan design review. That design review process would include consideration of shadow patterns.

Under the conceptual Phase 2 plan, project buildout would involve construction of another office/R&D building up to five stories tall (the conceptual East Grand Building), which would exceed the average height of existing structures in the project vicinity. Conceptual Phase 2 development would also involve expansion of the five-story Phase 1 parking garage to the east. Shadows produced from the conceptual East Grand Building and expanded parking garage would primarily occur on proposed new public sidewalks on Haskins Way and East Grand Avenue in the early morning hours throughout the year and East Grand Avenue in the afternoon hours in the fall, winter, and spring. Shadows produced from proposed office buildings would be typical of a mid-rise building, and would not produce shadows at a substantial distance from the project site. Due to the moderate height and relatively far distance of the conceptual Phase 2 buildings, these structures would not contribute substantially to shadows on the Bay Trail. Therefore, the proposed project would not contribute substantial new shadows to existing sidewalks and other pedestrian areas.

As shown on Figure 3.4, p. 3.XX, new sidewalks with street trees and landscaping buffers would be constructed along East Jamie Court, Haskins Way, and East Grand Avenue at project buildout (portions of Haskins Way and East Jamie Court during Phase 1 development, and the remaining areas during Phase 2 development, as depicted in the conceptual plan). The conceptual East Grand Building would cast shadows on the proposed Phase 1 Central Plaza and outdoor eating area amenities, but the majority of shadows would be present during the early morning and later afternoon hours when outdoor amenities are less likely to be in use. Therefore, the proposed project would not contribute substantial new adverse shadows to proposed open spaces.

4.11.2 Agriculture and Forest Resources

REGULATORY FRAMEWORK

There are no local, state, or federal laws, regulations, plans, or policies related to agricultural and forest resources applicable to the project site or to implementation of the proposed project.

SIGNIFICANCE CRITERIA

Based on Appendix G of the State CEQA Guidelines, agriculture and forestry resource impacts are considered to be significant if a project would:

a. convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;

b. conflict with existing zoning for agricultural use, or a Williamson Act contract;

c. conflict with existing zoning for, or cause rezoning of, forestland (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 forestland or conversion of forestland to non-forest use; or

e. involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use.

APPROACH TO ANALYSIS

Agricultural and forest resources impacts were evaluated based on the California Department of Conservation Farmland Mapping and Monitoring Program, the San Mateo County Williamson Act Program map, site visits, and aerial imagery from Google Earth.[16,17]

IMPACT EVALUATION

Impact AG-1: The proposed project would not convert designated farmland under the Farmland Mapping and Monitoring Program, nor would it conflict with any existing agricultural zoning or a Williamson Act contract, nor would it involve any changes to the environment that would result in the conversion of designated farmland. (*No Impact*)

The California Department of Conservation, Division of Land Resource Protection, maps important farmland, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The California Department of Conservation's Farmland Mapping and Monitoring Program identifies the project site as "Urban and Built-up."[18]

Because the project site does not contain any designated farmland, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use.

The proposed project would not conflict with any agricultural zoning, because the existing Mixed Industrial (MI) and Business Commercial (BC) zoning districts are not for agricultural use. It would not conflict with a Williamson Act contract, because there are no Williamson Act contracts for land within the East of 101 Area.[19] There is no urban agriculture on the project site.

In conclusion, the proposed project would have no impact on farmland and land zoned or contracted for agricultural uses. No mitigation measures are necessary.

[16] California Department of Conservation, 2016. Farmland Mapping and Monitoring Program – San Mateo County Map. Available online at: http://www.conservation.ca.gov/dlrp/fmmp/Pages/SanMateo.aspx. Accessed May 10, 2018.
[17] California Department of Conservation, 2007. San Mateo County Williamson Act FY 2006/2007. Available online at: http://www.conservation.ca.gov/dlrp/lca. Accessed May 10, 2018.
[18] California Department of Conservation, 2010. San Francisco Bay Area Important Farmland 2010. Available online at ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/regional/2010/bay_area_fmmp2010.pdf. Accessed April 5, 2018.
[19] 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.

Impact AG-2: The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, nor would it result in the loss of or conversion of forest land to non-forest uses. (*No Impact*)

There is no timberland or timberland zoned Timberland Production on the project site.[20] None of the trees currently growing on or adjacent to the project site are managed for a public benefit, and therefore the project site is not "forest land."[21] Thus, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. There would be no impact with respect to forest land or timberland, and no mitigation measures are necessary.

Impact C-AG-1: The proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact on agricultural resources or forest land or timberland. (*No Impact*)

The proposed project would have no impact on agricultural resources and forest land, nor would other proposed reasonably foreseeable probable cumulative projects in the vicinity because the project site and its vicinity are mapped as "Urban and Built Up Land" by the California Department of Conservation. There are no parcels in the East of 101 Area designated as Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance, nor are there parcels under Williamson Act contract. There is no timberland or timberland zoned Timberland Production in the East of 101 Area where the proposed reasonably foreseeable cumulative projects are located. Therefore, there would be no cumulative impact on farmland or forest resources and no contribution by the proposed project to a significant cumulative impact with respect to agricultural or forest resources. No mitigation measures are necessary.

4.11.3 Geology and Soils

REGULATORY FRAMEWORK

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting in structures for human occupancy. In accordance with this act, the state geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones.[22] Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace because many active faults are complex and

[20] As defined by California Public Resources Code Section 4526 and California Government Code Section 51104(g).

[21] Pursuant to California Public Resources Code Section 12220(g)

[22] California Department of Conservation, 2018. The Alquist-Priolo Earthquake Fault zoning (AP) Act (website). Available online at: http://www.conservation.ca.gov/cgs/rghm/ap. Accessed May 10, 2018.

consist of more than one branch that may experience ground surface rupture. The project site is not located within an Alquist-Priolo earthquake fault zone.[23]

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (California Public Resources Code Sections 2690–2699.6), adopted following the Loma Prieta earthquake, addresses threats to public health and safety and to minimize property damage caused by earthquakes. The act directs the California Geological Survey to identify and map areas prone to the earthquake hazards of liquefaction and earthquake-induced landslides. For structures intended for human occupancy, the act requires that project sponsors perform site-specific geotechnical investigations to identify potential seismic hazards and formulate mitigation measures prior to permitting of most developments within the zones of required investigation. San Mateo County, where the project site is located, has not been evaluated for seismic hazard zones for liquefaction or seismic landslides.[24]

California Building Code (2016)

The California Building Code has been codified in the California Code of Regulations (CCR) as Title 24, Part 2.[25] Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the California Building Code is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within its jurisdiction. The California Building Code is based on the International Building Code, previously known as the Uniform Building Code. The 2016 California Building Code is based on the 2015 International Building Code published by the International Code Conference.[26]

In addition, the California Building Code contains necessary California amendments, which are based on reference standards obtained from various technical committees and organizations such as the American Society of Civil Engineers (ASCE), Structural Engineering Institute (SEI), American Institute of Steel Construction, and American Concrete Institute. ASCE/SEI "Minimum Design Loads for Building and Other Structures" (ASC/SEI 7-10) provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion in building codes.[27] The provisions of the California Building Code apply to the construction, alteration, movement,

[23] California Geological Survey, 2000. San Francisco South Quadrangle Earthquake Fault Zones and Seismic Hazard Zones Map, released November 17, 2000. Available online at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_SOUTH_EZRIM.pdf. Accessed May 10, 2018.
[24] Ibid.
[25] California Building Standards Commission, 2017. California Building Standards Code (California Code of Regulations, Title 24). Available online at: http://www.bsc.ca.gov/Codes.aspx. Accessed May 10, 2018.
[26] California Building Standards Commission, 2016. Building Standards Information Bulletin 16-01. Available online at: https://www.documents.dgs.ca.gov/bsc/2015TriCycle/Information%20Bulletins/BSC-Bulletin-16-01.pdf. Accessed May 10, 2018.
[27] American Society of Civil Engineers, 2013. ASCE/SEI 7-10, Minimum Design Loads for Buildings and Other Structures.

replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

In particular, Chapter 16 of the California Building Code prescribes minimum structural loading requirements for use in the design and construction of buildings and structural components. It includes minimum design loads, assignment of risk categories, as well as permitted design methodologies. Standards are provided for the minimum design loads under various conditions, including wind, rain, flood, and earthquake. In addition, Chapter 18 of the California Building Code provides criteria for geotechnical and structural considerations in the selection, design, and installation of foundation systems to support the loads from the structure above. Chapter 18 further includes requirements for soils investigation and site preparation for receiving a foundation, including the allowed load-bearing values for soils and for protecting the foundation from water intrusion. Section 1808 of the California Building Code addresses the basic requirements for foundation types, and later sections address shallow foundations (Section 1809) and deep foundations (Section 1810).

Local

City of South San Francisco General Plan

The General Plan provides a vision for the long-range physical and economic development for the City, provides strategies and specific implementing actions, and establishes a basis for judging whether specific development proposals and public projects are consistent with the City's plans and policy standards. The General Plan contains a Health and Safety Element, which includes Policy 8.1-G-1 to minimize the risk to life and property from seismic activity and geologic hazards in the City.

City of South San Francisco Hazard Mitigation Plan

The City had adopted the Association of Bay Area Governments (ABAG) Local Hazard Mitigation Plan as the Hazard Mitigation Plan (HMP) for the City by Resolution 65-2006, on August 16, 2006. In 2011, ABAG adopted an updated 2010 HMP.[28] Participating local governments have also prepared annexes for this HMP to explain how it specifically applies to their jurisdiction. The City has not yet adopted the City of South San Francisco HMP annex and the annex has not been approved by ABAG and the Federal Emergency Management Agency.[29] The goal of the HMP is to maintain and enhance a disaster-resistant region by reducing the potential for loss of life, property damage, and environmental degradation from natural disasters, while accelerating economic recovery from those disasters. This goal is unchanged from the 2005 plan and continues to be the goal in designing its mitigation program. Additionally, the City has the specific objective of reducing the number of public and private buildings within the City that are vulnerable to the effects of earthquakes.[30] The City's HMP Annex identifies the specific areas where

[28] Association of Bay Area Governments, 2011. Regional Hazard Mitigation Plan. Available online at: http://resilience.abag.ca.gov/2011mitigation/. Accessed June 22, 2018.
[29] Association of Bay Area Governments, 2018. 2010 Jurisdiction Annexes. Available online at: http://resilience.abag.ca.gov/2011mitigation/2010annex/. Accessed June 22, 2018.
[30] City of South San Francisco, 2011. Annex to 2010 Association of Bay Area Governments Local Hazard Mitigation Plan – Taming Natural Disasters. Available online at: http://resilience.abag.ca.gov/wp-content/documents/2010LHMP/SSF-Annex-2011.pdf. Accessed June 22, 018.

people or structures may have higher vulnerability to earthquakes, flood, wildland fires, and other natural hazards. The plan identifies policies and actions that may be implemented by the City to reduce the potential for loss of life and property damage in these areas based on an analysis of the frequency of earthquakes, floods, wildland fires and landslides in terms of frequency, intensity, location, history, and damage effects. The HMP and HMP Annex serves as a guide for decision-makers as they commit resources to reduce the effects of natural hazards. The City has many ongoing mitigation programs that help create a more disaster-resistant region, including increased efforts to reduce landslides and erosion in existing and future development through continuing education of design professionals on mitigation strategies.[31]

City of South San Francisco Building Code

The City Building Division is tasked with enforcing the minimum standards found in the various model codes adopted by the state through the Building Standards Commission and as adopted and amended by the City Council. In particular, the City amended the California Building Code regarding concrete slab design.[32] The City building code also provides standards of construction for flood damage prevention.[33]

SIGNIFICANCE CRITERIA

Based on the CEQA Guidelines, Appendix G, a geology and soils impact is considered significant if the project would:

a. expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    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 or other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42;
    ii. strong seismic ground shaking;
    iii. seismic-related ground failure, including liquefaction; or
    iv. landslides.

b. result in substantial soil erosion or the loss of topsoil;

c. be located on a geologic unit or soil that is unstable, or that would become unstable as result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

d. be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code and in ASTM D4829-11, creating substantial risk to life or property; or

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 wastewater.

[31] Ibid, p. 12.
[32] Municipal Code Section 15.08.050.
[33] Municipal Code Section 15.56.160.

APPROACH TO ANALYSIS

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,[34] the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly exacerbate an existing environmental condition. Accordingly, hazards resulting from a project that would place development in an existing or future seismic 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 analysis below evaluates whether the proposed project or project buildout would exacerbate existing or future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death.

The information in this section is based on Langan's 2017 *Preliminary Geotechnical Investigation* prepared for the 201 Haskins Way parcel of the proposed project.[35] The scope of the geotechnical investigation included reviewing, exploring, and analyzing the subsurface conditions regarding soil and groundwater at the project site. The geotechnical investigation's conclusions and recommendations are based on available geotechnical data from the surrounding area and on limited field investigations, which included soil borings.

A site-specific geotechnical investigation for the Phase 2 area has not been performed, but is anticipated to be similar to conditions identified at the 201 Haskins Way parcel. Geotechnical investigation for the Phase 2 parcels would be required prior to commencement of any future Phase 2 development activities, pursuant to General Plan Policy GEO-10.

The project site is located on largely developed land with few areas of exposed soils. Exposed soils are generally limited to ornamental landscaping and ruderal vegetation between parcels. Therefore, criterion (b) as it pertains to topsoil is not applicable and is not further discussed. Impacts associated with soil erosion are discussed below.

The proposed project would not involve the construction or operation of septic tanks or alternative wastewater disposal systems. The proposed project would utilize existing municipal sewers. Therefore, criterion (e) is not applicable and is not further discussed.

[34] California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369. Opinion Filed December 17, 2015. Available online at: https://caselaw.findlaw.com/ca-supreme-court/1721100.html. Accessed May 11, 2018.
[35] Langan, 2017. *Preliminary Geotechnical Evaluation – 201 Haskins Way, South San Francisco, California* (Preliminary Geotechnical Evaluation). This evaluation is provided as part of the Administrative Record of this EIR.

IMPACT EVALUATION

Impact GE-1: The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, liquefaction, or landslides, with implementation of regulatory compliance measures. (*Less than Significant*)

The strong ground motions that occur during earthquakes are capable of inducing landslides, generally where unstable soil conditions already exist. Hilly areas underlain by weak bedrock units of slope greater than 15 percent have the greatest susceptibility to land sliding. In the City, this hazard is primarily located on the southern flank of San Bruno Mountain, located 1.5 miles northwest of the project site, and near Skyline Boulevard, located 4 miles west of the project site.[36] The project site is located in a low-lying area with relatively flat topography. The nearest area containing slopes over 15 percent are located north of East Grand Avenue surrounding the San Bruno Point hilltop, but the City has not otherwise provided any specific designation of landslide hazard zones in this area.[37] Landslide research conducted by the U.S. Geological Survey (USGS) in the Bay Area indicates that the project site is considered flat land and the San Bruno Point area contains few, if any, mapped historical landslides. [38] Therefore, the proposed project would not expose people or structures to adverse effects associated with landslides. No mitigation is necessary.

The project site is located in an area on the Bay shoreline subject to historic fill. Portions of the 201 Haskins Way parcel were previously bayward of the original shoreline and on reclaimed land.[39] In general, construction on the 201 Haskins Way parcel and southward is expected to occur over fill. The fill at and near this part of the project site is variable, consisting of clay, silt, sand, gravel, organics, debris, and rubble. The fill varies from soft to very stiff and loose to dense. The fill is undocumented and may not have been compacted when placed. The fill is likely underlain by soft to medium stiff, compressible, marine clay, known as Bay Mud. Bay Mud is underlain by medium dense to very dense silty sand and sand with silt and by stiff to hard sandy clay and clay. Geologic maps indicate that the depth to bedrock varies, but generally increases to the south and the southwest.[40] Material that was identified in borings as bedrock may be very dense sand of the Colma formation, which can be cemented and may have been interpreted as bedrock. Groundwater was measured at nearby sites at depths varying from about 8 to 15 feet below the ground surface.

The 400-450 East Jamie Court parcel was developed in the early 2000s and included the construction of two office/R&D buildings, a subsurface parking structure, and surface parking. The parcel was initially part of the Bay and was reclaimed by placing fill across the site between 1970 and 1972.[41] The fill was retained by constructing a perimeter dyke that extends beneath the southern edge of the site. Detailed soil

[36] City of South San Francisco, 1999. *City of South San Francisco General Plan*, as amended in 2011. Chapter 8, p. 8-6.
[37] Ibid, Figure 8-1, p. 8-3.
[38] U.S. Geological Survey, 1997. Summary Distribution of Slides and Earth Flows in San Mateo County, California (Open File Report 97-745). Available online at: https://pubs.usgs.gov/of/1997/of97-745/sm-sef.pdf. Accessed June 22, 2018.
[39] *Preliminary Geotechnical Evaluation*, p. 2.
[40] *Preliminary Geotechnical Evaluation*, p. 3
[41] City of South San Francisco, 2002. Initial Study and Mitigated Negative Declaration for the East Jamie Court Project, pp. 35–41. Available online at: http://weblink.ssf.net/weblink/Browse.aspx?startid=51192&row=1&dbid=0. Accessed May 10, 2018.

studies were conducted on the site to ensure that the buildings can be supported. The 2002 Initial Study for that project found that all impacts related to seismic ground shaking, ground failure, soil erosion, liquefaction, and expansive soil would be reduced to a less-than-significant level by adherence to geotechnical policies included in the *East of 101 Area Plan* and applicable provisions of the California Building Code. It is assumed that any known subsurface soil and geological conditions were handled appropriately in compliance with all applicable regulations when the parcel was developed with those uses.

Fault Rupture

The project site is not within an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known fault or potentially active fault exists on the project site.[42] In a seismically active area such as the San Francisco Bay Area, there is a small chance that future faulting could develop in areas where no faults previously existed; however, the geotechnical investigation found no evidence of active faulting on the project site and concluded that the risk of surface faulting and consequent secondary failure from previous unknown faults is very low.[43] Therefore, this impact would be less than significant. No mitigation measures are necessary.

Ground Shaking

The major active faults in the area are the San Andreas, Monte Vista-Shannon, San Gregorio, Hayward, and Calaveras faults.[44] The nearest fault is the North San Andreas – Peninsula fault segment, located approximately 5 kilometers (about 3.1 miles) west of the project site. This fault has an estimated mean characteristic magnitude of 7.23. The intensity of potential future earthquake ground motion at the site depends upon the characteristics of the generating fault, distance to the earthquake epicenter, magnitude and duration of the earthquake, and specific subsurface conditions. Ground shaking at the project site during a major earthquake would be very strong.[45]

A magnitude 6.0 earthquake is felt by everyone, indoors and outdoors, and poorly built buildings may be damaged. A magnitude 7.0 earthquake causes damage and severe damage or the partial or complete collapse of poorly built structures, and is felt across great distances (a 7.0 earthquake is approximately 1/16 as strong at a distance of 50 miles).[46,47] However, the proposed project must comply with California Building Code seismic requirements, which are established to reduce the risk to life safety from damage to newly constructed buildings due to seismic hazards to less-than-significant levels.

[42] California Geologic Survey, 2000. San Francisco South Quadrangle Earthquake Fault Zones and Seismic Hazard Zones Map, released November 17, 2000. Available online at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_SOUTH_EZRIM.pdf. Accessed May 10, 2018.
[43] *Preliminary Geotechnical Evaluation*, p. 6.
[44] Ibid, p. 3.
[45] Ibid, p. 4.
[46] U.S. Geological Survey, Magnitude/Intensity Comparison, https://earthquake.usgs.gov/learn/topics/mag_vs_int.php, accessed April 2, 2018.
[47] University of Portland, 2017. Building and Earthquakes – Which stands? Which falls?, http://www.iris.edu/hq/files/programs/education_and_outreach/retm/tm_100112_haiti/BuildingsInEQs_2.pdf, accessed on January 5, 2018.

Soil Liquefaction, Seismic Densification, and Lateral Spreading

A seismic hazard zone map has not been prepared for the site by the California Geological Survey.[48] During the 1906 earthquake, lateral spreading was observed near the site and previous geotechnical evaluations performed south and east of the 201 Haskins Way parcel concluded there is a potential for liquefaction to occur. [49] Due to the shallow depth to groundwater, the variability of the fill, and the presence of medium dense sand below the Bay Mud, an evaluation of liquefaction potential and seismically induced settlement in accordance with State of California Special Publication 117, Guidelines for Evaluation and Mitigation of Seismic Hazards in California (SP-117) is recommended in the *Preliminary Geotechnical Evaluation* as part of a final geotechnical investigation.[50]

The available subsurface information indicates that layers of loose to medium dense sand are likely present below the groundwater.[51] Medium dense sand could liquefy during a major earthquake on a nearby active fault. Potentially liquefiable soil layers in the area are anticipated to be discontinuous. Previous studies analyzed in the *Preliminary Geotechnical Evaluation* concluded that up to three inches of settlement may occur due to liquefaction from a major earthquake. The potential for liquefaction and resulting settlement would be evaluated as part of a final geotechnical investigation that includes drilled borings and/or core penetration tests.

Lateral spreading is associated with liquefaction. In general, the parameters used to estimate the magnitude of horizontal ground movement resulting from lateral spreading include the thickness of the liquefiable layer, the fines content and mean grain-size diameter of the liquefiable soil, the magnitude and distance of the earthquake from the site, the slope of the ground surface, and boundary conditions (such as free face of a channel). Previous studies at nearby sites concluded that the potential for lateral spreading is low; however, a more thorough evaluation would be made during the final geotechnical investigation.

Seismic densification can occur during strong ground shaking in loose, clean granular deposits above the water table, resulting in ground surface settlement. A previous study nearby analyzed in the *Preliminary Geotechnical Evaluation* concluded that the soil deposits above the water table are likely sufficiently clayey such that the potential for differential compaction to occur at the site is low.

Due to the heterogeneity of the subsurface conditions, the *Preliminary Geotechnical Evaluation* recommends that development on the 201 Haskins Way parcel under the proposed project be designed to provide uniform foundation support to limit the differential settlements of the proposed structures. Design will also consider differential settlement between on-site structures and other elements (e.g., pavements, utilities, etc.). Liquefaction may occur at the site during a large earthquake. In addition, even where not liquefiable, the fill is heterogeneous and not likely engineered when placed. Therefore, structures would

[48] California Geological Survey, 2000. San Francisco South Quadrangle Earthquake Fault Zones and Seismic Hazard Zones Map, released November 17, 2000. Available online at: http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_SOUTH_EZRIM.pdf. Accessed May 10, 2018.
[49] *Preliminary Geotechnical Evaluation*, p. 5.
[50] California Geological Survey, 2008. Special Publication 117A – Guidelines for Evaluating and Mitigating Seismic Hazards in California. Available online at: http://www.conservation.ca.gov/cgs/information/publications/sp/Documents/sp117.pdf. Accessed May 10, 2018.
[51] *Preliminary Geotechnical Evaluation*, p. 5.

be required to be supported in the soils and bedrock below fill and Bay Mud through implementation of deep auger cast piles or shafts. Floor slabs in areas requiring deep foundations would need to be structurally supported. Further geotechnical investigation of the Phase 2 development would be required. It is assumed that geotechnical conditions in the Phase 2 area are similar to those discussed in the 201 Haskins Way *Preliminary Geotechnical Evaluation*, and would involve similar structural design recommendations.

Detailed geotechnical investigation would be performed for all parcels in the project site, including sufficient borings and/or core penetration tests to perform a detailed evaluation of subsurface characteristics. The results of the field exploration would be used to develop design level recommendations for use in the design of proposed improvements. The number and depth of borings, core penetration tests and test pits will depend upon where the buildings are proposed. Geotechnical investigation would be performed to determine the presence of fill and expansive soil, presence and thickness of Bay Mud, strength of the alluvial soils below the Bay Mud, estimates of total and differential settlements from static loads and seismically induced settlements, evaluate potential variations of near surface soil characteristics beneath proposed improvements, and provide design level geotechnical recommendations.

The proposed project would comply with standard regulatory requirements—including completion of a detailed geotechnical investigation required by the California Building Code, which are adopted by reference under the South San Francisco Building Code—and therefore would result in a less-than-significant impact related to liquefaction, seismic densification, and lateral spreading under either Phase 1 or project buildout. No mitigation is needed.

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

The project site ranges from relatively level to gently sloping. The proposed project under both Phase 1 and project buildout would involve limited grading to accommodate the new proposed office/R&D buildings, parking structure, surface parking, and landscaping. The proposed project would not involve substantial changes to the existing grade, and no unprotected, exposed soils at risk of substantial erosion would remain on the project site.

As discussed in Section 4.6, Hydrology and Water Quality, compliance with the Construction General Stormwater Permit would ensure that water quality impacts related to violation of water quality standards or degradation of water quality due to discharge of construction-related stormwater runoff to the Bay, including eroded soils, would be less than significant. No mitigation is necessary.

Impact GE-3: The proposed project would be located on expansive soils but would not create substantial risk to life or property with implementation of standard regulatory measures. (*Less than Significant*)

In general, construction is expected to occur over fill. Overall, the fill is not expansive, except where Bay Mud was mixed in with the fill; in this case, it is highly expansive but was not encountered near the

ground surface.[52] The fill is likely underlain by up to about soft to medium stiff, compressible, marine clay, known as Bay Mud. The Bay Mud is highly expansive.

Detailed geotechnical investigations would be performed for all parcels in the project site to evaluate site-specific subsurface conditions. The results of the field exploration would be used to develop design-level recommendations for use in the design of proposed improvements. The investigation would determine the presence of fill and expansive soil, the presence and thickness of Bay Mud, and the strength of the alluvial soils below the Bay Mud; estimate total and differential settlements from static loads and seismically induced settlements; evaluate potential variations of near-surface soil characteristics beneath proposed improvements; and provide design-level geotechnical recommendations.

Therefore, in compliance with the California Building Code as adopted by reference under the South San Francisco Building Code, including completion of a detailed geotechnical investigation, the proposed project under either Phase 1 or project buildout would have a less-than-significant impact related to expansive soils. No mitigation is needed.

Impact GE-4: The proposed project would be located on a geologic unit or soil that is unstable, but would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse with implementation of standard regulatory measures. (*Less than Significant*)

As discussed in Impact GE-1, above, the project site is underlain by fill and Bay Mud. Based on the geotechnical investigation, the fill at nearby sites is variable, consisting of clay, silt, sand, gravel, organics, debris, and rubble. The fill conditions vary from soft to very stiff and loose to dense. The fill is undocumented and may not have been compacted when placed. For these reasons, the project site may include unstable subsurface conditions.

The project site is located in a low-lying area with relatively flat topography with slopes less than 10 percent which are below typical landslide hazard conditions. The nearest area containing slopes over 15 percent are located north of East Grand Avenue surrounding the San Bruno Point hilltop, but the City has not otherwise provided any specific designation of landslide hazard zones in this area.[53] Landslide research conducted by USGS in the Bay Area indicates that the project site is considered flat land and the San Bruno Point area contains few, if any, mapped historical landslides.[54] Furthermore, the USGS mapping indicates the project site is not in an area likely to produce debris flows or mudslides.[55] Therefore, the proposed project would not expose people or structures to adverse effects associated with landslides or mudslides. No mitigation is necessary.

As discussed in Impact GE-1, above, the project site is in an area subject to potential lateral spreading, subsidence, and liquefaction. Previous studies at nearby sites concluded that the potential for lateral

[52] *Preliminary Geotechnical Evaluation*, p. 2.
[53] Ibid, Figure 8-1, p. 8-3.
[54] U.S. Geological Survey, 1997. Summary Distribution of Slides and Earth Flows in San Mateo County, California (Open File Report 97-745). Available online at: https://pubs.usgs.gov/of/1997/of97-745/sm-sef.pdf. Accessed June 22, 2018.
[55] U.S. Geological Survey, 1997. Map Showing Principal Debris-Flow Source Areas in San Mateo County, California (Open File Report 97-745). Available online at: https://pubs.usgs.gov/of/1997/of97-745/sm-df.pdf. Accessed June 22, 2018.

spreading is low; however, a more thorough evaluation would be made during the final geotechnical investigation. Due to the shallow depth to groundwater, the variability of the fill, and the presence of medium dense sand below the Bay Mud, an evaluation of liquefaction potential and seismically induced settlement in accordance with State of California Special Publication 117, Guidelines for Evaluation and Mitigation of Seismic Hazards in California (SP-117) is recommended in the *Preliminary Geotechnical Evaluation* as part of a final geotechnical investigation that includes drilled borings and/or core penetration test.[56]

Due to the heterogeneity of the subsurface conditions, the *Preliminary Geotechnical Evaluation* recommends that development on the 201 Haskins Way parcel under the proposed project be designed to provide uniform foundation support to limit the differential settlements of the proposed structures. Structures would be required to be supported in the soils and bedrock below fill and Bay Mud through implementation of deep auger cast piles or shafts. Floor slabs in areas requiring deep foundations would need to be structurally supported. Further geotechnical investigation of the Phase 2 development would be required. It is assumed that geotechnical conditions in the Phase 2 area are similar to those discussed in the 201 Haskins Way *Preliminary Geotechnical Evaluation*, and would involve similar structural design recommendations.

Detailed geotechnical investigation would be performed for all parcels in the project site to develop design level recommendations in conformity with Chapter 18 of the California Building Code. This would include conformance to soils investigation and site preparation requirements for receiving a foundation (soil load-bearing capacity and protection from water intrusion) and foundation design types (including deep foundations as specified in Section 1810 of the California Building Code). This investigation would inform the overall structural design as specified in Chapter 16 of the California Building Code, specifically the required minimum design loads, risks, and methodologies under site-specific conditions and events such as wind, rain, flood, and earthquakes. Therefore, with compliance to standard regulatory requirements, including completion of a detailed geotechnical investigation, as required by the California Building Code as adopted by reference under the South San Francisco Building Code, the proposed project under either Phase 1 or project buildout would have a less-than-significant impact related unstable soils. No mitigation is needed.

Impact C-GE-1: The proposed project would not result in a cumulatively considerable contribution to a significant adverse cumulative impact on geology and soils. (*Less than Significant*)

Geologic and soils impacts are generally site-specific and localized. Past, present, and reasonably foreseeable probable projects are identified in Section 4.1, Approach to Environmental Analysis, pp. 4.1.4-4.1.9, and shown on Figure 4.1.1: Location of Baseline and Cumulative Projects, p. 4.1.5. The cumulative projects could require various levels of excavation or cut-and-fill, which would affect local geologic conditions. However, the cumulative projects would also be subject to the regulatory requirements for geotechnical review and would be required to comply with the local and state building codes. In addition, site-specific geotechnical review would reduce each project's impacts associated with

[56] California Geological Survey, 2008. Special Publication 117A – Guidelines for Evaluating and Mitigating Seismic Hazards in California. Available online at: http://www.conservation.ca.gov/cgs/information/publications/sp/Documents/sp117.pdf. Accessed May 10, 2018.

geology and seismic safety, and site-specific design features would be developed, when necessary, based on site conditions. Similar to the proposed project, cumulative projects in the project site vicinity would be subject to these mandatory seismic safety standards and design review procedures, if applicable. Compliance with these standards and procedures would ensure that the effects from nearby cumulative projects would be less than significant.

4.11.4 Hazards and Hazardous Materials

REGULATORY FRAMEWORK

Federal

Local and state agencies often have either parallel or more stringent rules than federal agencies. In most cases, to the extent that state law is more stringent than federal law, it applies in addition to federal law and enforcement of these laws is typically the responsibility of the state, or of a local agency to which enforcement powers are delegated.

PCB Regulations

Under the Toxic Substance Control Act, the U.S. Environmental Protection Agency (U.S. EPA) began to impose bans on polychlorinated biphenyl (PCB) manufacturing and sales and on most PCB uses in 1978;[57] however, some electrical transformers still in operation today use oils that contain PCBs.[58] Title 40 of the Code of Federal Regulations (CFR), Section 761.60, regulates the disposal of transformers. Title 40 of the CFR, Section 761.61, governs the management of PCB waste generated as the result of PCB spills and associated cleanup activities (e.g., contaminated environmental media, rags, debris). The U.S. EPA provides guidance for compliance with these regulations in their publication "Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act."[59] Any wastes produced as part of the cleanup must be disposed of in accordance with the requirements of Section 761.61.

State

Hazardous Waste Classification Criteria

In accordance with Title 22 of the CCR, excavated soil would be classified as a hazardous waste for off-site disposal purposes if it exhibits the characteristics of ignitability, corrosivity, reactivity, or toxicity.[60]

[57] U.S. Environmental Protection Agency, 2018. Summary of the Toxic Substances Control Act (website). Available online at: https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act. Accessed May 10, 2018.
[58] U.S. Environmental Protection Agency, 2018. Learn about Polychlorinated Biphenyls (PCBs) (website). Available online at: https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs. Accessed May 10, 2018.
[59] U.S. EPA, 2005. Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act (TSCA). Available online at: https://www.epa.gov/sites/production/files/2015-08/documents/pcb-guid3-06.pdf. Accessed May 10, 2018.
[60] California Code of Regulations Section 66261.20 *et seq*.

A waste is considered toxic if it contains certain substances at concentrations that meet Title 22 thresholds.[61]

Asbestos-Containing Materials

Asbestos wastes transported off-site are considered a hazardous waste in accordance with Title 22 of the CCR, Division 4.5, Article 3 Section 66261.24.[62] Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.[63] The Bay Area Air Quality Management District (BAAQMD) is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and implements the California regulatory requirements through Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). Rule 11, Regulation 2 requires a survey of any building planned for demolition to identify asbestos-containing materials that may be present. If asbestos-containing materials are identified, the BAAQMD must be notified, and the materials must be removed by an appropriately licensed contractor prior to demolition activities.[64] During removal activities, the contractor must implement controls to ensure that there are no visible asbestos emissions to the outside air.

Lead-Based Paint

Demolition debris that is painted with lead-based paint that is intact may be considered hazardous waste if lead concentrations exceed thresholds under Title 22 of the CCR, Division 4.5, Article 3 Section 66261.24.[65] In most cases, the lead concentration from the intact paint alone would not exceed hazardous lead levels for both the item and the intact paint; therefore, most materials with intact lead-based paint can be disposed of through normal practices at a regularly licensed waste facility.[66] If the paint has been separated from the building material (e.g., chemically or physically removed), then the paint waste should be evaluated independently from the building material to determine if it is hazardous and to identify the proper management practice.

[61] California Code of Regulations Section 66261.24.

[62] California Department of Toxic Substances Control, 2010. Official California Code of Regulations (CCR), Title 22, Division 4.5. Available online at: http://www.dtsc.ca.gov/LawsRegsPolicies/Title22/. Accessed May 10, 2018.

[63] California Health and Safety Code, Section 19827.5. Available online at: http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=19827.5. Accessed May 14, 2018.

[64] Bay Area Air Quality Management District, 2016. Compliance Advisory, Asbestos Notifications, April 7, 2016. Available online at: http://www.baaqmd.gov/~/media/files/compliance-and-enforcement/advisories/asbestos-renovation/adv_040716_notification_advisory_2-pdf.pdf?la=en. Accessed May 10, 2018.

[65] California Department of Toxic Substances Control, 2010. Official California Code of Regulations (CCR), Title 22, Division 4.5. Available online at: http://www.dtsc.ca.gov/LawsRegsPolicies/Title22/. Accessed May 10, 2018.

[66] U.S. Environmental Protection Agency, 1995. *Federal Register* Volume 60, No. 175. Available online at: https://www.gpo.gov/fdsys/pkg/FR-1995-09-11/pdf/95-22497.pdf. Accessed May 10, 2018.

PCBs

In California, PCB wastes are regulated as hazardous waste under Title 22 of the CCR, Division 4.5, Chapter 11, Section 66261.24. Most fluorescent light ballasts manufactured before 1978 contain PCBs in their capacitor and potting material. California requirements for management of fluorescent lights containing PCBs are specified in Title 22 of the CCR, Division 4.5, Chapter 42. In accordance with 40 CFR 761.60, fluorescent lights with PCBs in their potting material must be disposed of in an approved landfill or decontaminated.

Between 1979 and the early 1990s, bis(2-ethylhexyl) phthalate (DEHP) was used in place of PCB as a dielectric fluid in some fluorescent light ballasts and other electrical equipment.[67] DEHP is classified as a probable human carcinogen by the U.S. Department of Health and Human Services and as a hazardous substance by the U.S. EPA in accordance with Title 40 of the CFR, Chapter I, Subchapter I, Part 261, Subpart D, Section 261.33. Because of this, ballasts containing DEHP must be legally disposed of or recycled and are commonly handled in the same manner as PCB ballasts.

Disposal of Mercury-Containing Equipment

Spent fluorescent lamps and tubes commonly contain mercury vapors.[68] These, and electrical switches that contain mercury, are considered a hazardous waste in California under Title 22 of the CCR, Division 4.5, Chapter 11, Section 66261.50. Because they are considered a hazardous waste, all fluorescent lamps and mercury-containing switches must be recycled or taken to a universal waste handler.[69]

Naturally Occurring Asbestos

Asbestos-containing material is defined in 17 CCR Section 93105(h)(9) as any material that has an asbestos content of 0.25 percent or greater. In 2001, the California Air Resources Board adopted the Asbestos Airborne Toxic Control Measures for Construction, Grading, Quarrying, and Surface Mining Operations in areas of serpentine and other ultramafic rocks.[70] The Airborne Toxic Control Measures protects public health and the environment by requiring the use of best available dust mitigation measures to prevent the offsite migration of asbestos-containing dust from road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas of ultramafic rock, serpentine, or naturally occurring asbestos. The BAAQMD implements the regulation.

Hazardous Waste Tracking and Transportation

The "Generator" of hazardous waste is defined in 40 CFR 260.10 as the person or entity whose action produces a waste or causes a hazardous waste to become subject to regulation. Generators of hazardous

[67] DuPont Engineering, 2007. PCB Pollutant Minimization Plan Workshop – Managing Polychlorinated Biphenyls (PCBs) From Electrical Equipment. Available online at: https://www.nj.gov/drbc/library/documents/PMPWorkshop_0107/dupont_electrical.pdf. Accessed May 10, 2018.

[68] U.S. Environmental Protection Agency, 2007. Fluorescent Lamp Disposal and Recycling in EPA Region 2. Available online at: https://www3.epa.gov/region02/waste/spent-lamp.pdf. Accessed May 10, 2018.

[69] U.S. Environmental Protection Agency, 2018. Frequent Questions About Universal Waste (website). Available online at: https://www.epa.gov/hw/frequent-questions-about-universal-waste. Accessed May 10, 2018.

[70] California Code of Regulations, Section 93105

wastes are subject to the regulatory requirements of the California Department of Toxic Substances Control. In accordance with 22 CCR Division 4.5, Chapter 12, the generator of hazardous waste must have a Hazardous Waste Generator Number assigned by and registered with the California Department of Toxic Substances Control.

Regulatory requirements for the transport of hazardous wastes in California are specified in 22 CCR Division 4.5, Chapters 13 and 29. In accordance with these regulations, all hazardous waste transporters must have identification numbers. Hazardous waste transporters must comply with the California Vehicle Code, California Highway Patrol regulations (contained in 13 CCR); the California State Fire Marshal regulations (contained in 19 CCR); U.S. Department of Transportation regulations (contained in 49 CFR); and U.S. EPA regulations (contained in 40 CFR).

A hazardous waste manifest is required for transport of hazardous wastes.[71] The hazardous waste manifest documents the legal transport and disposal of the waste, and is signed by the generator and transporter(s) of the waste as well as the disposal facility. California regulations require specific cleanup actions that must be taken by a hazardous waste transporter in the event of a discharge or spill, and for the safe packaging and transport of hazardous wastes.[72]

Emergency Plan

The *State California Emergency Plan* describes how response to natural or human-caused emergencies occurs in California.[73] The plan is a requirement of the California Emergency Services Act, and describes methods for conducting emergency operations; the process for rendering mutual aid; emergency services of government agencies; how resources are mobilized; how the public is informed; how continuity of government is maintained during an emergency; hazard mitigation actions to reduce risk; and preparedness and recovery from disaster.

Regional

Comprehensive Airport Land Use Compatibility Plan

State law requires Airport Land Use Commissions (ALUCs) to prepare and adopt an Airport Land Use Compatibility Plan (ALUCP) for each public use and military airport within their jurisdiction. Further, ALUCs are required to review the plans, regulations, and other actions of local agencies and airport operators within each Commission's jurisdiction. SFO is located 1 mile south of the project site. Based on state law and guidance provided in the *California Airport Land Use Planning Handbook*, the *2012 Comprehensive Airport Land Use Compatibility Plan* prepared for SFO (2012 SFO ALUCP)[74] has four primary areas of concern:

[71] California Code of Regulations, Section 66263.20

[72] California Code of Regulations, Section 66263.30

[73] California Governor's Office of Emergency Services, 2017. State of California Emergency Plan & Emergency Support Functions. Available online at: http://www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/state-of-california-emergency-plan-emergency-support-functions. Accessed June 22, 2018.

[74] City/County Association of Governments of San Mateo County, 2012. Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (20120 SFO ALUCP). Available online at: http://ccag.ca.gov/plansreportslibrary/airport-land-use/. Accessed May 10, 2018.

- **Aircraft Noise Impact Reduction** – To reduce the potential number of future airport area residents who could be exposed to noise impacts from airport and aircraft operations.
- **Safety of Persons on the Ground and in Aircraft in Flight** – To minimize the potential number of future residents and land use occupants exposed to hazards related to aircraft operations and accidents.
- **Height Restrictions/Airspace Protection** – To protect the navigable airspace around the Airport for the safe and efficient operation of aircraft in flight.
- **Overflight Notification** – To establish an area within which aircraft flights to and from the Airport occur frequently enough and at a low enough altitude to be noticeable by sensitive residents. Within this area, real estate disclosure notices shall be required, pursuant to state law.

The 2012 SFO ALUCP contains airport/land use compatibility policies and criteria that apply to all land uses except those considered as existing land uses. ALUCs were given authority to: (1) specify how land near airports is to be used, based on safety and noise compatibility considerations; (2) develop height restrictions for new development to protect airspace in the vicinity of the airport; and (3) establish construction standards for new buildings near airports, including sound insulation requirements.

After an ALUC has adopted its ALUCP, affected local governments must update their general plans, specific plans, and land use regulations to be consistent with the ALUCP. Even if the local government has amended its plans to be consistent with the ALUCP, it must still submit proposed new and amended general plans, specific plans, land use ordinances (including rezoning), regulations, and facility master plans to the ALUC for review. The City/County Association of Governments of San Mateo County (C/CAG) ALUC reviews local land use policy actions and administrates consistency review and submits recommendations to the C/CAG Commission.

As identified in the 2012 SFO ALUCP, the project site is located within the Federal Aviation Regulation Part 77 sphere of influence, which is the boundary established to regulate obstructions to airspace navigation, including building heights.[75]

County of San Mateo Emergency Operations Plan

In 2011, the County of San Mateo updated its Emergency Operations Plan (EOP). The EOP provides an overview of the County's actions during a response to an emergency. Additional appendices and annexes to this plan describe in more detail response actions and hazards specific to the County. As such, the EOP is a living document with existing departmental plans and hazard specific annexes remaining in effect until the updated appendices and annexes are completed. The EOP describes the Emergency Operations Center's role and the coordination that occurs between the county, cities, towns, and other agencies in San Mateo County in an emergency.

[75] 2012 SFO ALUCP, Exhibit IV-2, p. IV-5.

Local

City of South San Francisco General Plan

The General Plan provides a vision for the long-range physical and economic development for the City, provides strategies and specific implementing actions, and establishes a basis for judging whether specific development proposals and public projects are consistent with the City's plans and policy standards. The General Plan contains a Land Use Element, Planning Sub-Areas Element, and Health and Safety Element that provide policies related to hazards and hazardous materials as described below.

Policy 2-I-22: Require that all future development conforms with the relevant height, aircraft noise, and safety policies and compatibility criteria contained in the most recently adopted version of the San Mateo County Comprehensive Airport Land Use Plan for the environs of San Francisco International Airport. (Amended by City Council Resolution 19-2010, Adopted February 10, 2010)

Policy 3.5-I-4: Unless otherwise stipulated in a specific plan, allow building heights in the East of 101 area to the maximum limits permissible under Federal Aviation Regulations Part 77.

Policy 8.3-G-1: Reduce the generation of solid waste, including hazardous waste, and recycle those materials that are used, to slow the filling of local and regional landfills, in accord with the California Integrated Waste Management Act of 1989.

Policy 8.3-G-12: Minimize the risk to life and property from the generation, storage, and transportation of hazardous materials and waste in South San Francisco. Comply with all applicable regulations and provisions for the storage, use and handling of hazardous substances as established by federal (EPA), State (DTSC, RWQCB, Cal OSHA, Cal EPA), and local (County of San Mateo, City of South San Francisco) regulations.

Policy 8.4-G-1: Minimize the risk to life and property from fire hazards in South San Francisco.

Policy 8.4-I-4: Require site design features, fire retardant building materials, and adequate access as conditions for approval of development or improvements to reduce the risk of fire within the City.

Policy 8.6-G-1: Use the City’s Emergency Response Plan as the guide for emergency management in South San Francisco.

Policy 8.7-G-1: Minimize the risk of life and property from aircraft accidents in South San Francisco.

Policy 8.7-I-1: Do not permit land uses that pose potential hazards to air navigation in the vicinity of SFO. These land uses include the following:

- Any use that would direct a steady or flashing light of white, red, green or amber color towards an aircraft engaged in an initial straight climb following takeoff or toward a landing, other than FAA-approved navigational lights;
- Any use that would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing;
- Any use that would generate smoke or rising columns of air;
- Any use that would attract large concentrations of birds within approach and climbout areas; and
- Any use that would engage electrical interference that may interfere with aircraft communications or aircraft instrumentation.

The Health and Safety Element also includes polices applicable to fire hazards in locations designated as "fire hazard management units" for areas that need vegetation management or other measures to reduce wildland fire risk. The project site, and the East of 101 Area in its entirety, is not located within a fire hazard management unit, and policies related to wildland fire hazards are not applicable to the proposed project.[76]

City of South San Francisco Fire Department Emergency Planning

The South San Francisco Fire Department (SSFFD) manages and maintains emergency plans and training of City staff and community members. Through public education events and training sessions, the SSFFD focuses on activities that will prepare the community to take care of itself in the period immediately following a local disaster. For example, the SSFFD administers the Community Emergency Response Team program to educate volunteers about disaster preparedness for the hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. The SSFFD provides general information about how the community can better prepare for emergencies such as earthquakes, power outages, floods, wildland fires, and winter storms.

SIGNIFICANCE CRITERIA

Based on the standards identified in CEQA Guidelines Appendix G, a hazards and hazardous materials impact is considered significant if the project would:

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, 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 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;

f. for a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;

g. impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or

h. expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

[76] City of South San Francisco, 1999. *City of South San Francisco General Plan*, Chapter 8, Health and Safety, Figure 8, p. 8-21.

APPROACH TO ANALYSIS

Information in this section is based on the *Phase I Environmental Site Assessment*,[77] Future Environmental Costs Memorandum,[78] and *Building Materials Survey*[79] of the 201 Haskins Way site completed for the project by Ramboll Environ. Review of the California Department of Toxic Substances Control's data management system, EnviroStor, was also considered in evaluating impacts.

There are no private airports within the vicinity of the proposed project. The project site is in an urbanized area several miles removed from areas in the coastal mountains of San Mateo County that are the nearest open spaces subject to wildland fire. Therefore, topics (f) and (h) are not applicable and are not further discussed below.

IMPACT EVALUATION

Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (*Less than Significant*)

Construction and operation under the proposed project during either Phase 1 or project buildout are not expected to create a significant hazard through the routine transport, use, or disposal of hazardous materials because the use or disposal of any hazardous materials are required to comply with applicable regulations as discussed above. State and federal laws require proper handling, use, and disposal of hazardous materials.

The proposed project would include operation of office/R&D uses. Depending upon the nature of research planned at the proposed facilities, for which detailed information has not yet been provided, there are likely to be biomedical hazards and chemical hazards. Future tenants at the project site are required to check the state and federal lists of regulated substances available from the San Mateo County Environmental Health Department (SMCEHD). Chemicals on the list pose a major threat to public health and safety or the environment because they are highly toxic, flammable, or explosive. If handling of hazardous materials would be required during the R&D process, businesses are required to determine which list to use in consultation with the SMCEHD and to apply for all applicable permits and comply with all applicable state and local regulations. Further, in the event that hazardous materials would be used during R&D activities, registration in the San Mateo County Environmental Health Hazardous Material Business Plan Program would be required to ensure safe and responsible handling of hazardous materials by site tenants.

The City requires that building spaces be designed to handle the intended office use, with sprinklers, alarms, vents, and secondary containment structures, in accordance with the guidelines laid out in the

[77] Ramboll Environ, 2017. *Phase 1 Environmental Site Assessment, 201 Haskins Way, South San Francisco, California*. This document is available as part of the Administrative Record of this EIR.
[78] Ramboll Environ, 2017. Future Environmental Costs Memorandum. This document is available as part of the Administrative Record of this EIR.
[79] Ramboll Environ, 2017. *Building Materials Survey, 201 Haskins Way, South San Francisco, California*. This document is available as part of the Administrative Record of this EIR.

City's Fire Code. Compliance with state and local regulations would ensure that buildings are equipped with safety measures including sprinklers, alarms, etc., to minimize potential impacts of the presence of hazardous materials. The City further requires that upon completion of each proposed project building, occupancy is not allowed until a final inspection is made by the SSFFD for conformance of all building systems with the Fire Code and National Fire Protection Association requirements. The inspection includes a review of the emergency evacuation plans. Finally, compliance with the California Department of Transportation regulations would ensure that all necessary safety precautions would be taken during transport of hazardous materials during all phases of the project. Therefore, the proposed project would have a less-than-significant impact related to routine transport, use, or disposal of hazardous materials. No mitigation is necessary.

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*)

During operation of the proposed project under Phase 1 or project buildout, the proposed office/R&D uses would not involve substantial industrial use of hazardous materials that could be released into the environment. Operation of the proposed project may involve the use of regulated hazardous materials related to biomedical R&D in addition to common commercial products for cleaning and maintenance purposes. As described in Impact HZ-1, the proposed project would not involve the routine handling of substantial quantities of hazardous materials in such a way that substantial hazards associated with the accidental release of hazardous materials into the environment would occur. Impact HZ-2 focuses on known subsurface site conditions, and discusses the potential for encountering contaminated soils and groundwater during construction of Phase 1 and project buildout. This section also discusses the potential for existing on-site buildings to contain potentially hazardous building materials and the potential release of hazardous materials during demolition of these buildings.

The project site is located on historic Bay tidelands subject to fill and development in the post-war industrial period. The Bay tidelands are underlain by slope debris deposits and rocks of the Franciscan Complex, which crop out in the northern half of the project area, including 101, 151 and the northern portion of 201 Haskins Way; 410 and 430 East Grand Avenue; and the northern portion of 451 East Jamie Court. The project site does not overlay naturally occurring asbestos, such as that found in serpentinite formations. The southern portion of the site was filled in the 1970s with unspecified imported material. The material has not been specifically evaluated for its contents, and constituents present may include materials common in fill such as metals, petroleum hydrocarbons, and polycyclic aromatic hydrocarbons.

Phase 1 Development

For the purposes of this EIR, this analysis discusses the results of the preliminary geotechnical evaluation for the 201 Haskins Way parcel. A detailed analysis of conditions on the 400-450 East Jamie Court project has not been performed for this project, although recent evaluation of site conditions was performed under previous development of the project.

201 Haskins Way

The approximately 6.45-acre 201 Haskins Way parcel is improved with an approximately 24,075-sq.-ft. building. The southern half of the site was originally part of the Bay and was filled with imported material from unknown sources during the 1960s and 1970s.[80] Historic site development included at least one structure as early as 1915, and additional structures may have been present in the 1940s. By 1977, historical structures were demolished and replaced with the current building.

FORMER UNDERGROUND STORAGE TANKS

According to prior environmental reports evaluated in the *Phase 1 Environmental Site Assessment*, three underground storage tanks (USTs) were removed from the site including a 2,000-gallon waste oil UST and two 10,000-gallon diesel USTs.[81] Groundwater sampling in 1987 identified low concentrations of volatile organic compounds (VOCs) including chlorinated solvents 1,1-dichloroethane, trichloroethene, benzene and toluene. The waste oil was removed in 1987, and the SMCEHD issued closure (No Further Action determination) for the site, acknowledging that limited hazardous materials remain in soil and groundwater beneath the site and residual soil contamination occurs deeper than 10 feet below the ground surface.

SOILS AND GEOLOGY

The 201 Haskins Way parcel is underlain by slope debris deposits and rocks of the Franciscan Complex, which crop out in the northern half of the parcel. The southern portion of the site was filled in the 1970s with unspecified imported material. The material has not been specifically evaluated for its contents, and constituents present may include materials common in fill such as metals, petroleum hydrocarbons and polycyclic aromatic hydrocarbons.

ASBESTOS, LEAD, AND PCBS

The existing building includes one asbestos-containing material (vinyl sheet flooring) and several coatings of lead-based paint.[82] The building also includes mercury-containing lamps, and light ballasts that are suspected to contain PCBs.

400-450 East Jamie Court

The 400-450 East Jamie Court parcel was developed in the early 2000s and included the construction of two office/R&D buildings, a subsurface parking structure, and surface parking. Although previous investigation of this parcel indicated several metals were present in the soils, the most recent soil samples collected were found to be within naturally occurring background concentration levels.[83] Groundwater sampling did not detect metals, VOCs, or petroleum hydrocarbons at or above any level of regulatory limit. It is assumed that any environmental hazards from historic uses were handled appropriately in

[80] *Phase 1 Environmental Site Assessment*, p. 1.
[81] *Phase 1 Environmental Site Assessment*, p. 25.
[82] Ramboll Environ, 2017. *Building Materials Survey*, Attachment A, p. 6.
[83] City of South San Francisco, 2002. *Initial Study and Mitigated Negative Declaration of the East Jamie Court Project*, pp. 42–43.

compliance with all applicable regulations if any were encountered when the parcel was developed with the current 400 and 450 East Jamie Court office buildings and basement parking garage.

Project Buildout

In addition to the existing subsurface conditions of the 400-450 East Jamie Court parcel as described above, five of the six additional parcels included in the Phase 2 area are currently occupied by five one- to two-story buildings constructed in the 1980s and occupied by light industrial uses, including a kiteboarding equipment distribution warehouse, a packaging manufacturer, a van rental service, audio and visual equipment rental services, and a janitorial equipment supplier. The sixth parcel is a surface parking lot (Assessor's Parcel Number 015-102-290) containing 44 parking spaces. These sites are north of the presumed fill line established on 201 Haskins Way and are assumed to have been constructed over Bay Mud, although historic land uses on these sites are unknown.

Since the existing buildings in the Phase 2 area were constructed after 1980, after building materials such as asbestos, lead-based paint, and PCBs were banned, it is assumed that hazardous building materials are possible but not likely. Existing subsurface environmental conditions, such as USTs or groundwater VOCs, are unknown. However, it is assumed potential subsurface environmental concerns may be present on one or more of the six parcels, similar to conditions found on the 201 Haskins Way parcel described above.

Discussion

Construction activities have the potential to result in the release of contaminated soils and groundwater. On the project site, groundwater depths ranging from approximately 8 to 15 feet below ground surface have been encountered, generally shallowest in the southern areas of the site.

During Phase 1 development, to address existing environmental issues on the 201 Haskins Way site, soil excavation would generally occur from the upper approximately 2 feet beneath the proposed future building footprints. Excavation may also include removal of the former UST hot spot area to a depth of 13 feet below ground surface to address the residual soil contaminants greater than 10 feet below ground surface. A *Phase I Environmental Site Assessment* of the additional six Phase 2 area parcels has not been conducted. However, it is assumed that similar environmental conditions related to subsurface contaminated soils may be present. With implementation of standard regulatory compliance measures, potentially contaminated soils and groundwater would be handled, transported, and disposed of in accordance with applicable local, state, and federal regulations and requirements. This impact is less than significant.

Demolition of the existing building would have the potential to expose workers and surrounding receptors to asbestos, lead, mercury, and PCBs. Handling of PCBs is regulated under 24 CFR and handling of PCBs, asbestos, lead, and mercury is regulated under 22 CCR. Project applicants are required to study existing building materials, and implement handling and disposal controls. With compliance with standard local, state, and federal regulatory requirements, impacts to the accidental release of hazardous materials would be less than significant. No mitigation is required.

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

No schools are located within 0.25 mile of the project site. However, the proposed project is within 0.25 mile of one existing childcare center, the Early Years preschool located at 371 Allerton Avenue. The project site is also within 0.25 mile of the Genentech Childcare Facility at 342 Allerton Avenue, which is currently under construction as described in Section 4.1, Approach to Environmental Analysis under "Approach to Baseline Setting", on p. 4.1.4-4.1.7. However, as discussed under Impact HZ-1 and Impact HZ-2, the proposed project would be required to comply with standard local, state, and federal regulatory requirements associated with the handling of hazardous materials. The proposed project would not involve any uses that would involve hazardous emissions that are typical of heavy industrial uses. Therefore, this impact would be less than significant. No mitigation measures are necessary.

Impact HZ-4: The proposed project is not 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 not create a significant hazard to the public or the environment with compliance of applicable regulations. (*Less than Significant*)

The project site is located near multiple closed cleanup sites included on EnviroStor, a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[84] No active cleanup sites are located in or within 0.25 mile of the project site. Nonetheless, as described in Impact HZ-2, above, the exposure of known or unknown subsurface conditions could occur, but with implementation of standard local, state, and federal regulatory requirements that would ensure the proper handling of potentially hazardous subsurface soils and groundwater, this impact would be less than significant. No mitigation is required.

Impact HZ-5: The proposed project is located within an airport land use plan, but would not result in a safety hazard for people residing or working in the project area. (*Less than Significant*)

The closest airport is SFO, approximately 1 mile south of the project site. The project site is within the boundary of the ALUCP. Because the proposed buildings under either the Phase 1 development or project buildout would have an area of greater than 100,000 sf and would require a rezoning of the project site, the proposed project is subject to advisory review by the ALUC. With the proposed buildings at a maximum height of approximately 99 feet, the proposed project would not exceed the 2012 SFO ALUCP height limit of 161 feet. Due to proximity to the airport, however, the project would be required to submit a Notification of Proposed Construction or Alteration under 14 CFR Part 77 to allow the Federal Aviation Administration to chart the new structures in their database and provide a formal determination of the effect of the proposed structures on navigable airspace. Overall, the proposed project would be compatible with the ALUCP and the proposed structures would remain below the established height limits of the project site, and would not pose a safety hazard for people working in the project area. Therefore, this impact would be less than significant. No mitigation is necessary.

[84] California Department of Toxic Substances Control, 2018. EnviroStor. Available online at: https://www.envirostor.dtsc.ca.gov/public/. Accessed May 9, 2018.

Impact HZ-6: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (*No Impact*)

The proposed project would not alter traffic patterns or make substantial changes to the existing roadways other than relocating or removing driveway entrances into the project site, and would not impair implementation of the State Emergency Plan or the County Emergency Operations Plan. Therefore, no impact would occur. No mitigation is necessary.

Impact C-HZ-1: The proposed project would not result in a cumulatively considerable contribution to a significant adverse cumulative impact related to hazards and hazardous materials. (*Less than Significant*)

Environmental impacts related to hazards and hazardous materials are generally site-specific. Nearby cumulative development projects would be subject to the same fire safety and hazardous materials handling and disposal regulations applicable to the proposed project or project buildout. Although the proposed project or project buildout could result in potential impacts related to conducting construction activities within potentially contaminated soil and demolishing and reusing structures that contain hazardous building materials, conformance with applicable regulatory requirements would ensure less-than-significant impacts. Similarly, operation of the proposed project combined with operation of nearby cumulative projects would include several new office/R&D uses from which there are likely to be biological hazards and chemical hazards. Future tenants at each site are required to check the state and federal lists of regulated substances available from SMCEHD, and registration in the San Mateo County Environmental Health Hazardous Material Business Plan Program would be required to ensure safe and responsible handling of hazardous materials by site tenants. Furthermore, each project would be required to comply with local and state fire safety codes and inspections, and would involve a review of emergency evacuation plans. Finally, compliance with California Department of Transportation regulations would ensure that all necessary safety precautions would be taken during transport of hazardous materials for each project. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable probable future projects in the project vicinity to create a significant cumulative impact related to hazards and hazardous materials. No mitigation is required.

4.11.5 Mineral Resources

REGULATORY FRAMEWORK

Local

There are no local, state, or federal ordinances or policies related to mineral resources that apply to the project site.

SIGNIFICANCE CRITERIA

Based on CEQA Guidelines Appendix G, the proposed project would have a significant environmental impact related to mineral resources if it would:

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; or

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.

APPROACH TO ANALYSIS

In accordance with the Surface Mining and Reclamation Act of 1975, the project site was evaluated in accordance with the California Department of Conservation, Division of Mines and Geology Mineral Lands Classification system.[85]

IMPACT EVALUATION

Impact ME-1: The proposed project would not have a significant adverse impact on the availability of a known mineral resource and/or a locally important mineral resource recovery site. (*No Impact*)

The project site has historically been developed and is located in an urbanized area of South San Francisco. The project site is within mineral lands classification area Mineral Resource Zone 4 (MRZ-4) (areas where available information is inadequate for assignment to any other zone).[86] Thus, the site is not a designated area of significant mineral deposits. The project site has not been delineated as a locally important mineral recovery site in the General Plan, on any specific plan, or on any other land use plan. There are no mining activities on the project site, and no mining activities are known to have occurred there. In addition, on portions of the project site located over Bay fill, no subsurface mineral resources would be expected.

Therefore, implementation of the proposed project would not impact any known mineral resources on the project site. Additionally, there are no designated mineral resource recovery sites in the project vicinity whose operations or accessibility would be affected by the construction or operation of the proposed project. Therefore, the proposed project would have no impact on known mineral resources or any locally important mineral resource recovery site. No mitigation measures are necessary.

Impact C-ME-1: The proposed project would not result in a cumulatively considerable contribution to a significant adverse cumulative impact on mineral and energy resources. (*Less than Significant*)

There are no known mineral resources or resource recovery sites on the project site or in the vicinity. All land in the East of 101 Area, including the project site, is designated MRZ 4. Therefore, none of the projects identified as cumulative development are likely to have mineral resources or resource recovery sites. There would be no cumulative impact on mineral resources. No mitigation measures are necessary.

[85] California Department of Conservation. Surface Mining and Reclamation Act (SMARA) Mineral Lands Classification (MLC) data portal (website). Available online at: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed May 10, 2018.

[86] California Division of Mines and Geology,1996. Open File Report 96-03. Available online at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_96-03/OFR_96-03_Text.pdf. Accessed April 5, 2018); Special Report 146 Parts I and II, 1986.

4.11.6 Population and Housing

REGULATORY FRAMEWORK

Regional

Plan Bay Area

Plan Bay Area is a long-range (2040) integrated transportation and land use/housing strategy for the San Francisco Bay Area. *Plan Bay Area* marks the nine-county region's first long-range plan to meet the requirements of California's 2008 Senate Bill (SB) 375, which calls on each of the state's 18 metropolitan areas to develop a Sustainable Communities Strategy, an integrated transportation, land use, and housing plan that addresses ways to accommodate future population growth and reduce greenhouse gas emissions from cars and light trucks.[87] *Plan Bay Area* advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. ABAG and the Metropolitan Transportation Commission jointly approved *Plan Bay Area* on July 18, 2013.

Since 2002, the regional population, household, and jobs forecast prepared by ABAG has been "policy-based," meaning that the forecast promotes policy objectives which increase housing development and alternative transportation modes, specifically by increasing the proportion of growth near transit and in existing urban areas. The most recent forecast of population and housing was prepared in ABAG's *Projections 2013*.[88]

Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022

The Regional Housing Need Allocation (RHNA) process is a state mandate designed to ensure that each jurisdiction recognizes its responsibility to provide housing that represents the number of additional residential units that would be required to accommodate the anticipated growth in households; to replace expected demolitions and conversions of housing units to non-housing uses; and to achieve a future vacancy rate that allows for the healthy functioning of the housing market. According to state law, each jurisdiction's housing element must include a strategy to meet its share of the region's housing need. Jurisdictions that do not have capacity to meet their RHNA must rezone sites with appropriate development standards to accommodate the unmet capacity.[89]

The *Regional Housing Need Plan for the San Francisco Bay Area: 2014-2022* was published in July 2013 and covers the planning period from January 31, 2015, to January 31, 2023.[90] The plan determined that the Bay Area must plan for 187,990 new housing units from 2014–2022. The housing allocation is expressed not only as an overall housing production target but also as separate targets for production of

[87] Association of Bay Area Governments, 2017. *Plan Bay Area 2040*. Available online at: http://2040.planbayarea.org/reports. Accessed May 10, 2018.
[88] Association of Bay Area Governments, 2013. Projections 2013 (website). Available online at: https://abag.ca.gov/planning/housing/projections13.html. Accessed May 10, 2018.
[89] California Government Code, Section 65584.
[90] Association of Bay Area Governments, 2013. *Regional Housing Need Plan*, San Francisco Bay Area, 2014-2022. Available online at: https://abag.ca.gov/files/ABAG_Final_RHNA_Publication.pdf. Accessed May 10, 2018.

housing affordable to various household income categories. South San Francisco's share of the regional housing need for 2014 through 2022 is 1,864 new units, with approximately 62 percent to be affordable.[91,92] This represents a little under 1 percent of the regional total over the 2014–2022 time frame and amounts to a Citywide housing production goal of about 233 units per year. South San Francisco's share of the RHNA is incorporated into the City's Housing Element.[93] As required by state law, the Housing Element of the General Plan discusses the City's fair share allocation of regional housing needs by income as projected by ABAG.

Local

City of South San Francisco General Plan

The General Plan includes objectives, policies, and programs related to population, housing, and employment. Several of the priority policies of the General Plan establish the City's interest in affordable housing, economic diversity, and a broad range of employment opportunities for residents. The Economic Development Element of the General Plan provides a policy framework for ensuring South San Francisco's long-term competitiveness in the region. Based on the analysis of recognized business trends and available resources, the Economic Development Element outlines the City's economic development objectives, serves to ensure that economic decision-making is integrated with other aspects of the City's development, and provides a framework for detailed implementing actions.

The Housing Element of the General Plan is the City's primary policy document regarding the development, rehabilitation, and preservation of housing for all economic segments of the population within the City's boundaries. Accordingly, the Housing Element identifies and analyzes the existing and projected housing needs of the City and states goals, policies, quantified objectives, and implementation programs for the preservation, improvement, and development of housing. The Housing Element describes housing needs and identifies the capacity for new housing in the City based on land supply and development capacity. This element focuses on the City's critical need for affordable housing. The Housing Element establishes goals for housing production, as well as policies related to mitigating the impacts of growth on the housing market that are relevant to evaluation of the proposed project. The Housing Element also identifies sites for housing development that are adequate to accommodate the City's allocation of the regional housing need.

As provided in the General Plan, none of the parcels located within the East of 101 Area, including the project site, are designated Residential.[94] Furthermore, Policy 3.5-I-3 of the Planning Sub-Areas Element of the General Plan states, "Do not permit any residential uses in the East of 101 area."[95] This is due to the area's sensitivity both from aircraft noise and safety perspectives.

[91] Ibid, p. 25.
[92] The jurisdictions in Napa, San Mateo, and Solano Counties each chose to form a subregion to carry out the RHNA process. These numbers reflect the final allocations adopted by San Mateo County.
[93] City of South San Francisco, 2015. 2015-2023 Housing Element. Available online at: http://www.ssf.net/home/showdocument?id=476. Accessed May 10, 2018.
[94] City of South San Francisco, 2018. General Plan Map. Available online at: http://www.ssf.net/home/showdocument?id=512. Accessed May 11, 2018.
[95] General Plan, Chapter 3, p. 3-45.

SIGNIFICANCE CRITERIA

According to CEQA Guidelines, Appendix G, impacts on population and housing are considered significant if implementation of the project would:

a. induce substantial 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 housing, necessitating the construction of replacement housing elsewhere; or

c. displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

APPROACH TO ANALYSIS

This topic analyzes the existing uses on the project site and the new uses that would be constructed under the proposed project based on employment estimates by land use provided in the General Plan Land Use Element employment, and the projected employment growth of the City as provided by ABAG *Projections 2013.*

The proposed project would involve a rezoning under Phase 1 and project buildout to allow new office/R&D uses. Development under Phase 2 during project buildout is conceptual at this time and the proposed rezoning would not involve the physical construction removal of existing uses or the physical displacement of employees until such development is pursued by the existing or future property owners. However, for the purposes of conservative analysis, the potential transition from the existing light industrial uses to the proposed office/R&D uses, including prospective changes to employment, is considered below.

IMPACT EVALUATION

Impact PH-1: The proposed project would not induce substantial population growth in an area, either directly or indirectly. ***(Less than Significant)***

The proposed project does not propose any new housing units in either Phase 1 or project buildout and would not directly induce population growth. However, the displacement of existing light industrial uses and employees, and the new employees introduced as a result of new BTP development would, on the whole, increase the number of employees in the City and the East of 101 Area.

The existing light industrial uses support a total of approximately 191 employees who would vacate the project site and be displaced or relocated. The existing project site at 201 Haskins Way is currently vacant, but previously hosted a trucking terminal use with approximately 25 employees.[96] The 400-450

[96] City of South San Francisco, 1999. General Plan Land Use Element, p. 2-34. The General Plan assumes 955 sq. ft. of industrial use per employee, and 450 sq. ft. of office/R&D use per employee. Alexandria Real Estate Equities (ARE) facilitated relocation of the previous trucking facility employees since acquiring that property in early 2018. However, for the purposes of conservative analysis, the EIR assumes that those employees are still on the project site and therefore are included in the number of existing employees on the site.

East Jamie Court site hosts an existing business and technology park use that would remain under both Phase 1 development and project buildout. The five light industrial warehouse and distribution buildings in the Phase 2 area contain approximately 191 existing employees that would be displaced or relocated as a result of project buildout.

The estimated number of jobs provided by the proposed project is summarized in **Table 4.11.1: Proposed Project Employment**. This type of growth is consistent with past office/R&D development in the East of 101 Area, including the Genentech Campus.

According to ABAG *Projections 2013*, the City will have 51,510 jobs in 2020 and 53,790 jobs in 2040, or growth of 2,280 jobs in 20 years.[97] The new 748 employees introduced during Phase 1 and 1,506 during project buildout would represent 33 percent and 66 percent, respectively, of the total projected growth in the City between 2020 and 2020 according to *Projections 2013*. By this measure, the proposed project would contribute a substantial portion of projected job growth in the City. However, the General Plan Land Use Element, as amended in 2011, plans for much higher job growth, and projects an employment of 80,600 jobs in the City by 2035 at buildout of the General Plan, or a growth of 29,090 jobs from the 2020 job count predicted by ABAG.[98] The proposed project employees introduced during Phase 1 and project buildout would represent 2.5 percent and 5.2 percent of the total job growth in the City at General Plan buildout. The proposed project's new employees would not represent a substantial portion of projected employment growth as planned for under the General Plan, and the proposed project would not result in substantial unplanned employment growth.

Table 4.11.1: Proposed Project Employment

	Phase 1 Development	Project Buildout
Existing Industrial Use to be Removed (gsf)	24,075	182,070
Existing Employees[1]	*25*	*191*
Proposed New Business Technology Park Use (gsf)	336,368	677,600
New Employees[2]	*748*	*1,506*
Net Employment	**723**	**1,315**

Notes:

[1] Based on General Plan Land Use Element employment estimates of 955 sq. ft. of industrial use per employee

[2] Based on General Plan Land Use Element employment estimates of 450 sq. ft. of office/R&D use per employee

Source: City of South San Francisco (1999), Alexandria Real Estate Equities (ARE) (2018)

The new 748 employees introduced during Phase 1 and 1,506 during project buildout in the City could result in an increase in demand for housing. The City is primarily built out and any housing constructed within the City limits would most likely be infill housing. The total number of jobs and the total number of residential units make up an area's jobs–housing ratio. The jobs–housing ratio indicates the ability of an area to provide both adequate employment and housing opportunities for its existing and projected population. A balance of jobs and housing can benefit the regional environment by reducing commute

[97] Association of Bay Area Governments, 2013. *Projections 2013*. p. 87.

[98] General Plan, Chapter 2, Table 2.4-4, p. 2-35.

times and distances between residential areas and employment centers. Longer commutes result in increased vehicle trip length, which creates environmental effects such as those associated with transportation, air quality, and noise.

According to ABAG *Projections 2013*, the City will have 23,250 households and 51,510 jobs in 2020, and 27,900 households and 53,790 jobs in 2040.[99] This means that South San Francisco is a job center that imports employees from surrounding communities or, alternatively, that exports housing, and a high level of in-commuting. Housing availability, already projected to be out of balance, would decrease with implementation of Phase 1 development or project buildout. Therefore, the proposed project would result in an increased unfavorable jobs/housing ratio in the City, which would increase over the implementation of Phase 1 and, subsequently, project buildout. However, continued job growth in the City will promote a greater regional balance between jobs and housing. The City is located in Bay Area and is well served by all modes of transit, including shuttles, bus, rail, and air. Therefore, additional potential future employees have access to a variety of transportation options for reaching the project site.

Based on *Projections 2013*, San Mateo County, on average would have a ratio of approximately 1.44 employed residents per household.[100] Accordingly, the proposed project would create the need for up to 519 new units of housing in Phase 1 and 1,046 new units of housing at project buildout. Although it is likely that some of these new employees would be existing residents in South San Francisco or in the region, the potential employment increase resulting from the proposed project would result in indirect growth that may not be accommodated by existing or proposed housing projections for the City. However, the City recognizes that much of its land area, including the East of 101 Area, is not well suited for housing development due to existing land use conflicts, including proximity to SFO and the historic and existing industrial uses of the East of 101 Area, as well as the emerging office/R&D uses in the area.[101] In that light, the City does not have an adopted jobs/housing ratio goal applicable to development within the East of 101 Area, and relies upon the greater Bay Area's regional jobs–housing balance. Nonetheless, on August 22, 2018, the City adopted Chapter 8.69 of the Municipal Code to establish a commercial linkage fee for non-residential development projects (including office, medical, and R&D) to address the effect of increased jobs on the need for affordable housing. Project applications deemed complete prior to January 1, 2019, are not subject to the fee.

The proposed project under both Phase 1 and project buildout would construct new office/R&D uses on an existing infill site in an urbanized area consistent with the General Plan designation for the project site. Development of infrastructure could remove obstacles to population growth if it would allow for development in an area that was not previously considered feasible for development because of infrastructure limitations, which could induce population growth indirectly. The proposed project under Phase 1 and project buildout would not include the extension of area roadways or expansion of infrastructure to areas lacking existing development. No indirect impacts related to population growth as a result of expansion of infrastructure would occur.

[99] Association of Bay Area Governments, 2013. *Projections 2013*. pp. 86–87.
[100] Association of Bay Area Governments, 2013. *Projections 2013*, p. 84. Calculated based on employed residents divided by households in 2020.
[101] General Plan, Chapter 3, Policy 3.5-I-3, p. 3-45.

Overall, the City does not have an adopted jobs–housing ratio, the project would promote a greater regional jobs and housing balance, the project would be an appropriate land use for the project site's limitations consistent with the General Plan designation, and the job growth that would occur under the proposed project would be within the projected employment growth of the City. If the project application is not deemed complete prior to January 1, 2019, the proposed project would not require payment of the commercial linkage fee under Chapter 8.69 of the Municipal Code which would contribute to the development of affordable housing. The impact of the Phase 1 development or project buildout on indirect population growth would be less than significant. No mitigation is required.

Impact PH-2: The proposed project would not displace housing or people, and would not necessitate the construction of replacement housing elsewhere. ***(Less than Significant)***

The project site does not contain any existing residents or housing units. There would be no impact under Phase 1 or project buildout. This topic focuses on the displacement of existing employment on the project site.

The existing light industrial uses support a total of approximately 216 employees who would vacate the project site, and potentially relocate, should prospective construction of the conceptual project build out occur. The existing project site at 201 Haskins Way is currently vacant, but previously hosted a trucking terminal use with approximately 25 employees. The five light industrial warehouse and distribution buildings in the Phase 2 area contain approximately 191 existing employees that would be displaced as a result of project buildout.

The existing light industrial uses include a former trucking terminal use and warehouse/distribution uses. These types of uses are not limited to the East of 101 Area, and existing businesses could relocate to other industrial areas in the City or the Bay Area. The relocation of 25 employees under Phase 1 development or displacement or relocation of up to 191 employees under project buildout is less than 1 percent of the total jobs projected to be available in the City by 2040. The proposed project would not displace housing and would not necessitate the construction of replacement housing, and would not displace substantial numbers of employees. This impact would be less than significant. No mitigation is required.

Impact C-PH-1: The proposed project would not result in a cumulatively considerable contribution to significant cumulative population and housing impacts. (*Less than Significant*)

The proposed project's potential contribution to cumulative impacts on population and housing is evaluated in the context of past, present, and reasonably foreseeable probable future development expected in the City and includes the additional baseline and cumulative projects and plans listed in Section 4.1, Approach to Analysis, pp. 4.1.4-4.4.1.9.

The proposed project does not include the construction of new housing units, and would not directly induce population growth. The *Downtown Station Area Specific Plan* would involve the development of a new mix of uses including 1,400 housing units. None of the remaining foreseeable future projects in the East of 101 Area propose housing, and mainly propose office/R&D and other commercial uses. Although these projects would generate demand for new housing units in the City, this would not constitute direct population growth. According to ABAG *Projections 2013*, the City will have 23,250 households and

51,510 jobs in 2020, and 27,900 households and 53,790 jobs in 2040.[102] The Bay Area is expected to grow from 2,837,680 households in 2020 to 3,308,090 households in 2040, for a total growth of 470,410 households in 20 years.[103] The proposed project does not propose housing, and would not contribute any cumulatively considerable unplanned direct growth as compared to projected Bay Area household growth from the construction of residential units. The cumulative impact related to direct population growth from construction of new housing would not occur. Therefore, the proposed project would not substantially contribute to a significant direct population growth impact. No mitigation is required.

The proposed project, in combination with the foreseeable future projects, would involve construction of new office/R&D uses, commercial uses, or industrial uses. Each of the cumulative projects would involve construction of new office/R&D uses, including the 494 Forbes Boulevard project (326,020 sq. ft.), the 328 Roebling Road project (105,536 sq. ft.), the *Genentech Master Plan Update* (4,300,000 sq. ft), the *Oyster Point Specific Plan Update* project (1,742,000 sq. ft.) and the *Downtown Station Area Specific Plan* (1,185,049 sq. ft.), totaling approximately 7,658,605 sq. ft. of new office/R&D use. The new office/R&D uses would generate approximately 17,019 new office/R&D employees in the City.[104] The proposed project at project buildout would generate 1,506 additional office/R&D employees. The *Downtown Station Area Plan* would also introduce new Business Commercial use (511,780 sq. ft.), Commercial use (268,800 sq. ft.), and Industrial use (21,250 sq. ft.). The *Oyster Point Specific Plan Update* project would also provide 40,000 sq. ft. of Commercial use. These new Business Commercial, Commercial, and Industrial uses would generate approximately 2,075 new employees in the City.[105] Therefore, the proposed project at project buildout, in combination with these reasonably foreseeable future projects would generate a total of approximately 20,600 new employees in the City. As stated above, the City will have 51,510 jobs in 2020 according to ABAG *Projections 2013*, and 80,600 jobs in the City by 2035 at buildout of the General Plan, or a growth of 29,090 jobs. The proposed project at buildout, in combination with these reasonably foreseeable future projects, would represent approximately 70 percent of the total job growth in the City at General Plan buildout. This growth would be within the projected job growth in the City, and would be consistent with the long-term goal of developing and intensifying office/R&D uses in the East of 101 area.

The City is a job center that imports employees from surrounding communities or, alternatively, that exports housing. Housing availability, already projected to be out of balance, would decrease with implementation of the proposed project in combination with reasonably foreseeable future projects, and would result in an increased unfavorable jobs/housing ratio in the City. The proposed project at project buildout would represent approximately 7.3 percent of the total jobs generated under the sum of these cumulative projects.

Based on the San Mateo County average under *Projections 2013* in 2020, the proposed project in combination with the reasonably foreseeable probable future projects, would create the need for

[102] Association of Bay Area Governments, 2013. *Projections 2013*. pp. 86-87.
[103] Association of Bay Area Governments, 2013. *Projections 2013*. p. 21.
[104] Based on 450 sq. ft. of office use per employee.
[105] Based on 400 sq. ft. of commercial use per employee, and 955 sq. ft. of industrial use per employee.

approximately 14,305 new units of housing,[106] which cannot all be provided for within South San Francisco city limits. However, it is likely that some of these new employees would be existing residents in South San Francisco or in the region. The proposed project at project buildout, in combination with the reasonably foreseeable future projects, would represent approximately 3 percent of Bay Area household growth between 2020 and 2040, and could be reasonably accommodated by existing projected growth.

The potential employment increase resulting from the proposed project would result in indirect growth that may not be accommodated by existing or proposed housing projections for the City. However, the City recognizes that much of its land area, including the East of 101 Area, is not well suited for housing development due to its proximity to SFO and the historic and existing industrial uses of the East of 101 Area and the ongoing development of new office/R&D uses. In that light, the City does not have an adopted jobs/housing ratio goal applicable to development within the East of 101 Area, and relies upon the greater San Francisco Bay Area's regional jobs–housing balance. Furthermore, the City has several residential and mixed-use projects west of U.S. 101 that are either under construction or in development which would add to the City's housing supply.

Each of the cumulative projects listed in Section 4.1, Approach to Environmental Analysis, on pp. 4.1.7-4.1.9, would construct new uses on existing infill sites in an urbanized area. Development of infrastructure could remove obstacles to population growth if it would allow for development in an area that was not previously considered feasible for development because of infrastructure limitations, which could induce population growth indirectly. The proposed project would not include the extension of area roadways or expansion of infrastructure to areas lacking existing development. The East of 101 Area is confined by the Bay on the north, east and south sides, and existing development west of U.S. 101. Therefore the amount of development potential is limited by the amount of land available for infill development, and not generally limited by the availability of infrastructure. The *Genentech Master Plan Update* project, the *Gateway Business Park Master Plan* project, the *Oyster Point Specific Plan Update* project, and the *Downtown Station Area Specific Plan* project would each require off-site improvements to utility infrastructure proportional to the scale of development proposed by each project. However, this infrastructure would not indirectly induce substantial population growth in the project area because these projects are located on infill sites surrounded by existing development and the proposed infrastructure improvements would be sized to meet only project needs and would not enable additional development. Furthermore, each of these projects would be required to provide impact fees associated with City infrastructure improvements. Therefore, no indirect population growth would occur as a result of expansion of infrastructure that would occur as a result of the proposed project in combination with past, present, and reasonably foreseeable future projects.

Overall, the proposed project, in combination with reasonably foreseeable future projects, would involve development of land uses that are appropriate for the limitations of the East of 101 Area. Moreover, the proposed project would be consistent with the General Plan designation and policies applicable to the project site. The impact of the proposed project in combination with reasonably foreseeable future projects on indirect population growth would be less than significant. Therefore, the proposed project

[106] Association of Bay Area Governments, 2013. *Projections 2013,* p. 84. Based on 1.44 employed residents per household in 2020.

would not contribute considerably to a significant population-related cumulative impact. No mitigation measures are required.

4.11.7 Public Services

REGULATORY FRAMEWORK

State

California Fire Code

The California Fire Code 2016 Edition, as published by the International Code Council and adopted by the State Fire Marshal, is adopted by reference by the City of South San Francisco. State fire regulations are set forth in Sections 13000 *et seq.* of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices (such as extinguishers and smoke alarms) and standards (such as those for high-rise buildings), and fire suppression training.

Local

City of South San Francisco General Plan

The General Plan provides a vision for the long-range physical and economic development for the City, provides strategies and specific implementing actions, and establishes a basis for judging whether specific development proposals and public projects are consistent with the City's plans and policy standards. The General Plan contains a Health and Safety Element. The purpose of this element is to acknowledge and mitigate the risk posed by hazards. Topics discussed include seismic and geologic, flooding, hazardous materials and waste, fire, and law enforcement. Policies applicable to police and fire services are provided below.

Policy 8.4-G-1: Minimize the risk to life and property from fire hazards in South San Francisco.

Policy 8.4-G-2: Provide fire protection that is responsive to citizens' needs.

Policy 8.4-I-4: Require site design features, fire retardant building materials, and adequate access as conditions for approval of development or improvements to reduce the risk of fire within the City.

Policy 8.5-G-1: Provide police services that are responsive to citizen's needs to ensure a safe and secure environment for people and property in the community.

Policy 8.5-I-1: Ensure adequate police staff to provide rapid and timely response to all emergencies and maintain the capability to have minimum average response times.

SIGNIFICANCE CRITERIA

Based on the CEQA Guidelines, Appendix G, a project is considered to have significant impacts if implementation of the project would:

result in substantial adverse physical impacts associated with the provision of 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:

a. fire protection
b. police protection
c. schools
d. parks
e. other public facilities

APPROACH TO ANALYSIS

As provided by CEQA Guidelines Section 15382, changes in demand for public services or service ratios, response times, or other performance objectives is not a physical environmental impact. Rather, this analysis discusses whether the demand generated by the proposed project would result in the need to construct new facilities in order to meet demand or performance objectives, and if the construction of new facilities would cause a physical environmental impact. Physical impacts associated with parks are discussed in Section 4.11.8, below.

IMPACT EVALUATION

Impact PS-1: Operation of the proposed project would not require the provision of new or physically altered fire and emergency medical services in order to maintain acceptable service ratios, response times, or other performance objectives. ***(Less than Significant)***

Fire protection and emergency services in the project area is the responsibility of the SSFFD. The SSFFD staffing consists of emergency response, fire prevention, and administrative personnel, for a total of 87 full-time equivalent and 5.68 hourly and contract employees.[107] There are a minimum of 20 on-duty emergency response personnel staffing each of the three shifts. The General Plan Health and Safety Element does not identify a personnel-to-service population target ratio.

There are currently five fire stations located throughout South San Francisco. Station #62 is the closest existing station to the project site, approximately 0.65 miles away at 249 Harbor Way. Fire Station No. 62 serves the East of 101 Area and has three apparatus bays and sufficient space to accommodate an on-duty crew of four personnel.

The project site is not located in any of the City's fire hazard management unit areas, and access to the site via East Grand Avenue, Haskins Way, and East Jamie Court is standard and would not change as a result of the proposed project.

Response time is defined as the time that elapses between the moment a call is received by dispatch and the moment when the first unit assigned to the call arrives at the scene. The SSFFD goal is to arrive at emergency incidents within seven minutes after a 9-1-1 call is received, which includes a 4-minute travel

[107] City of South San Francisco, 2016. Adopted Biennial Operating Budget & Capital Improvement Program, Fiscal Years 2017-19, p. E-39. Available online at: http://www.ssf.net/home/showdocument?id=2027. Accessed May 10, 2018.

time with 7-minute total response time. To determine the adequacy of fire and emergency medical service in the East of 101 Area, the City mapped areas that can be traveled to within 4 minutes from Station No. 62.[108] Areas at the southeastern end of the East of 101 Area, including the project site, are within the existing Fire Station No. 62 4-minute travel time capability. Therefore, no new firefighting facilities would be necessary to serve the proposed project.

The proposed project is estimated to increase incident volume per day at Phase 1 and again at project build-out (assumed to occur in 2021 and 2023, respectively), as shown in **Table 4.11.2: Estimated Fire Protection and Emergency Medical Response Incidents Generated under the Proposed Project**. The proposed project, at either Phase 1 or project buildout, would generate fewer than 40 calls per year and fewer than three calls per month; therefore, no additional emergency response staffing would be required.

Table 4.11.2: Estimated Fire Protection and Emergency Medical Response Incidents Generated under the Proposed Project

Phase	Proposed Office/ R&D Use (gsf)	Annual Service Calls	Total Calls Per Day	Firefighter Demand
Phase 1	336,368	15	0.04	0
Project Buildout	677,600	32	0.08	0

Note: The average annual call volume per 1,000 gsf of Office/R&D use is calculated as follows: square footage of office/BTP use / ((189 average service calls per year between 2013–2017 / (5,600,000 gsf existing Office/R&D use at similar density / 1,000 gsf) = 0.0338) x 3% annual increase from 2017 through 2021 and 2023 for Phase 1 and project buildout, respectively).

Source: Michael Baker International (2017), Alexandria Real Estate Equities (ARE) (2018)

The SSFFD also commented on the proposed project through the City's standard review process. Staffing and service issues were not identified with respect to proposed site development. The proposed project would be designed comply with the California Fire Code and the City Fire Marshall's code requirements that require on site access for emergency vehicles, a standard condition for any new project approval. Fire sprinkler, extinguisher, alarm, pump, and piping standards; access road and vehicle clearance standards; fire hydrant location and specifications; utility shutoff locations; hazardous material planning; emergency radio coverage; elevator specifications; and application of the Public Safety Impact Fee of the East of 101 Area all were identified as conditions of project approval.

Therefore, the proposed project would have a less-than-significant impact on the City's fire protection services under both Phase 1 and project buildout. No mitigation is required.

Impact PS-2: Operation of the proposed project would not require the provision of new or physically altered police protection services in order to maintain acceptable service ratios, response times, or other performance objectives. ***(Less than Significant)***

The South San Francisco Police Department (SSFPD) provides police service to the entire City. As of 2016, the SSFPD had a total of 83 sworn officers and 35 civilian employees with ratio of 1.23 officers per

[108] Michael Baker International, 2017. *2017 Oyster Point Specific Plan Update Municipal Services Assessment*. Attachment A-1 – South San Francisco Fire Map 7b, 4 Minute Travel from Station 62. Available online at: http://weblink.ssf.net/weblink/Browse.aspx?startid=51192&row=1&dbid=0. Accessed May 10, 2018.

1,000 residents.[109,110] The SSFPD operates out of one main station (as opposed to having substations), which is currently located at 33 Arroyo Drive.

Implementing Policy 8.1.I-2 of the General Plan Health and Safety Element seeks to maintain a target ratio of 1.5 officers per 1,000 residents to ensure rapid and timely response to all emergencies. The proposed project would not construct new housing, and would not impact the ratio of officers per resident. In 2016, the SSFPD response times to emergency calls averaged 3:59 minutes and to nonemergency calls averaged 6:03 minutes.[111] These response times are considered acceptable under SSFFD goals, though there are no adopted standards.

The proposed project is estimated increase incident volume per day at Phase 1 and at project build-out (assumed to occur in 2021 and 2023, respectively), as shown in **Table 4.11.3: Estimated Police Protection Incidents Generated under the Proposed Project**. The proposed project, at either Phase 1 or project buildout, would generate fewer than 20 calls per year and fewer than two calls per month; therefore, no additional staffing would be required.

Table 4.11.3: Estimated Police Protection Incidents Generated under the Proposed Project

Phase	Proposed Office/ R&D Use (gsf)	Annual Service Calls	Total Calls Per Day	Police Demand
Phase 1	336,368	9	0.02	0
Project Buildout	677,600	18	0.05	0

Note: The average annual call volume per 1,000 gsf of Office/R&D use is calculated as follows: square footage of office/BTP use / ((124 average service calls per year between 2013–2017 / (5,600,000 gsf existing Office/R&D use at similar density / 1,000 gsf) = 0.0338) x 3% annual increase from 2017 through 2021 and 2023 for Phase 1 and project buildout, respectively).

Source: Michael Baker International (2017), Alexandria Real Estate Equities (ARE) (2018)

The SSFPD also commented on the proposed project through the City's standard review process. Staffing and service issues were not identified with respect to site development. Conformance to Municipal Code Chapter 15.48.070, minimum security standards for nonresidential buildings, including a list of security design measures, was identified as a condition of project approval.

A new police headquarters that will replace the current main station is proposed as part of the City's Community Civic Campus project, which is currently undergoing its own environmental review, with construction planned for 2019. The City will be constructing a new, approximately 39,000-sq.-ft. police headquarters that will replace the existing approximately 29,000-sq.-ft. station as part of the Community Civic Campus project. The new facility will result in an additional 10,000 sq. ft. of facility space.

Though the project would result in more employees onsite, it is expected that the proposed office/R&D land use would not lead to a substantial increase in service calls to SSFPD. It is not expected that the project would lead to an increase in SSFPD service call response times, and existing ongoing plans to

[109] City of South San Francisco, 2016. Adopted Biennial Operating Budget & Capital Improvement Program, Fiscal Years 2017-19, p. E-39. Available online at: http://www.ssf.net/home/showdocument?id=2027. Accessed May 10, 2018.

[110] Based on a population of 67,200 residents in 2015 as provided in ABAG *Projections 2013*, p. 85.

[111] Michael Baker International, 2017. *2017 Oyster Point Specific Plan Update Municipal Services Assessment*. p. 8. Available online at: http://weblink.ssf.net/weblink/Browse.aspx?startid=51192&row=1&dbid=0. Accessed May 10, 2018.

upgrade police facilities would further reduce response times and service ratios. Therefore, no new facilities would be necessary to serve the proposed project, and the proposed project would have a less-than-significant-impact on police services under both Phase 1 and project buildout. No mitigation is required.

Impact PS-3: Operation of the proposed project would not require the provision of new or physically altered schools or other public facilities in order to maintain acceptable service ratios, response times, or other performance objectives. ***(Less than Significant)***

Schools and Libraries

The City is served by the South San Francisco Unified School District. As discussed in Section 13.8, Population and Housing, some of the proposed project employees may relocate to the City, thereby generating a small indirect student population increase or an increase in library use. However, because the project would not involve construction of new residences, it is not likely that the school district or existing libraries would experience a substantial growth in demand. Nonetheless, the proposed project would be subject to development fees, including a school district fee based on square footage of commercial/industrial development. Therefore, the impact on the South San Francisco Unified School District and local libraries would be less than significant. No mitigation is required.

Childcare

The proposed office/R&D uses would result in the need for childcare facilities for infants to 4-year-olds (infant to preschool). There is currently a shortage of preschool childcare facilities in the City.[112] However, the proposed project would be required to pay a fee under the City's Childcare Impact Fee Program. The purpose of the Childcare Impact Fee Program is to impose a fee on new development based on a nexus study which analyzed the projected need for new childcare facilities and calculated the fee amount necessary to fund the new spaces to serve the increased demand for childcare generated by new development.

In addition, the City's zoning ordinance provides a development bonus for accessory childcare uses on new nonresidential projects to encourage the development of new childcare facilities. For example, future development during Phase 2 of the proposed project could include FAR-excluded accessory uses such as childcare, to be determined in coordination with the City and upon completion of final design.

In summary, the impact of the proposed project on childcare facilities would be less than significant under both Phase 1 and project buildout. No mitigation is required.

Impact C-PS-1: Operation of the proposed project would not require the provision of new or physically altered public services in order to maintain acceptable service ratios, response times, or other performance objectives. ***(Less than Significant)***

The proposed project's potential contribution to cumulative impacts on public services is evaluated in the context of past, present, and reasonably foreseeable future development expected in the City and includes

[112] Michael Baker International, 2017. *2017 Oyster Point Specific Plan Update Municipal Services Assessment*. p. 40.

the additional baseline and cumulative projects and plans listed in Section 4.1, Approach to Environmental Analysis, pp. 4.1.4-4.4.1.9.

The proposed project does not include the construction of new housing units. Some of the proposed project employees may relocate to the City, thereby generating a small indirect student population increase or an increase in library use. However, because the project would not involve construction of new residences, it is not likely that the school district or existing libraries would experience a substantial growth in demand. Nonetheless, the proposed project would be subject to development fees, including a school district fee based on square footage of commercial/industrial development. Therefore, the proposed project would not contribute to any cumulative impacts related to schools or libraries. The *Downtown Station Area Specific Plan* would involve the development of a new mix of uses including 1,400 housing units. In addition, each of the cumulative projects would involve construction of new office/R&D uses, including the 494 Forbes Boulevard project (326,020 sq. ft.), the 328 Roebling Road project (105,536 sq. ft.), the *Genentech Master Plan Update* (4,300,000 sq. ft), the *Oyster Point Specific Plan Update* project (1,742,000 sq. ft.) and the *Downtown Station Area Specific Plan* project (1,185,049 sq. ft.), totaling approximately 6,986,605 sq. ft. of new office/R&D use. The *Downtown Station Area Plan* would also introduce new Business Commercial use (511,780 sq. ft.), Commercial use (268,800 sq. ft.), and Industrial use (21,250 sq. ft.). The *Oyster Point Specific Plan Update* project would also provide 40,000 sq. ft. of Commercial use.

As discussed in Section 13.8, Population and Housing, these projects would not constitute substantial unplanned population or employment growth such that substantial impacts on the provision of public services would occur. Therefore, the proposed project would not contribute considerably to significant cumulative impacts on fire protection from reasonably foreseeable future projects.

Similar to the proposed project, developers of other reasonably foreseeable projects in the East of 101 area would be required to adhere to conditions of approval set forth by the SSFFD or SSFPD related to fire-safe and security design measures, and applicable impact fees such as the City Childcare Impact Fee and School District Fee, as applicable. The proposed project, in combination with reasonably foreseeable probable future projects, would not substantially impact existing public services and no significant cumulative impact would occur. Therefore, the proposed project would not contribute considerably to a significant cumulative public services impact. This impact would be less than significant. No mitigation is required.

4.11.8 Recreation

REGULATORY FRAMEWORK

Significance Criteria

Based on State CEQA Guidelines, Appendix G, the proposed project would have a significant environmental impact related to recreation if it would:

a. increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

b. require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

APPROACH TO ANALYSIS

There are no City-, state- or federally owned parks or recreation centers within 1 mile of the project site. This analysis focuses on the potential for the proposed project to impact the existing regional Bay Trail. The proposed project site plan at Phase 1 and project buildout also have outdoor public and private open space, including a basketball court in the central plaza located at 201 Haskins Way, as well as new outdoor eating areas and sidewalks, as required by the zoning ordinance. These amenities are considered in light of recreation demand generated under the proposed project as discussed below.

IMPACT EVALUATION

Impact RE-1: The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (*Less than Significant*)

The Parks and Recreation Department manages parks and recreation centers within City boundaries. As of 2015, there are an estimated 251.2 acres of parks and open space in the City, including community parks, neighborhood parks, mini-parks, linear parks, open spaces, and school lands.[113]

The project site and vicinity are primarily characterized by industrial and office/R&D uses with a substantial existing daytime employee population. There are no City parks located within 1 mile of the project site. The project site, particularly the 400-450 East Jamie Court parcel, is adjacent to the Bay Trail to the south. This segment of the Bay Trail is part of a planned 500-mile hiking and bicycling path that will encircle San Francisco and San Pablo bays and follow the shoreline of nine counties, pass through 47 cities, and cross seven toll bridges. Approximately 350 miles of the trail have been completed.[114] The trail provides scenic recreation, wildlife viewing, and environmental education opportunities. The Bay Trail is used for recreational activities by regional users from outside the City, bicycle commuters, and local workers.

Impacts on the Bay Trail under Phase 1 and project buildout as a result of the construction and operation of new BTP uses are discussed below.

Phase 1

As detailed in Section 4.10.6, Population and Housing, the proposed project under Phase 1 would not generate any residents nor a substantial population of employees. The proposed project would not substantially increase demand on the Bay Trail. The Bay Trail is a paved hardscaped resource that is designed for repetitive use for commuting and recreational use for users across the entire Bay Area. Though some employees of the project site may use the Bay Trail, this use would not substantially

[113] City of South San Francisco, 2015. *Parks and Recreation Master Plan*. p. 23. Available online at: http://www.ssf.net/home/showdocument?id=498. Accessed May 10, 2018.
[114] San Francisco Bay Trail, 2018. Welcome to the San Francisco Bay Trail (website). Available online at: http://baytrail.org/about-the-trail/welcome-to-the-san-francisco-bay-trail/. Accessed May 10, 2018.

deteriorate existing parks or recreational facilities based on the relatively small number of new employees expected to occupy the proposed new buildings (748 employees at Phase 1). Furthermore, the proposed project, under Phase 1, would involve construction of on-site open space and landscaping as required under the zoning ordinance. Open space amenities would include a basketball court in the central plaza located at 201 Haskins Way, as well as new outdoor eating areas and sidewalks. These amenities would partially offset recreation demand from employees on site.

In conclusion, the proposed project during Phase 1 would not cause substantial deterioration of the Bay Trail. Impacts related to existing recreational resources would be considered less than significant during Phase 1. No mitigation is required.

Project Buildout

As discussed in Section 13.8, Population and Housing, the proposed project under project buildout would not generate any new residential units or a substantial population of new employees. The proposed project at project buildout would not substantially increase demand on the City's public parks or the Bay Trail. Though some employees of the project site may use the Bay Trail, this use would not substantially deteriorate existing parks or recreational facilities based on the relatively small number of new employees expected to occupy the proposed new buildings (1,506 employees at project buildout). No other neighborhood or regional parks are located close enough to the project site that they would be substantially affected by the proposed project. Furthermore, the proposed project, under project buildout, would involve construction of on-site open space and landscaping as required under the zoning ordinance and as advised by the Design Review Board. This includes a basketball court in the central plaza located at 201 Haskins Way, as well as new outdoor eating areas and sidewalks. These amenities would partially offset recreation demand from employees on site.

In conclusion, the proposed project at project buildout would not cause substantial deterioration of the Bay Trail, and no other recreational facilities are expected to be used by employees of the project site. Impacts related to existing recreational resources would be considered less than significant during project buildout. No mitigation is required.

Impact RE-2: The proposed project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (*Less than Significant*)

As discussed in Impact RE-1, above, the proposed project would not cause substantial deterioration of local or regional recreation resources under either Phase 1 or project buildout. The proposed project would not require the construction of new recreational facilities or expansion of recreational facilities in order to replace or compensate for the loss of or deterioration of existing recreational resources. The proposed project, under both Phase 1 and project buildout, would involve construction of on-site open space and landscaping as required under the zoning ordinance. This includes a basketball court in the central plaza located at 201 Haskins Way, as well as new outdoor eating areas and sidewalks. The construction of these facilities would occur concurrently during construction of office/R&D buildings at Phase 1 and at project buildout. Physical effects on the environment as a result of construction of the proposed project during Phase 1 and project buildout are discussed in their respective environmental

topics in this EIR. No further environmental effects as a result of construction of on-site recreational amenities would occur. This impact would be less than significant. No mitigation is required.

Impact C-RE-1: The proposed project, would not result in a cumulatively considerable contribution to significant cumulative impacts on recreation. (*Less than Significant*)

The proposed project's potential contribution to cumulative impacts on recreation is evaluated in the context of past, present, and reasonably foreseeable probable future development expected in the City and includes the additional baseline and cumulative projects and plans listed in Section 4.1, Approach to Environmental Analysis, pp. 4.1.4-4.1.9.

As discussed in Section 4.10.6, Population and Housing, the proposed project, in combination with past, present, and reasonably foreseeable future development, would not generate any new residents or a substantial population of employees. The proposed project at project buildout would not substantially increase demand on the City's public parks or the Bay Trail. Though some employees at the project site may use the Bay Trail, this use would not substantially deteriorate existing parks or recreational facilities. Similarly, new employees and residents in other areas of the East of 101 Area would also use portions of the Bay Trail that are near their sites. Because the Bay Trail is a paved hardscaped resource that is designed for repetitive use for commuting and recreational use for users across the entire Bay Area, the additional use by new development would not result in a significant cumulative impact on this recreational facility. There are no other neighborhood or regional parks that would be substantially affected by the proposed project. The proposed project, in combination with past, present, and reasonably foreseeable probable future development, would not cause substantial deterioration of the Bay Trail. As with the proposed project, other development projects proposed or under consideration nearby would be required to include on-site recreational open space and amenities for the residents and employees who would occupy their developments. Therefore, the proposed project would not contribute considerably to a significant cumulative impact on recreation. Cumulative impacts would be considered less than significant. No mitigation is required.