# APPENDIX B: INITIAL STUDY

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## The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District

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# A. PROJECT DESCRIPTION

The project description for the Hub Plan,[1] 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD) is included as Chapter 2, Project Description, in the draft environmental impact report (EIR) to which this initial study is appended.

[1] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

# B. PROJECT SETTING

The project setting for the Hub Plan,[2] 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub HSD is included as Chapter 2, Project Description, in the draft EIR to which this initial study is appended.

[2] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

# C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

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

## 1. SAN FRANCISCO PLANNING CODE

The planning code incorporates the City and County of San Francisco's (City's) zoning maps, implements the San Francisco General Plan, and governs permitted uses, densities, heights and bulks, and the configuration of buildings within San Francisco. Permits to alter existing buildings, construct new buildings, or demolish existing buildings may not be issued unless 1) the proposed project conforms to the planning code, 2) an allowable exception is granted pursuant to provisions of the planning code, or 3) amendments to the planning code are included as part of the project.

Implementation of the Hub Plan[3] would require revisions to the planning code, including revisions regarding existing zoning districts and height and bulk districts, and the addition of a special use district in the Hub Plan area, as described in Chapter 2, Project Description, Section D, The Hub Plan Components, of the Draft EIR. The proposed general plan amendment, planning code text amendments, and zoning map amendments to update the Market and Octavia Area Plan; change the land use, zoning, and height and bulk classifications of the Hub Plan area; and otherwise implement the Hub Plan would be subject to approvals by the planning commission and board of supervisors. Designation of portions or all of the Hub Plan area as an HSD would also require planning code text amendments as well as amendments to the San Francisco Business and Tax Regulations Code, which would require approval by the planning commission and board of supervisors.

If the EIR is certified by the planning commission, the commission would make recommendations to the board of supervisors. The board of supervisors would then have the ability to approve the Hub Plan and related planning code amendments, which would include the land use and height and bulk changes proposed for the individual development projects.

[3] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

Both individual development projects would require approval of a Downtown Project Authorization by the planning commission, per Planning Code section 309, for projects within a Downtown Commercial (C-3-G) district that would be more than 50,000 square feet in area or more than 75 feet in height as well as conditional use authorization to exempt the floor area attributed to the onsite inclusionary below-market-rate units from the required floor area ratio, per Planning Code section 124. The 30 Van Ness Avenue Project would also require approval for office allocation, pursuant to Planning Code section 321, and might require approval of potential variances under Planning Code section 305[4] if required by final design of the building.

# 2. PLANS AND POLICIES

## GENERAL PLAN

The San Francisco General Plan provides general policies and objectives to guide land use decisions. The general plan contains 10 elements (commerce and industry, recreation and open space, housing, community facilities, urban design, environmental protection, transportation, air quality, community safety, and arts) that set forth goals, policies, and objectives for physical development of the city. The general plan also contains many area plans, which provide more specific policy direction for certain neighborhoods, primarily on the east side of the city. The Hub Plan, which would amend the 2008 Market and Octavia Area Plan, is a comprehensive plan for the easternmost portions of the Market and Octavia Area Plan.

As described in Chapter 2, Project Description, Section G, Project Approvals, of the Draft EIR, in addition to amendments to the Market and Octavia Area Plan, adoption of the proposed Hub Plan would also require amendments to other elements of the general plan to conform to the concepts of the Hub Plan. Such amendments to the general plan would be reviewed by the planning commission and recommended to the board of supervisors for approval. Upon board of supervisors approval, such amendments would be incorporated into the general plan.

## PRIORITY POLICIES

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Planning Code section 101.1 to establish eight Priority Policies. Prior to issuing a permit for any project that requires an initial study under the California Environmental Quality Act (CEQA); issuing a permit for any demolition, conversion, or change in use; or taking any action that requires a finding of consistency with the general plan, the City is required to find that the plan or legislation is consistent with the Priority Policies. As noted

[4] Planning Code section 305 governs the approval or disapproval of variances from the planning code. A variance is a deviation from the set of rules a municipality applies to land use and land development, typically a zoning ordinance, building code, or municipal code.

above, the consistency of the Hub Plan, the individual development projects, and the Hub HSD with the environmental topics associated with the Priority Policies is discussed in Section E, Evaluation of Environmental Effects, or in the EIR.

The Priority Policies pertain to (1) the preservation and enhancement of neighborhood-serving retail uses, (2) protection of neighborhood character, (3) preservation and enhancement of below-market-rate housing, (4) discouragement of commuter automobiles, (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership, (6) maximization of earthquake preparedness, (7) landmark and historic building preservation, and (8) protection of open space.

Priority Policies (1) and (5) are addressed in Section E.1, Land Use and Planning; Priority Policy (2) is addressed in Section E.2, Aesthetics; Priority Policy (3) is addressed in Section E.3, Population and Housing; Priority Policy (4) is addressed in Section 3.B, Transportation and Circulation, in the EIR; Priority Policy (6) is discussed in Section E.14, Geology and Soils; Priority Policy (7) is discussed in Section 3.A, Cultural Resources, in the EIR; and Priority Policy (8) is addressed in both Section E.10, Recreation, Section 3.E, Wind, and Section 3.F, Shadow, in the EIR.

Both the initial study and EIR provide information for use in the case report for the proposed project. The case report and approval motions for the Hub Plan, the individual development projects, and the Hub HSD will contain the San Francisco Planning Department's (department's) comprehensive project analysis and findings regarding consistency of the Hub Plan, the individual development projects, and the Hub HSD with the Priority Policies.

## REGIONAL PLANS

Environmental plans and policies directly address physical environmental issues or contain targets or standards that must be met in order to preserve or improve the city's physical environment. These include the Bay Area Air Quality Management District's (BAAQMD's) *Bay Area 2017 Clean Air Plan*[5] and *Bay Area 2005 Ozone Strategy*[6] and the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin*.[7]

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[5] Bay Area Air Quality Management District, *2017 Clean Air Plan: Spare the Air, Cool the Climate*, April 19, 2017, *http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en*, accessed: February 2, 2018.

[6] Bay Area Air Quality Management District, *Bay Area 2005 Ozone Strategy*, 2006, *http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2005-ozone-strategy/adoptedfinal_vol1.pdf*, accessed: February 2, 2018.

[7] San Francisco Regional Water Quality Control Board, *Water Quality Control Plan for the San Francisco Bay Basin*, December 16, 2015, *https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch1-7_print.html*, accessed: February 2, 2018.

The other principal regional planning agencies in the San Francisco Bay Area with policies to guide planning in the region include *Plan Bay Area 2040*[8] from the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) and *San Francisco Bay Plan* from the San Francisco Bay Conservation and Development Commission.[9]

Plan Bay Area is the Regional Transportation Plan/Sustainable Communities Strategy adopted for the Bay Area by ABAG and MTC in fulfillment of the requirements of Senate Bill 375 (2008). The purpose of Senate Bill 375 is to meld regional transportation planning with land use strategies to reduce future greenhouse gas (GHG) emissions and meet regional targets. Pursuant to Senate Bill 375, Plan Bay Area identifies transit priority project areas and planned development areas, which are intended to accommodate future urban development as well as planned conservation areas that provide habitat, agricultural, and other benefits within the region.

## APPROVALS AND PERMITS

Approval actions to implement the Hub Plan and the individual development projects are listed in Chapter 2, Project Description, Section G, Project Approvals, of the Draft EIR.

## CONSISTENCY WITH PLANS AND POLICIES

Section E.1, Land Use and Planning, and the EIR discuss the Hub Plan's proposed changes to the general plan. They also describe the Hub Plan, the individual development projects, and the Hub HSD in the context of the citywide planning framework, with reference to other planning efforts in the city, including the Market and Octavia Area Plan, the San Francisco Municipal Transportation Agency's (SFMTA's) Muni Forward, the San Francisco Bicycle Plan, the Better Streets Plan, and others. The transportation section of the EIR discusses the interaction between the future Better Market Street Plan and the Hub Plan and how they are compatible. The EIR and various sections of this initial study also discuss inconsistencies with the regional plans noted above.

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[8] Metropolitan Transit Commission and Association of Bay Area Governments, *Plan Bay Area 2040: Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017–2040, Final,* July 26, 2017, *http://files.mtc.ca.gov/library/pub/30060.pdf*, accessed: February 2, 2018.

[9] Bay Conservation and Development Commission, San Francisco Bay Plan, 1969, *https://www.bcdc.ca.gov/plans/sfbay_plan#2*, accessed: July 6, 2019.

# D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could affect the environmental factors checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

## 1. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

The Hub Plan,[10] the two individual development projects, and the Hub HSD have been evaluated to determine whether any of the project's components, including the streetscape and street network improvements, the subsequent development projects associated with the Hub Plan, the two individual development projects, and the Hub HSD, could result in significant environmental impacts. The Hub Plan and the two individual development projects, and the Hub HSD could have a significant effect on:

(1) **Cultural resources** (historical and archaeological) because of the potential for such resources to be disturbed by any of the project's components, including subsequent development projects within the Hub Plan area, the streetscape and street network improvements, the individual development projects, and the Hub HSD;

(2) **Transportation and circulation** because implementation of any of the project's components, including the Hub Plan, subsequent development projects within the Hub Plan area, the two individual development projects, and the Hub HSD, could conflict with policies concerning the circulation system, including policies related to people walking, bicycling, riding transit, driving, and loading;

[10] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

(3) **Noise** because any of the project's components, including subsequent development projects in the Hub Plan area, the streetscape and street network improvements, the two individual development projects, and the Hub HSD, could create construction noise and vibration and operational noise and vibration;

(4) **Air quality** because any of the project's components, including construction and operation of subsequent development projects in the Hub Plan area, the streetscape and street network improvements, the two individual development projects, and the Hub HSD, could increase emissions of criteria air pollutants and expose sensitive receptors to more pollutants;

(5) **Wind** because any of the project's components, including subsequent development projects in the Hub Plan area, the streetscape and street network improvements, the two individual development projects, and/or the Hub HSD, could result in the construction of new buildings that could adversely affect wind speeds at the level of people walking; and

(6) **Shadow** because any of the project's components, including subsequent development projects in the Hub Plan area, the streetscape and street network improvements, the two individual development projects, and/or the Hub HSD, could result in increased height limits, which could result in a substantial amount of net new shadow.

Accordingly, these topics are further analyzed and included in the EIR to determine if such impacts would be significant and identify and evaluate mitigation that may lessen potential impacts.

## 2. EFFECTS FOUND NOT TO BE SIGNIFICANT

The department determined that none of the project's components, including the streetscape and street network improvements, the subsequent development projects associated with the Hub Plan, the two individual development projects, and the Hub HSD, would have a significant adverse effect on the environment related to the topics that were not checked in the initial study checklist above. Specifically, impacts related to the following were found not to be significant: land use and planning, aesthetics, population and housing, GHG emissions, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral resources, energy, agriculture and forestry resources, and wildfire. Impacts related to tribal cultural resources, biological listed species, and paleontological resources were determined to be less than significant with mitigation measures incorporated; the mitigation measures are included in this initial study. This initial study explains the reasons for determining that these impacts would not be significant. These topics are discussed below and are not analyzed further in the EIR.

# E. EVALUATION OF ENVIRONMENTAL EFFECTS

This initial study examines the potential effects on the environment that would result from implementation of any of the project's components, including the Hub Plan,[11] the two individual development projects, and the Hub HSD. For all items checked "Less than Significant with Mitigation Incorporated," "Less-than-Significant Impact," "No Impact," or "Not Applicable," the department has determined that the Hub Plan, the two individual development projects, and the Hub HSD would not have a significant adverse environmental effect that could not be mitigated to a less-than-significant level. These issues are discussed below, and conclusions regarding effects are based on substantial evidence and standard reference material available from the department, such as the department's *Transportation Impact Analysis Guidelines for Environmental Review*.

For each checklist question analyzed, the evaluation has considered the impacts of the Hub Plan, the two individual development projects, and the Hub HSD, individually and cumulatively. Cumulative development includes development surrounding and within the Hub Plan area that would occur under buildout of local area plans (such as the Central SoMa Area Plan), transportation plans and related projects (such as San Francisco Public Works' [public works'] Better Market Street Project), and other local development projects.

## AESTHETICS AND VEHICULAR PARKING ANALYSIS

On September 27, 2013, Governor Brown signed Senate Bill 743, effective January 1, 2014. Among other provisions, Senate Bill 743 amended CEQA by adding Public Resources Code section 21099, which states that aesthetic and vehicular parking impacts from residential, mixed-use residential, or employment-center infill projects in transit priority areas are not considered significant impacts on the environment under CEQA.[12] Accordingly, a project that meets the following criteria would not result in significant environmental impacts related to aesthetics or vehicular parking:

a) The project is on an infill site,

b) The project is in a transit priority area, or

c) The project is a residential, mixed-use residential, or an employment-center use.

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[11] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

[12] Public Resources Code section 21099(d).

The individual development projects at 30 Van Ness Avenue and 98 Franklin Street meet each of the three criteria above because they would be (1) located on infill sites that are already developed and/or are surrounded by other urban development, (2) located within 0.5 mile of several rail and bus transit routes, and (3) considered primarily residential projects or mixed-use residential projects with office,[13] institutional, retail, and restaurant uses.[14,15]

The 30 Van Ness Avenue Project does not meet the Vehicle Miles Traveled (VMT) Analysis – Screening Criterion under Public Resources Code section 21099 because the project proposes more parking than the amount allowed by the planning code without a conditional use authorization.[16] The 30 Van Ness Avenue Project proposes 243 parking spaces and between 350 to 610 dwelling units; conservatively, the highest parking-space-per-dwelling-unit ratio would be 0.69. This parking-space-per-dwelling-unit ratio would be higher than the space-per-dwelling-unit control for the the Van Ness and Market Downtown Residential Special Use District (0.25) and slightly higher than the existing neighborhood residential parking rate of 0.56 space per unit. However, given that existing residential daily VMT per capita for the Transportation Analysis Zone[17] (2.5) is substantially lower than the threshold of 15 percent below regional daily residential VMT per capita, it is unlikely that the proposed project's parking-space-per-dwelling-unit ratio, which is slightly higher than existing neighborhood rate, would exceed the residential VMT threshold. The 98 Franklin Street Project meets the VMT Analysis – Screening Criterion.[18]

Thus, this initial study does not consider aesthetics and the adequacy of vehicular parking in determining the significance of project impacts under CEQA for the two individual development projects. Project plans for each of the individual development projects are included in Chapter 2, Project Description, of the Draft EIR for informational purposes. However, the Hub Plan and Hub HSD do not meet the Senate Bill 743 criteria, which are not

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[13] The 30 Van Ness Avenue Project proposes 350,000 square feet of office uses.

[14] San Francisco Planning Department, *Transit-oriented Infill Project Eligibility Checklists for the 30 Van Ness Avenue Project*, April 19, 2019. This document (and all documents cited in this initial study unless otherwise noted) is available for review on the San Francisco Property Information Map, which can be accessed at https://sfplanninggis.org/PIM/?. Individual files can be viewed by clicking on the Planning Applications link, clicking on the "More Details" link under the project's environmental case number (2015-000940ENV, 2017-008051ENV or 2016-014802ENV), and clicking on the "Related Documents" link.

[15] San Francisco Planning Department, *Transit-oriented Infill Project Eligibility Checklists for the 98 Franklin Street Project,* April 19, 2019.

[16] San Francisco Planning Department, *Transit-oriented Infill Project Eligibility Checklists for the 30 Van Ness Avenue Project*, April 19, 2019.

[17] Transportation Analysis Zones are used by planners as part of transportation planning models for transportation analyses and other planning purposes.

[18] San Francisco Planning Department, *Transit-oriented Infill Project Eligibility Checklists for the 98 Franklin Street Project,* April 19, 2019.

applicable to large-scale land use plans. Therefore, this initial study considers aesthetics and the adequacy of vehicular parking in determining the significance of project impacts under CEQA for the Hub Plan and Hub HSD.

Public Resources Code section 21099 states that a lead agency maintains the authority to consider aesthetic impacts, pursuant to local design review ordinances or other discretionary powers, and that aesthetic impacts, as addressed by the revised Public Resources Code, do not include impacts on historical or cultural resources. As such, the department may still consider aeshetics during design and historic review. Similarly, the department acknowledges that vehicular parking conditions may be of interest to the public and the decision-makers. Therefore, the EIR presents a vehicular parking demand analysis for informational purposes and considers any secondary physical impacts associated with a constrained supply (e.g., queuing by drivers accessing onsite vehicular parking spaces that affects the public right-of-way), as applicable, in the transportation analysis.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **1.** | **LAND USE AND PLANNING. Would the project:** | | | | | |
| a) | Physically divide an established community? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) | Cause a significant physical environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ | ☐ |

# SETTING

## EXISTING LAND USES WITHIN THE HUB PLAN AREA

The existing Hub Plan area is developed and highly urbanized, consisting of a wide variety of land uses. The following general land uses exist in the Hub Plan area: neighborhood-serving retail, nonresidential mixed-use, residential, residential mixed-use, cultural/institutional/ educational, office, and open space. The descriptions below present examples of the specific uses that are present within, or in the vicinity of, the Hub Plan area.

### NEIGHBORHOOD-SERVING RETAIL, CULTURAL/INSTITUTIONAL/EDUCATIONAL, AND OFFICE USES

Neighborhood-serving retail currently operates on segments of Franklin, Gough, Lily, Page, Rose, and Market streets, near housing and transit. Retail uses are predominately on the ground floor, with residential and commercial uses above. Because of the scale and heights of the buildings, building frontages, and narrow sidewalk widths, retail activities along these streets create a close-knit neighborhood atmosphere. Local-serving retail uses, such as corner "mom-and-pop" stores, laundromats, and coffee houses, are also interspersed on residential streets in the Hub Plan area.

Market Street provides the major retail area for the Hub Plan area. West of Van Ness Avenue, retail land uses on Market Street transition east to west from large-scale retail uses, such as furniture and mattress stores, to smaller retail uses, such as coffee shops, restaurants, and laundromats. East of Van Ness Avenue, retail uses are dominated by ground-floor retail within commercial or residential mixed-use buildings.

The Hub Plan area contains several cultural and educational destinations as well. These include the San Francisco Conservatory of Music at 50 Oak Street, the New Conservatory Theater Center at 25 Van Ness Avenue, French American International School (FAIS) at 150 Oak Street, and the San Francisco Girls Chorus at 44 Page Street. These uses are concentrated north of Market Street, between Van Ness Avenue and Gough Street. In addition, the administrative offices for the City College of San Francisco are located at 33 Gough Street, south of Market Street.

A concentration of high-density office uses is also located around the Market Street and Van Ness Avenue intersection, typically including ground-floor retail. Office uses in the Hub Plan area are generally geared toward professional trades, technology, and government/institutional uses. These include buildings that house Bank of America, Square, and Uber as well as several institutional uses, including SFMTA, public works, the San Francisco Retirement System, San Francisco County Transportation Authority, and the department.

#### RESIDENTIAL USES

Residential uses within the Hub Plan area are mostly within older two- to four-story buildings near Market and Fell streets, Market and Gough streets, and along McCoppin and Franklin streets. Mixed-use buildings are also scattered throughout the Hub Plan area along major streets such as Gough, Franklin, Market, and Mission streets. Apartment buildings, located mostly near major intersections, range in height from four to eight stories.

A large amount of new residential development has occurred in and near the Hub Plan area in recent years north of Market Street. At Van Ness Avenue and Fell Street, a commercial high-rise building (100 Van Ness) was renovated and converted to a mixed-use building with ground-floor retail and residential uses. At 1699 Market Street, residential uses are under construction. At 1546–1564 Market Street, a 12-story, 110-unit residential building is under construction, and at 22–24 Franklin Street, an eight-story mixed-use building is under construction.

#### PARKS AND OPEN SPACES

The Hub Plan area encompasses an intensely developed urban area that does not contain large regional park facilities. The two recreational facilities managed by the San Francisco Recreation and Park Department (RPD) within the Hub Plan area are the SoMa West Skate Park and SoMa West Dog Park. The approximately 0.6-acre SoMa West Skate Park is located under U.S. 101 at Stevenson Street and Duboce Avenue. Adjoining the skate park is the SoMa West Dog Park, which is similarly located under U.S. 101 at the corner of Stevenson Street and Duboce Avenue. McCoppin Hub, a 0.1-acre publicly accessible open space under the jurisdiction of public works, is also present within the Hub Plan area. McCoppin Hub extends east–west, from the cul-de-sac where McCoppin Street terminates at the Central Freeway to Valencia Street on the east. McCoppin Hub features seating areas, palm trees, light landscaping, and landings for food trucks, art/craft display tables, and tents for live music performances. Informal public open spaces throughout the Hub Plan area include sidewalk dining and cafés, restaurant courtyards, and residential stoops.

### EXISTING LAND USES NEAR THE INDIVIDUAL PROJECT SITES

The project site at 30 Van Ness Avenue is surrounded by residential, commercial, and office uses. North of the project site, at Van Ness Avenue and Fell Street, a commercial high-rise building (100 Van Ness) was recently renovated and converted into a mixed-use building with

ground-floor retail and residential uses. East of the project site, there are two- to four-story buildings with commercial and residential uses. South of the project site, on the south side of Market Street, taller commercial and office buildings house a variety of businesses and agencies, including Bank of America and SFMTA. West of the project, on the west side of Van Ness Avenue, is the New Conservatory Theater Center and a mixed-use building with ground-floor retail and residential uses.

The 98 Franklin Street project site is occupied by a vacant lot and surrounded by residential and commercial uses. San Francisco Fire Department Station 36 is immediately west of the site, across Franklin Street at 109 Oak Street. Adjacent to the site, to the east, is 1546–1564 Market Street, which, as of summer 2019, has a 12-story, 110-unit residential building under construction. Immediately to the south is 22–24 Franklin Street where an eight-story mixed-use building is under construction. North of the site, across Oak Street, lies the six-story San Francisco Conservatory of Music and a surface vehicular parking lot. West of the site, across Franklin Street, is a three-story residential and commercial building. Across the intersection of Franklin and Oak streets, which is northwest of the site, is the International High School of the FAIS.

## EXISTING PLANNING CODE ZONING DISTRICTS

Currently, the Hub Plan area contains four zoning districts (see **Figure 2-4** in Chapter 2, Project Description, p. 2-18, of the Draft EIR): Neighborhood Commercial Transit (NCT-3), Downtown General Commercial (C-3-G), Hayes Neighborhood Commercial Transit (Hayes NCT), and Public (P). The C-3-G zoning district is concentrated in the northern half of the Hub Plan area, while the NCT-3 zoning district is within the southern half of the Hub Plan area. The Hayes NCT and P zoning districts are small designated areas within the NCT-3 zoning district. The 30 Van Ness Avenue project site is within the C-3-G zoning district. The 98 Franklin Street project site is also within the C-3-G zoning district, but much of the surrounding area is in NCT-3 and P zoning districts.

Uses permitted in the NCT-3 and Hayes NCT zoning districts are similar and include a variety of retail uses, such as bars, full-service restaurants, small self-service restaurants, movie theaters, other entertainment, financial services, medical services, personal services, and business or professional services. Many uses are also conditionally permitted, including hotels and automobile-related uses. The C-3-G zoning district permits office, retail, residential, entertainment, and institutional uses, with hotels as a conditional use. P zoning districts apply to land that is owned by a governmental agency with some form of public use, including open space or office uses occupied by a government agency.

The majority of C-3-G zoning district sites in the Hub Plan area are also within the Van Ness and Market Downtown Residential Special Use District (SUD). The Market and Octavia Area Plan created the SUD to emphasize residential use as the primary land use in the specified area.

The current zoning allows for a range of residential uses at varying scales of affordability as well as commercial uses on the ground floor. In addition, the 1500 Mission Street SUD is located in the C-3-G district. Within the NCT-3 zoning district are sites within the 1629 Market Street SUD and the Veterans Commons SUD.

Existing height and bulk districts within the Hub Plan area are shown in **Figure 2-6** in Chapter 2, Project Description, p. 2-22, of the Draft EIR. Under the current zoning, much of the Hub Plan area is zoned for a height of 85 feet, with the exception of the two major intersections at Market Street and Van Ness Avenue and Mission Street and South Van Ness Avenue, which currently allow for towers ranging from 250 to 400 feet. Existing buildings throughout the Hub Plan area range from two to six stories, with some notable exceptions at Market Street and Van Ness Avenue where the 100 Van Ness Avenue building is 29 stories (400 feet) and the 1455 Market Street building is 23 stories (315 feet). The 30 Van Ness Avenue project site is zoned for a height and bulk of 120/400-R2, while the 98 Franklin Street project site is zoned for a height and bulk of 85-X.

## APPROACH TO ANALYSIS

### THE HUB PLAN AND HUB HSD

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements proposed under the Hub Plan. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassification of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on land use could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. The land use analysis that follows evaluates the impacts of the subsequent development projects anticipated to occur in the Hub Plan area with respect to existing conditions. In the second significance criterion analyzed below, a conflict between a proposed project, including potential general plan amendments, and a general plan policy does not necessarily indicate that there would be a significant effect on the environment under CEQA. The staff report for the planning commission will analyze the Hub Plan's consistency with general plan policies. To the extent that development under the Hub Plan, including proposed streetscape and street network changes, would result in physical environmental impacts that would indicate a potential policy inconsistency, those impacts are

analyzed in the applicable topic section of this initial study or in the Draft EIR. It is noted that a proposed project's inconsistency with a plan that is applicable to the project does not, in itself, result in an adverse physical effect on the environment. However, such an inconsistency may, at least in some cases, be indicative of an adverse physical effect. The determination of a significant impact, which, by definition, must involve a physical change, is separate from the legal determination of plan consistency.

The analysis also addresses impacts related to proposed streetscape and street network changes at a project level because a sufficient level of detail has been developed to allow for analysis of the potential environmental effects of these changes. Physical environmental impacts related to or associated with these operational changes are analyzed in this Draft EIR. The proposed streetscape and street network changes would involve no changes in land use because the alteration of lane configurations, widening of sidewalks, and addition of bicycle lanes, transit-only lanes, and mid-block crossings for people walking, among other proposed changes, would have no bearing on either the permitted uses or the allowable building heights.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

## 30 VAN NESS AVENUE AND 98 FRANKLIN STREET

The individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and residents to the area, which could result in impacts related to land use; therefore, they are analyzed on a project-specific level. The impact analysis for the two individual development projects evaluates whether they would physically divide an established community or conflict with the applicable land use policies of the City and the regional plans adopted for purposes of avoiding or mitigating an environmental effect.

Similar to the Hub Plan, a conflict between a proposed project and applicable land use plans, policies, and regulations of an agency with jurisdiction over the project does not necessarily indicate a significant effect on the environment under CEQA. Consequently, the analysis here

focuses on inconsistencies with policies adopted for the purpose of avoiding environmental impacts. The planning commission and/or board of supervisors will ultimately determine the proposed project's overall consistency with the goals and policies contained in the general plan, City requirements, and planning documents as part of the decision to approve or reject the proposed project.

If the proposed project would conflict with a plan or policy adopted to address issues associated with a particular resource area, such as air quality or water quality resources, any impacts associated with those conflicts would be analyzed in the applicable resource sections of this initial study or the Draft EIR and summarized here.

## IMPACTS AND MITIGATION MEASURES

**Impact LU-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not physically divide an established community. (Less than Significant)**

### THE HUB

The Hub Plan is a regulatory program; it does not represent physical development projects or sets of projects (with the exception of the streetscape and street network changes and the two individual development projects, discussed below). Therefore, any impacts related to the physical division of an established community would be secondary effects related to subsequent development projects incentivized by the Hub Plan.

Subsequent development projects under the Hub Plan would not be expected to divide an established community. Although the elevated Central Freeway and various freeway entrance and exit ramps are present within the area, the proposed rezoning within the Hub Plan area would not create any new physical barriers within the Hub Plan area. The Hub Plan does not propose roadways, such as freeways, that would divide the Hub Plan area or isolate individual neighborhoods within it.

The Hub Plan's proposed amendments to zoning districts and controls would allow for a diversity of land uses throughout the Hub Plan area and would not alter the physical layout of the Hub Plan area such that movement within or across the Hub Plan area would be obstructed. The Hub Plan's proposed zoning changes, which would allow more flexibility of uses generally and encourage more housing development specifically, may be expected to result in changes in land use patterns as subsequent development projects are implemented pursuant to the Hub Plan. However, these changes would not result in physical barriers to established communities, either within or surrounding the Hub Plan area. On the contrary, implementation of the Hub Plan would result in development within established lot boundaries, in most cases at a scale and density greater than that already permitted. In addition, the Hub Plan's requirement that larger developments include publicly accessible

open space could improve connectivity between land uses and neighborhoods within the Hub Plan area. For the reasons stated above, the Hub Plan would have a ***less-than-significant*** impact related to the division of an established community.

The proposed streetscape and street network changes would not involve any changes in land use and would not alter either the permitted uses or the allowable building heights. The proposed streetscape and street network changes, including improvements to the streetscape, mid-block alleys, and mid-block crosswalks, could decrease existing physical barriers by reducing the length of many of the Hub Plan area block faces and thereby facilitating movement of people walking through the neighborhood. Furthermore, the substitution of vehicular traffic lanes with transit-only lanes and bicycle lanes, widening of sidewalks, and installation of mid-block crosswalks would remove barriers to circulation within the neighborhood, especially for non-automobile modes, which would be beneficial for neighborhood connectivity. Consequently, no adverse impact related to the division of an established community would result from implementing the streetscape and street network changes. The impact would be ***less than significant***.

## 30 VAN NESS AVENUE AND 98 FRANKLIN STREET

The proposed projects at 30 Van Ness Avenue and 98 Franklin Street would construct new buildings on existing lots and would not alter the established street grid or permanently close any streets or sidewalks. These individual projects would not include any large-scale infrastructure features such as new freeways or high-volume roadways that would physically divide an established community or remove transportation infrastructure that links neighborhoods. Although portions of the sidewalk adjacent to the project sites could be closed for periods of time during project construction, these closures would be temporary. Therefore, the individual development projects would not physically divide an established community, and a ***less-than-significant*** impact would result.

**Mitigation**: None required.

**Impact LU-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not cause a signficiant physical environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)**

The applicable plans that regulate development in the Hub Plan area include the San Francisco General Plan and the San Francisco Planning Code. See Section C, Compatibility with Existing Zoning and Plans, for a detailed discussion of these and other land use plans that are applicable to the Hub Plan and the two individual development projects. Section C also identifies potential conflicts with the plans and policies. The discussion that follows summarizes the key findings of the analysis.

## THE HUB PLAN

As explained in Chapter 2, Project Description, of the Draft EIR, implementation of the Hub Plan would require revisions to the planning code, including revisions to the existing zoning districts and height and bulk districts in the Hub Plan area. The proposed general plan amendment, planning code text amendments, and zoning map amendments to update the Market and Octavia Area Plan; the change in land use, zoning, and height and bulk classifications in the Hub Plan area; and actions to implement the Hub Plan would be subject to approvals by the planning commission and board of supervisors.

Because the Planning Code zoning districts, height and bulk districts, and land use designations are not explicitly "adopted for the purpose of avoiding or mitigating an environmental effect," the Hub Plan's proposed rezoning, redistricting, and land use designation changes, in and of themselves, would not result in a significant impact. Physical effects that would result from subsequent development projects pursuant to the Hub Plan and the aforementioned planning code amendments are analyzed as secondary effects in this initial study and Draft EIR. Furthermore, the proposed Hub Plan would be consistent with the vision of the project area and applicable objectives and policies set forth in the Market and Octavia Area Plan. Also, the proposed project would adhere to applicable environmental regulations, specifically, those of the general plan and planning code, and would not conflict with policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect such that a substantial adverse physical change in the environment would result. As such, this impact would be ***less than significant***.

## 30 VAN NESS AVENUE AND 98 FRANKLIN STREET

Approval of the Hub Plan and related planning code amendments would also approve the land use and height and bulk changes proposed for the individual development projects at 30 Van Ness Avenue and 98 Franklin Street. Both individual development projects would require approval of a Downtown Project Authorization by the planning commission, per Planning Code section 309 for projects within a Downtown Commercial (C-3-G) district that would be more than 50,000 square feet in area or more than 75 feet in height. Both individual development projects would also require conditional use (CU) authorization to exempt the floor area attributed to the onsite inclusionary below-market-rate units from the required floor area ratio, per Planning Code section 124. The 30 Van Ness Avenue Project would also require approval for office allocation, pursuant to Planning Code section 321, and might require approval of potential variances under Planning Code section 305 if required by final design of the building.

Upon approval of the Hub Plan, the individual development projects would be consistent with their respective zoning, height and bulk districts, and land use designations. Authorizations for special allowances and conditionally permitted uses are conditionally allowed under the

planning code and do not represent conflicts with zoning districts that would result in physical effects. Therefore, the individual development projects are considered to be consistent with relevant planning code regulations. Furthermore, the individual development projects would be consistent with the applicable objectives and policies set forth in the general plan and the Market and Octavia Area Plan and adhere to applicable environmental regulations. Therefore, the 30 Van Ness Avenue and 98 Franklin Street projects would not conflict with policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect such that a substantial adverse physical change in the environment would result, and this impact would be ***less than significant***.

**Mitigation**: None required.

**Impact C-LU-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts. (Less than Significant)**

The reasonably foreseeable projects in the Hub Area and vicinity are identified in Chapter 3 of the Draft EIR. All of the subsequent development projects would be located on infill sites, replacing existing uses with new, predominantly residential uses.

Conflicts with existing land use plans and policies are policy issues and do not, themselves, give rise to a significant physical impact related to land use under CEQA. For these reasons, conflicts with plans and policies, considered with those of past, present, and foreseeable projects, could not combine to result in a significant cumulative impact related to land use.

The related projects, individually or in combination with the Hub Plan and the two individual development projects, would not divide an established community. Rather, consistent with current urban design practice in San Francisco, designs would aim to enhance neighborhood connectivity, improve public spaces, and increase the safety of streets and intersections for all users. As such, the Hub Plan and the two individual development projects, would not combine with related projects to result in a significant cumulative land use impact. For these reasons, the Hub Plan and the two individual development projects, in combination with other past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable land use impact. Accordingly, cumulative effects related to land use would be ***less than significant***.

**Mitigation**: None required.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **2.** | **AESTHETICS. Except as provided in Public Resources Code section 21099, would the project:** | | | | | |
| 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) | In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ | ☐ |
| d) | Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ | ☐ |

As discussed in Section E, Evaluation of Environmental Effects, the two individual development projects meet the criteria associated with Senate Bill 743, which states that the aesthetic and vehicular parking impacts of residential, mixed-use residential, and employment-center infill projects located in transit priority areas are not considered significant impacts on the environment under the CEQA. Thus, this aesthetics analysis does not consider the significance of project-specific impacts under CEQA for the two individual development projects at 30 Van Ness Avenue or 98 Franklin Street.

The following analysis is focused on program-level impacts resulting from implementation of the Hub Plan and Hub HSD.

# SETTING

## REGIONAL VISUAL SETTING

The greater San Francisco Bay (Bay) region is a complex system of mountain ranges, valleys, and waterways that, together, create a unique area that not only defines the character of the region but also contributes to the overall character of California. Some notable areas include the distinctive urban center of San Francisco, the cliffs of the Marin Headlands and Pacific Ocean coastline, and the Bay. The region is characterized by panoramic views from the Santa Cruz Mountains and the East Bay Hills, the rolling hillsides, and numerous waterways.

## VISUAL CHARACTER OF THE HUB PLAN VICINITY

The visual character of a city or part of a city, such as the Hub Plan area, comprises many physical elements that, in combination, form the city's image. The location of the Hub Plan and Hub HSD in relation to the city at large is shown in Chapter 2, Project Description, **Figures 2-1**

**and 2-2**, pp. 2-2 and 2-4, of the Draft EIR. The existing visual setting of the Hub Plan area is varied and reflects the visual characteristics of its natural and built components, including the topography, street grid, buildings (individually and collectively), public parks and open spaces, and major transportation infrastructure. The approximately 84-acre Hub Plan area occupies an area of San Francisco within the Downtown/Civic Center, SoMa, Western Addition, and Mission neighborhoods. Topographic features in the project vicinity are minimal, and the grading is generally flat.

The notable visual features disussed in this section and seen in **Figure E.2-1**, Existing Visual Character in the Hub Plan Area, include the Central Freeway (U.S. 101) in the southwestern portion of the Hub Plan area (on the far right edge of the figure); Market Street, diagonally bisecting the area (shown in the middle of the figure); South Van Ness Avenue, seen horizontally in the middle of the figure between Market Street and U.S. 101; and the collection of taller, larger buildings (compared with the rest of the buildings in the image's foreground and background) on the left (upper part of the image near the intersection of Market Street and South Van Ness Avenue).

The Hub Plan area has experienced and continues to experience a visual transformation in the form of redevelopment and infill development. As such, the visual setting of the project vicinity is varied in character. Newly developed sites are found side by side with older rehabilitated buildings. Other sites display ongoing construction activities. This redevelopment and infill development in the Hub Plan area is creating a visual fabric that includes an array of architectural styles, mixing old with new. Therefore, the massing, scale, materials, and architectural character (with respect to age and style) of the buildings do not conform to any strongly discernible overall pattern within the Hub Plan area; rather, many developments are visually unique with respect to one another.

The Hub Plan area has a distinctive block pattern, created by the meeting of the Mission, SoMa, and North of Market street grids near the intersections of Market Street and Valencia, Haight, and Gough streets, lending the project area its name, "The Hub" (see p. 2-5 in the EIR). Some site (block) sizes within the Hub Plan area and vicinity are non-uniform, either rectangular or triangular in shape. Angular and perpendicular road patterns define the edges.

#### STREETS AND ROADWAYS

Streets and roadways are a major component of the Hub Plan area's built environment. These primary public rights-of-way define the Hub Plan area's scale. Roadways in the Hub Plan area tend to be wide; the major thoroughfares are approximately 80 feet wide curb to curb, such as Market Street and South Van Ness Avenue. Many of the one-way streets convey vehicular traffic in three or four lanes, such as Gough Street. Medium and smaller roadways, such as Duboce and Haight streets, provide additional access. People bicycling are served by bicycle


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The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.2-1**
**Existing Visual Character in the Hub Plan Area**

lanes on select streets, such as Market Street. Alleys within the Hub Plan area, such as Rose Street, Minna Street, and Brady Street, are small-scale streets that typically carry only very low numbers of people driving. People driving use the alleys when accessing adjacent properties.

The character of the alleys varies across the Hub Plan area, from residential alleys to service alleys, such as the one-way Minna and Otis streets. A major visual component in the Hub Plan area is the elevated Central Freeway (U.S. 101) and associated ramps over South Van Ness Avenue between Mission and 13th streets.

For people walking, roadbeds are seen as open areas (a visual relief) between buildings and blocks. From this perspective, roadways provide the most visual public open space in the Hub Plan area. These areas are dynamic because they most often accommodate fast-moving vehicles of many shapes and sizes. The street's *edges* are the walkways for people walking or concrete sidewalks, which vary in width (up to 15 feet) and, at times, are non-existent in the Hub Plan area. These edges for people walking operate as public open spaces that transition into private property, providing thresholds to homes and businesses.

#### LIGHT AND GLARE

Light pollution includes all forms of unwanted light in the sky during hours of darkness, such as glare, light trespass, sky glow, and overlighting. Sources of light and glare are typical and abundant in the urban environment of the Hub Plan area, including streetlights, vehicular parking lot lights, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

### VIEWS FROM WITHIN THE HUB PLAN AREA

Foreground views in the Hub Plan area include buildings of varying styles and stature, including both modern and older buildings; an elevated freeway, roadways, sidewalks, and associated infrastructure; paved surface vehicular parking lots; public parks and open spaces; and glimpses of the sky. Middleground and background views[19] are limited in most directions by surrounding development.

#### OPEN SPACES

Public spaces contribute to a neighborhood's identity, serve as visual landmarks, and provide visual relief in densely built urban environments. The Hub Plan area encompasses an intensely developed urban area where public open spaces are limited. There are three existing public recreational open spaces in the Hub Plan area: SoMa West Skate Park, under the Central

[19] There are three distinct "distance zones" for assessing potential visual impacts. These are foreground views (approximately 0 to 0.25 or 0.5 mile), middleground views (approximately 0.25 or 0.5 mile to 3 to 5 miles), and background views (approximately 3 to 5 miles to areas beyond).

Freeway on Valencia Street between McCoppin Street and Duboce Avenue; the adjacent SoMa West Dog Park, located under the Central Freeway on Duboce Avenue between Valencia and Otis streets; and McCoppin Hub, which extends east–west, from the cul-de-sac where McCoppin Street terminates at the Central Freeway to Valencia Street on the east. These public open spaces, with major visual components that include concrete pylons, concrete benches and skate structures, fences, railings, light posts, and artificial turf, are very much a part of the built environment, although confined by the walls of adjacent buildings and the freeway's undercarriage, making them narrow areas with limited skyview or long-range views. Five other existing small parks and gardens are found in the Hub Plan vicinity but outside the Hub Plan area, as shown in Section E.12, Recreation, **Table E.12-1**, Open Spaces within 0.25 mile of the Hub Plan Area, p. E.12-3. There are also two proposed parks, Brady Park, which would be located within the Hub Plan area, and 11th/Natoma Park, which would be located about 200 feet outside the Hub Plan area. From most locations within the Hub Plan area, these adjacent parks and gardens could be visually obstructed by tall buildings and other urban elements.

#### BUILDINGS AND BUILT FORM

The visual context of the Hub Plan area is framed by the distribution and types of land uses and buildings. No one land use dominates the Hub Plan area; rather, a wide range of land uses can be found in the same block or even within the same building. Current land uses in the Hub Plan area include housing units (in a mix of older buildings and newer residential buildings), offices, industrial spaces, commercial uses such as gas stations, retail spaces, and some cultural and social institutions. Light industrial and mixed-use buildings tend to be on major streets, while residential units are on local streets. This creates a mixed visual pattern. Wide streets are crossed by small streets and alleys that offer visual relief from the street wall. These smaller streets are flanked by tall building walls that provide less visual relief but an appropriate human scale for residential access.

#### STREETS

Most streets in the Hub Plan area are described in the general plan[20] as having views of *average* quality. In the Hub Plan area, one block of Polk Street (east of Van Ness Avenue and north of Market Street, on the northern border of the Hub Plan area) and one block of Hayes Street (where it meets Market Street, between Larkin and Polk streets) are characterized as having street views with *good* quality. No streets in the Hub Plan area have been characterized as having views with *excellent* quality. No other street segments are specifically characterized in terms of street view quality.

[20] City and County of San Francisco, *San Francisco General Plan*, Urban Design Element, Quality of Street Views, 2010, *http://generalplan.sfplanning.org/I5_Urban_Design.htm*, accessed: July 6, 2019.

### FREEWAYS

The Central Freeway, which runs east–west on the southern boundary of the Hub Plan area, is elevated by approximately 30 to 50 feet. It runs above South Van Ness Avenue between Mission and 13th streets and feeds into the freeway entrance south of 13th Street. The freeway is a major visual element in the Hub Plan area in that it dominates overhead views and obstructs street-level and mid-range views. The low-rise and infrequently used buildings adjacent to the freeway contribute to the visual dominance of the freeway's concrete structure and associated ramps.

## VIEWS OF THE HUB PLAN AREA FROM SURROUNDING AREAS AND VIEWER GROUPS

The Hub Plan area is visible from several surrounding areas, as discussed below. **Figure E.2-2**, Existing Massing in the Hub Plan Area, is a visual rendering of the Hub Plan area in terms of mass and height (from a bird's-eye view, looking east, toward the Hub Plan area).

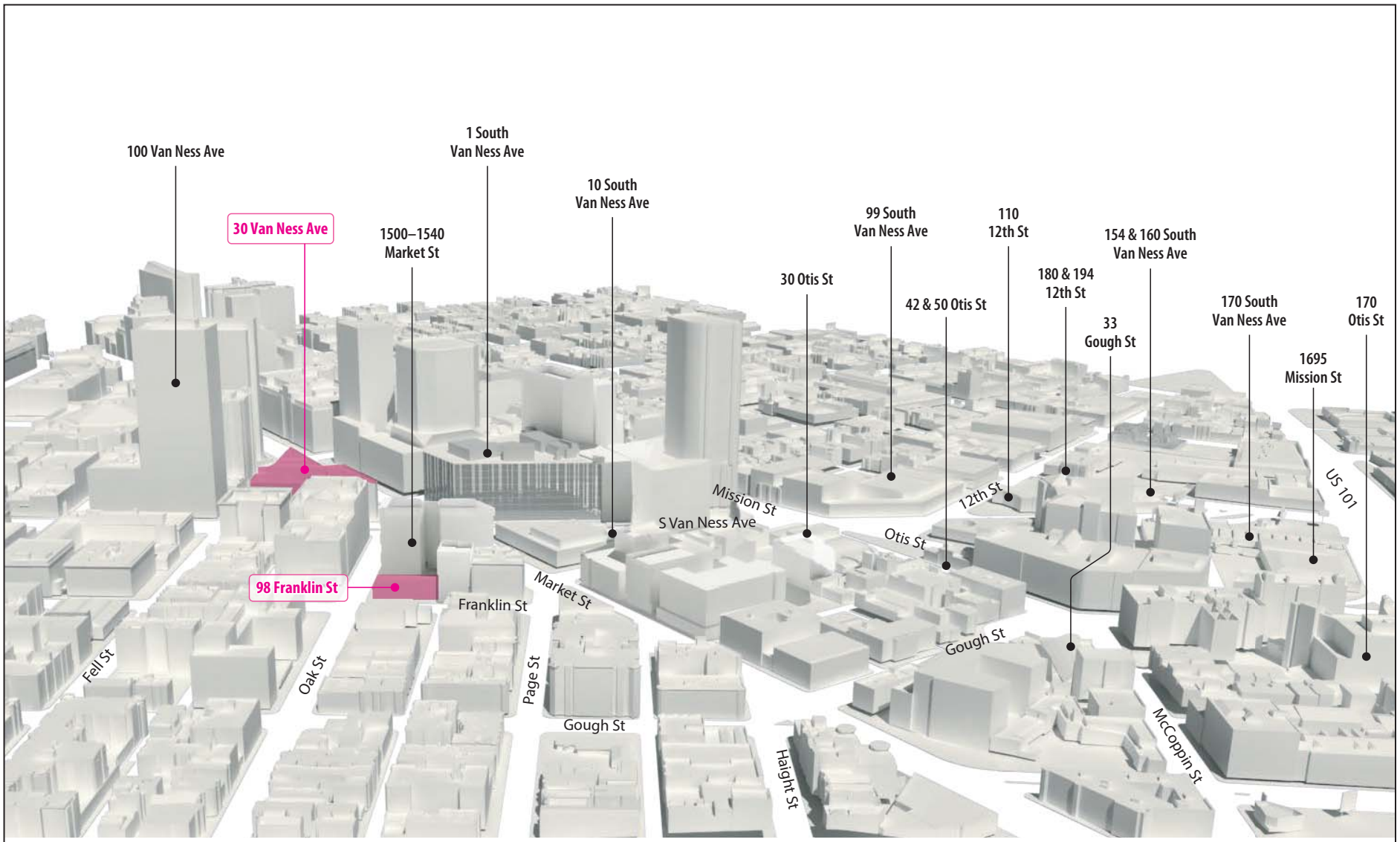
**Adjacent Streets.** Existing views of the Hub Plan area from local streets and roadways are heavily obstructed by buildings, infrastructure, and other built forms. Views are generally limited to the roadbed, rights-of-ways for people walking, and foreground views of building walls. The proposed Hub Plan area does not currently stand out as a distinct zone or neighborhood from a visual perspective from streets adjacent to the Hub Plan area.

Viewers also include business owners and workers (i.e., occupants) as well as patrons of the businesses. Business occupants have moderate visual sensitivity because, although they are likely to have a sense of ownership over local views, they are more focused on operating their businesses, and more likely to see additional development as a favorable source of new patrons. Business patrons are likely to have moderate to low visual sensitivity because they are more focused on visiting the businesses than on views of the Hub Plan area. They have intermittent and limited views of the Hub Plan area.

Local roadway and freeway users include commuters traveling to and from work, shoppers, recreational travelers, and people driving commercial vehicles. Roadway users typically travel at speeds up to the posted speed limit, which is typically 25 miles per hour in the Hub Plan area**.** Depending on speed and vehicular traffic congestion, people driving and passengers take in brief views of the scenery around them.

**Central Freeway.** Elevated views toward the Hub Plan area and surrounding Bay Area are available from the elevated Central Freeway (U.S. 101) on the southern edge of the Hub Plan area, between Mission and 13th streets. The Central Freeway is not listed as a State Scenic Highway (or an Eligible State Scenic Highway) under the state's Scenic Highway Program.[21]

[21] California Department of Transportation, *Scenic Highway Program, List of Eligible and Officially Designated State Scenic Highways*, 2016, last updated: March 16, 2016, *http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/scenic_hwy.htm*, accessed: March 8, 2018.




Source: San Francisco Planning Department, 2018.

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The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)
Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.2-2**
**Existing Massing in the Hub Plan Area**

Views of the Bay and East Bay Hills from the elevated Central Freeway in the Hub Plan area are fragmented by consistent vehicular traffic, tall road signs, and concrete roadway barriers and other structures.

In addition, people walking are not permitted atop the elevated freeway. People driving are typically not paying attention to views while driving in this area. Although people driving might be aware of skyviews and other distinct features, they are presumed to be distracted by immediate close-range views and focused on driving and navigating vehicular traffic.

**Hillside Public Parks.** San Francisco's numerous hills offer expansive, long-range scenic views of the Bay and the Hub Plan area, including public viewpoints from public parks and open spaces. The Hub Plan area would be visible in long-range middleground views from the following public hillside spaces: Dolores Park (looking north), Corona Heights (looking east), Potrero Hill (looking northeast), and Twin Peaks (looking northeast). Features included in these mostly east-to-northeast-facing medium- to long-range views are the massing of the buildings, the overall cityscape and skyline, the Bay, the Bay Bridge, Yerba Buena Island, Treasure Island, and the hills of the East Bay. From these elevated vantage points, the high-rise buildings of the Financial District are visible next to the southern towers of the Bay Bridge and Yerba Buena Island. The high-rise buildings transition to low- and mid-rise buildings in the areas that surround the Financial District, including downtown, SoMa, the Mission District, and The Castro.

Recreational viewers have moderate to high visual sensitivity because they are more likely to value the natural and urban environments, appreciate the visual experience, have a strong sense of ownership, and be sensitive to changes in views. Recreational viewers use parks, waterways, trails, and roadways. They are likely to enjoy the local urban scenery and seek out the scenic views associated with the Bay. Local recreationists tend to have a higher sense of ownership over views and resources than visiting recreationists; however, it is likely that visiting recreationists would be familiar with the area and therefore also place a high value on existing views.

## SCENIC AND VISUAL RESOURCES

Scenic resources are elements in the environment, such as topographic features, trees, rock outcroppings, or other features of the built or natural environment, that contribute to a scenic public setting. Scenic resources may be protected by federal, state, or local regulations or highly valued by the local community. *Scenic vista views* are views from public areas that generally encompass a wide area with long-range views to surrounding elements in the landscape. Scenic vista views often have local and regional value. Such views are often visible because of a flat landscape with little vegetation or an elevated viewing point that allows for views out and over the surrounding landscape. Vistas also have a directional range, which is to say that some viewpoints have scenic vistas with a 360-degree view in all directions, while others may be

limited in one direction in a manner that reduces the line-of-sight angle and the amount of vista that is visible. In such cases, narrower vista views are often confined by topography, development, and vegetation. Scenic vista viewsheds allow the public to access panoramic views of natural features, including the ocean, striking or unusual natural terrain, or unique urban or historic features that are identified in adopted policies or plans. The term *view corridor* refers to views of important features along a path, roadway, or other horizontal corridor where the view is confined by obstructions such as development or vegetation. As such, a view from a view corridor has limited lateral visibility. This is referred to as a *channelized view*.

### VISUAL RESOURCES IN THE HUB PLAN AREA

No state or local designated scenic routes are associated with the Hub Plan area. The Hub Plan area has generally flat topography. It does not have any natural landscape forms or features with substantial scenic resource value. The Hub Plan area also does not contain built features with high scenic resource value or any visually noteworthy vegetation or trees.

The Hub Plan area does contain some visually important buildings but is not generally an area that would be described as having *high scenic quality*. Although many buildings are comparable to one another in terms of height, bulk, building materials, architecture, and façade, there are some notable exceptions. These distinct buildings add visual quality to the Hub Plan area.

As identified in the Market and Octavia Neighborhood Plan,[22] examples of important individual buildings that lend visual texture to the Hub Plan area and remind us of its history include the Venetian Renaissance–style Masonic Temple at 25 Van Ness Avenue (San Francisco Conservatory of Music), built in 1911 by a prominent architect; the High School of Commerce at 135 Van Ness Avenue (San Francisco Landmark #140), built in 1927, a building that exhibits an "exuberant Spanish Colonial Revival design";[23] and the Juvenile Court and Detention Center at 150–170 Otis Street, built in 1914 by architect Louis C. Mullgardt in the Spanish Revival style.

The Urban Design Element of the San Francisco General Plan classifies some streets in San Francisco according to their level of importance as visual resources and the quality of the street views available from certain vantage points along those streets (refer to the Regulatory Framework for the general plan urban design element map, Street Areas Important to Urban

[22] Page & Turnbull, Inc., *Historic Context Statement. Market and Octavia Neighborhood Plan Area*, 2017, *http://sf-planning.org/sites/default/files/FileCenter/Documents/682-MO_Context_Final_202007.pdf*, p. 62, accessed: March 20, 2018.

[23] San Francisco Property Information Map, *135 Van Ness Avenue*, *http://propertymap.sfplanning.org?search=135+van+ness+avenue&tab=2*, accessed: November 9, 2018.

Design and Views).[24] Within the Hub Plan area, Market Street, which bisects the area on the north, is described as a street with a "Street View of Important Buildings" and a "Street that Defines City Form." This is because of the street's unusual width and direction as well as its view of an important building (the Ferry Building on The Embarcadero). The "Central Skyway" (Central Freeway) on the southern boundary of the Hub Plan area is classified as having an "Important Street View for Orientation." No other streets within the Hub Plan area or its vicinity are described as streets of importance with respect to San Francisco urban design and views.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Although the Hub Plan would establish a policy and regulatory framework that, if carried out, could alter the urban form of the Hub Plan area, the Hub Plan would not result in immediate physical changes to the existing visual character. Any changes to urban form and visual quality would be the result of the subsequent development projects permitted under the Hub Plan. The proposed streetscape and street network and configuration changes could also have physical effects.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural

[24] City and County of San Francisco, *San Francisco General Plan*, Urban Design Element, 2010, last updated: December 7, 2010, *http://www.sf-planning.org/ftp/General_Plan/images/I5.urban_design/urb_street_areas_important_to_perception_of_city.pdf*, accessed: March 8, 2018.

change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

The visual quality of an area relates to the physical appearance and characteristics of the built environment, the proximity and balance of human-made structures with open space or landscaping, and views of public open space or more distinct landscape features such as hills, water bodies, or built landmarks. These elements help define a sense of place and a physical orientation in a larger visual setting. The Hub Plan area is not a pristine natural environment or rural area; instead, the Hub Plan area is within a human-built urban environment that is part of an established community. Visual conditions within the vicinity of the Hub Plan area are defined by a mix of local roadways, large blocks that are either vacant or under construction, and industrial, office, recreational, residential, and commercial development. The interplay of these elements of the visual setting varies, depending on the viewer location.

Design and aesthetics are subjective and open to interpretation by decision-makers and the public. However, as with all CEQA impacts, the effects of a project or program must be considered in the physical context of the program area and compared to existing conditions. A proposed project would, therefore, be considered to have a significant adverse effect on visual quality under CEQA only if it were to cause a substantial and demonstrable negative change in the physical environment that affects the public in one or more ways. Changes to private views resulting from a proposed program would not be considered to be substantially degrading to the existing visual character of the environment because they would not affect the public at large.

This analysis evaluates the anticipated development in the Hub Plan area with respect to existing conditions and current allowances. It considers the degree of visual contrast and compatibility in scale and character between existing and potential conditions that could occur as a result of programmatic changes. Potential impacts on aesthetic and visual resources due to the Hub Plan are evaluated below, based on a review of photographs and program data as well as site reconnaissance. Computer-generated visual massing studies are used below to depict the potential range of development that could occur under the proposed Hub Plan.

## DENSITY BONUS PROGRAMS

As discussed in Chapter 2, Project Description, in the EIR, the state density bonus program, as well as the City's Affordable Housing Bonus Program (codified in Planning Code section 206), would be applicable in the Hub Plan area. This would result in the potential for added height for affordable housing projects. However, the locations where project sponsors might seek to use the state or the local density bonus programs are not known. Although these bonus programs permit an increase in residential density beyond that otherwise allowed, and enable project sponsors to request waivers or modifications with respect to planning code

requirements, including height limits, they do not exempt subsequent projects from being subject to CEQA review. Therefore, pursuant to state density bonus law, any project for which additional height is requested would be evaluated further under CEQA.

## IMPACTS AND MITIGATION MEASURES

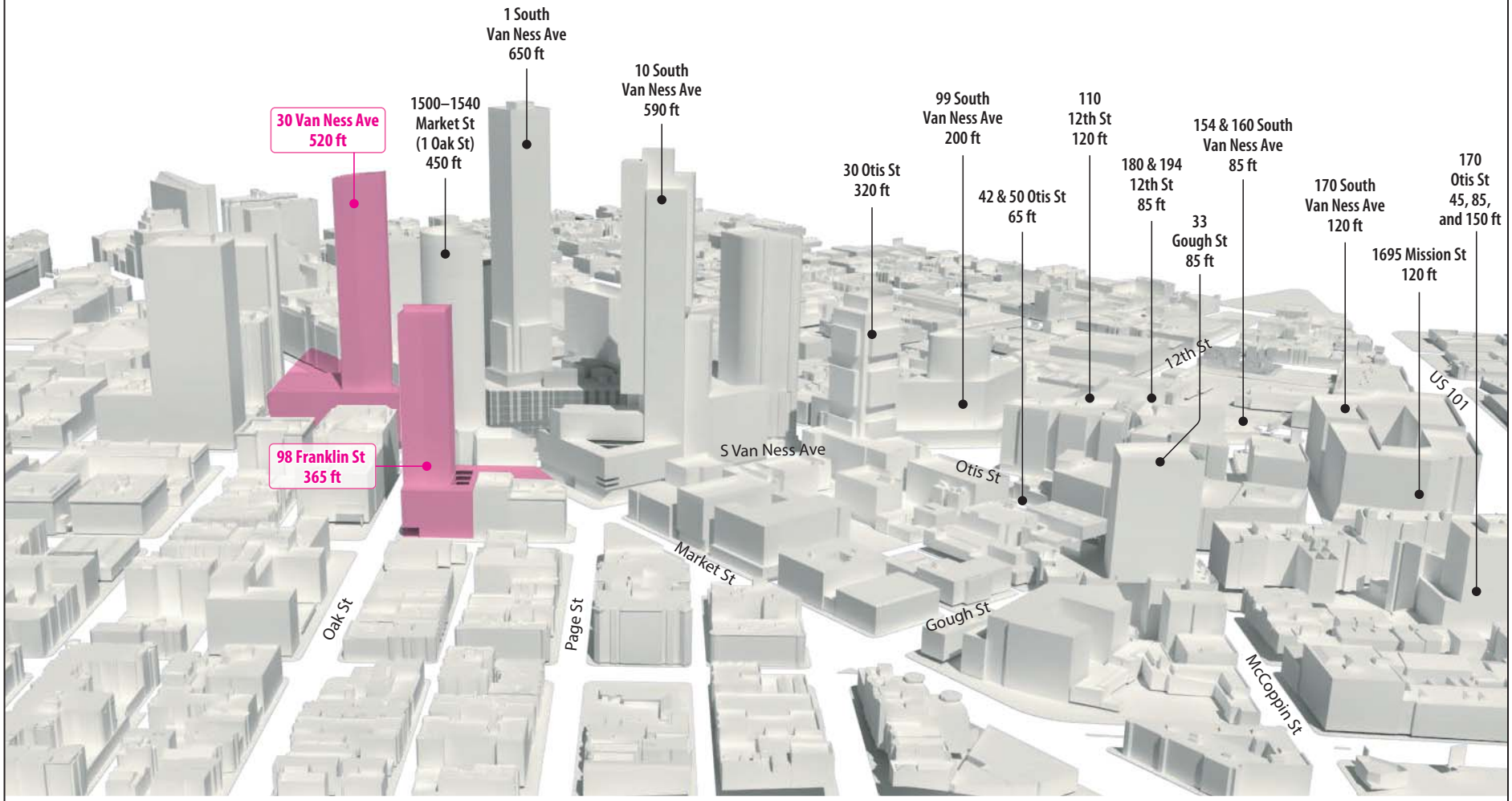
**Impact AE-1: The Hub Plan would not have a substantial adverse effect on a scenic vista. (Less than Significant)**

As described above, a scenic vista is a vista from a public location with high visual quality, including harmonious, visually interesting, and broad views. The Hub Plan area has no substantial topographic relief and only limited public open spaces that provide vantage points. The one location within the Hub Plan area from which scenic vistas are afforded is the Central Freeway. Accordingly, this discussion focuses on the effect of subsequent development projects under the Hub Plan and its effect on mid-range views within the Hub Plan area as well as mid-range and long-range views of the Hub Plan area from outside locations.

**Figure E.2-3**, Potential Massing under the Hub Plan, is a visual diagram of potential maximum building heights and massing that would be allowed in the Hub Plan area. This diagram represents a mid-range view from outside the planning area (looking east, toward the Hub Plan area). Development pursuant to these height limits would result in substantially taller buildings on the sites proposed for upzoning compared with the current low- to mid-rise buildings that are the more common scale throughout the majority of the Hub Plan area. However, they would be compatible with the scale of surrounding buildings already in the vicinity, especially development seen to the north and east in the Financial District and SoMa neighborhoods.

The Central Freeway (U.S. 101) would not be directly affected or substantially altered under the Hub Plan. Thus, the availability of views from the aerial portions of the freeway would not be changed. Newer, taller buildings in the Hub Plan area could be visible from the freeway but would generally blend in with the existing urban quality and scale of development in the viewshed, including the high-rise buildings at 100 Van Ness Avenue, 1390 Market Street (Fox Plaza), and 8 10th Street (NEMA), for example.

In areas surrounding the Hub Plan area, public locations (i.e., hillside public parks and open spaces) where scenic vistas could be affected by subsequent development projects under the Hub Plan are as follows: Dolores Park, Corona Heights, Potrero Hill, and Twin Peaks. These locations offer expansive mid-range and long-range views of the sky and the natural setting of the Bay, the San Francisco waterfront, Yerba Buena Island, and the East Bay Hills. In addition, these locations include views of the Bay Bridge, a notable architectural feature. The overall character of the cityscape seen from these public locations, as well as the focal points (described above) viewed from these locations, would not substantially change as a result of the Hub Plan.




**Legend**

Individual Development Project Sites

Source: San Francisco Planning Department, 2019.

ICF Graphics … 00700.17 (4-24-2019)

The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.2-3**
**Potential Massing under The Hub Plan**

The Hub Plan would incentivize the construction of high-rise building in the Hub Plan area, but these potential future changes to the height and bulk of buildings in the Hub Plan area would blend in with the existing cityscape viewed from mid-range and long-range locations such as these. Should future development occur within the Hub Plan area that maximizes the proposed height limits, the area would not stand out or be visually notable, given the expansive nature of the vistas. The Hub Plan, including the streetscape and street network changes, would not have a substantial adverse effect on a scenic vista. This impact would be ***less than significant***.

**Mitigation**: None required.

**Impact AE-2: The Hub Plan would not conflict with applicable zoning and other regulations governing scenic quality or substantially damage scenic resources. (Less than Significant)**

No natural or scenic resources would be affected by subsequent development projects under the Hub Plan because none currently exist in the area. Physical changes are likely to occur as secondary effects from revisions to the planning code regarding intensified allowable uses and the increased height and bulk limits throughout the Hub Plan area. The visual effects of foreseeable new uses under the Hub Plan would be most prevalent in areas that allow taller buildings compared with current conditions.

Under the current zoning, much of the Hub Plan area is zoned for a height of 85 feet, with the exception of the two major intersections at Market Street and Van Ness Avenue, and Mission Street and South Van Ness Avenue, which currently allow for towers ranging from 250 to 400 feet. The proposed zoning under the Hub Plan would allow for additional height at Market Street and Van Ness Avenue and Mission Street and South Van Ness Avenue, with towers ranging from 250 to 650 feet. This proposed zoning would also allow increases in height for select sites. Specific changes to height limits under the Hub Plan are shown in Chapter 2, Project Description, **Table 2-1**, Proposed Changes to Height Limits, p. 2-24, of the Draft EIR.

Development pursuant to these height limits would result in substantially taller buildings compared with the current low- to mid-rise buildings that are the more common scale throughout the majority of the Hub Plan area. However, they would be compatible with the scale of surrounding buildings already in the vicinity, especially development seen to the north and east in the Financial District and SoMa neighborhoods. The relatively greater height and density of buildings now present in the vicinity would be expanded south to include the Hub Plan area. In addition, physical changes would be incremental, occurring gradually over time and according to the resources and timing of individual project sponsors. Given historical development patterns, it can also be assumed that not all sites would be built to maximum height and bulk allowances. The proposed Hub Plan height and bulk limits would provide a greater incentive for redevelopment of some sites over others. As a result, some

new buildings could be noticeably taller than existing adjacent buildings. However, although the character of the Hub Plan area would change, it would not cause a negative visual effect because they would be compatible with the scale of surrounding buildings already in the vicinity, avoiding conflicts with applicable zoning or other regulations governing scenic quality.

Although the varied scale and mid-rise character of much of the Hub Plan area would remain, implementation of the Hub Plan would still alter the cityscape and change some areas at ground level. Taller buildings in clustered areas would reinforce existing street grid–oriented development, causing a concentration of visual changes in specific locations as opposed to spread out over a wide area. Higher-density development would be most noticeable to people walking and driving at ground level whose perspectives for wayfinding and physical orientation may be altered. These changes, however, would not necessarily be considered adverse from a visual perspective. As with many redevelopment projects, newly constructed buildings are a welcome visual change that may enhance or improve some areas (especially those that were decrepit or underutilized), creating more vibrancy and activity in areas that may have been lacking. Therefore, even though the overall appearance of the area would change as a result of subsequent development projects under the Hub Plan, the dominant visual character of the area, one of a densely built urban environment, would remain generally consistent with existing conditions, avoiding conflicts with applicable zoning or other regulations governing scenic quality.

Less visual change would occur in the Hub Plan area where building height and bulk allowances would remain as is, such as the blocks on Market Street between Van Ness Avenue and Gough Street and the areas in the southern portion of the Hub Plan area near the freeway. Historic preservation policies would continue to protect older buildings that add visual character to the area. Furthermore, future uses and building designs would conform to the general plan urban design policies and guidelines and those of the Market and Octavia Area Plan. Generally, the mix of design styles and uses across the Hub Plan area would be preserved.

Although visual quality is subjective, given the above analysis, implementation of the Hub Plan would not conflict with applicable zoning or other regulations governing scenic quality, nor would the Hub Plan result in substantial adverse impacts on visual quality or scenic resources.

The Hub Plan would improve the public realm through streetscape improvements that allow for a functional, attractive, and well-integrated system of public streets in the area. Major intersections such as Market Street and Van Ness Avenue, as well as Mission Street and South

Van Ness Avenue, would be reconfigured to make them safer. This would also facilitate multi-modal traffic and create public spaces. Implementation of the Hub Plan would conform to the standards of the Better Streets Plan.[25]

Proposed streetscape and street network improvements generally include consistent materials, detailed high-quality paving in the roadway, raised crosswalks at intersections, street trees along the vehicular parking lane or wherever the width allows along the sidewalk's edge, and other landscaping wherever feasible. From an aesthetics standpoint, these modifications to the streetscape and street network and streetscape would result in minor and generally beneficial alterations to the visual character of the neighborhoods in the Hub Plan area. Specifically, they would reduce the amount of public space allocated to private vehicles, add street trees to visually soften and shade sidewalks (and vehicular traffic calming), and create more visually interesting public spaces and streets that would be scaled for people walking. These changes would not be considered adverse and would not conflict with applicable zoning or other regulations governing scenic quality.

Implementation of the Hub Plan would not conflict with applicable zoning or other regulations governing scenic quality or adversely affect any scenic resources in the Hub Plan area. The impact would be ***less than significant***.

**Mitigation**: None required.

**Impact AE-3: The Hub Plan would not create a new source of substantial light or glare in the Hub Plan area that would adversely affect daytime or nighttime views or substantially affect people or properties. (Less than Significant)**

Implementation of the proposed Hub Plan would incentivize new development, which would generate additional lighting during hours of darkness in the future, but this change would not be substantial or adverse in the context of existing lighting in the urban Hub Plan area. The new lighting would not exceed existing lighting at nearby buildings and could be lower in comparison on a per-building basis because requirements in the San Francisco Building Code (building code) and Green Building Code require energy conservation. Also, compliance with design guidelines and the planning code would require the use of non-reflective glass; downward-directed, shielded outdoor lighting; and limitations on the illumination of outdoor signs. In addition, Planning Commission Resolution 9212 generally prohibits the use of

[25] The Better Streets Plan, adopted in 2010, identifies policies and standards for the design, location, and dimensions of items for people walking and streetscape items in the public right-of-way, including crosswalks, bulb-outs, street furniture, planters, and trees. The plan seeks to balance the needs of all city street users and includes goals, objectives, policies, and design guidelines, as well as future strategies, to improve the realm of people walking in San Francisco. Major concepts covered in the Better Streets Plan range from safety and accessibility features for people walking to improved ecological performance on streets and streetscape greening.

mirrored or reflective glass in new buildings. Therefore, impacts related to glare from new buildings would not be substantial. Streetscape and street network changes would result in light and glare conditions similar to or slightly better than those under existing conditions. New lighting would use improved designs and technology, such as LED technology, which allows individual lights to be directed downward at the public right-of-way at ground level, resulting in less spillage into surrounding buildings. Therefore, implementation of the Hub Plan would not result in obtrusive light or glare that would adversely affect views or substantially affect other properties. The impacts would be ***less than significant***. (A separate analysis of lighting effects on birds is included in Section E.13, Biological Resources.)

**Mitigation**: None required.

**Impact C-AE-1: The Hub Plan, along with other past, present, and reasonably foreseeable future development, would not make a considerable contribution to any cumulative impact on aesthetics. (Less than Significant)**

This analysis of the contribution of the Hub Plan to cumulative aesthetics impacts is based on consideration of the reasonably foreseeable future projects within the Hub Plan area, as identified and described in Section B, Project Setting. Smaller projects within and near the Hub Plan area, even mid-rise developments, would not generally be discernable in long-range views of the Hub Plan area, nor in shorter-range views from within the Hub Plan area (unless a project were in immediate view). Thus, smaller projects would not combine with potential Hub Plan area development and would not create a significant cumulative impact.

When combined with other foreseeable proposed, approved, or under-construction projects in the area, the subsequent development projects under the Hub Plan would alter the visual character of the Downtown/Civic Center, SoMa, Western Addition, and Mission neighborhoods. However, in the context of the highly developed Hub Plan area and surroundings, this change would not conflict with applicable zoning or other regulations governing scenic quality. Buildings that are currently approved (such as 200–214 Van Ness Avenue, at up to 134 feet tall) would be comparable with zoning allowances in the Hub Plan area, which are mostly in the 120-foot range but would go up to 650 feet at specified locations (refer to Chapter 2, Project Description, **Table 2-1**, Proposed Changes to Height Limits, p. 2-24, of the Draft EIR). The Central SoMa Area Plan (east and southeast of the Hub Plan area and within the visual backdrop of the Hub Plan area from higher public vantage points, as discussed above) would allow building heights of up to 400 feet in specified areas and change building heights in other areas of Central SoMa from the existing 45 feet to as much as 160 feet. It would also allow towers ranging from 200 to 400 feet on specified sites across its planning area. Building allowances of 85 feet would remain in many areas; some areas that are currently at 45 feet would be raised to 85 feet. This varied height and bulk pattern seen in the Central SoMa Area Plan is similar to the limits and/or allowances specified for the Hub Plan area.

From a visual standpoint, where buildings tend to blend together from mid- and long-range views (2 to 10 miles), the changes would not be considered adverse and would not conflict with applicable zoning or other regulations governing scenic quality. In addition, new buildings, such as the proposed developments in the Hub Plan area at 30 Van Ness Avenue (at up to 520 feet) and 98 Franklin Street (at up to 365 feet), could create new focal points from long-range locations. However, San Francisco height and bulk limits,[26] urban design standards,[27] and the Planning Code section 309 (Downtown Project Authorization) process would promote well-designed towers that would enhance the skyline. Future residential projects in the Hub Plan area would likewise be required to adhere to the Residential Design Guidelines,[28] which articulate expectations regarding the character of the built environment and are intended to promote a design that will protect neighborhood character and enhance the attractiveness of city neighborhoods. Overall, the cumulative impact on views would not be adverse or conflict with applicable zoning or other regulations governing scenic quality.

The Hub Plan, when combined with past, present, and reasonably foreseeable future development, would incentivize new development, which would create more density in the area, with more high-rise and mid-rise buildings and increased heights in locations near transit and transit hubs. Implementation of the above-noted projects and plans, as well as the subsequent development projects that could occur under the Hub Plan, would intensify the overall look and feel of the area. However, this visual change would not be considered adverse nor conflict with applicable zoning or other regulations governing scenic quality. In addition, underutilized and vacant sites across the Hub Plan area and in areas with other development projects would be developed, enhancing the visual quality and character of these areas.

As with the Hub Plan, other development would not substantially disrupt the existing natural or man-made environment because no scenic resources are present in the Hub Plan area. Furthermore, as with the Hub Plan, proposed streetscape and street network changes, combined with reasonably foreseeable projects, would result in visually enhanced and softened streetscapes in the Hub Plan area. New street trees and attractive lighting would soften streetscapes and add visual contrast to the Hub Plan area, create more public spaces that would be scaled toward people walking, and reduce the amount of space allocated for

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[26] San Francisco Planning Code section 270.

[27] San Francisco Planning, *San Francisco Urban Design Standards*, March 22, 2018, *http://default.sfplanning.org/plans-and-programs/planning-for-the-city/Urban-Design-Guidelines/Urban_Design_Guidelines.pdf* , accessed: July 5, 2019

[28] San Francisco Planning Commission, *Residential Design Guidelines*, 2003, *http://sf-planning.org/sites/default/files/FileCenter/Documents/5356-resdesfinal.pdf*, accessed: March 13, 2018.

the private automobile. These are considered beneficial visual changes. Therefore, the Hub Plan, combined with reasonably foreseeable projects, would not substantially affect scenic resources, views, scenic vistas, or light and glare. Therefore, cumulative impacts would be ***less than significant***.

**Mitigation**: None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **3. POPULATION AND HOUSING. Would the project:** | | | | | |
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing? | ☐ | ☐ | ☒ | ☐ | ☐ |

# SETTING

## EXISTING CONDITIONS

The San Francisco Housing Inventory, November 2017, reports that there were 387,597 housing units in the city in 2016, an increase of 5,046 since 2015.[29] Between 2010 and 2016, nearly 15,037 units were added to the city's housing stock, reflecting an annual growth rate of approximately 0.6 percent and a sharp acceleration in development and the construction of new housing units.[30]

For the same time period, from 2010 to 2016, the city experienced population growth at a slightly faster rate. According to the U.S. Census Bureau, there were approximately 805,235 people living in San Francisco in 2010.[31] In 2016, there were 850,282 people living in San Francisco,[32] reflecting an annual growth rate of 0.8 percent. These trends suggest that additional housing is needed to match the growth rate in the city's population. Also, during this time period, the city's average household size increased slightly, increasing from 2.26 persons per household (pph) in 2010[33] to 2.33 pph in 2016.[34]

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[29] San Francisco Planning Department, *2016 San Francisco Housing Inventory,* November 2017, *http://default.sfplanning.org/publications_reports/2016_HousingInventory.pdf*, accessed: February 6, 2018.

[30] Ibid.

[31] U.S. Census Bureau. *DP-1 Profile of General Population and Housing Characteristics: 2010,* 2010, *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_SF1DP1&prodType=table*, accessed: February 6, 2018.

[32] U.S. Census Bureau, *DP05 ACS Demographic and Housing Estimates, 2012–2016,* American Community Survey 5-year Estimates, 2017, *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_DP05&prodType=table*, accessed: February 6, 2018.

[33] U.S. Census Bureau, *DP-1 Profile of General Population and Housing Characteristics,* 2010, *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_SF1DP1&prodType=table,* accessed: February 6, 2018.

[34] U.S. Census Bureau, *B25010 Average Household Size of Occupied Housing Units by Tenure, 2012–2016*, American Community Survey 5-year Estimates, 2017, *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_B25010&prodType=table*, accessed: February 6, 2018.

**Table E.3-1** shows the city's population and housing changes between 2010 and 2016.

**TABLE E.3-1. CITY POPULATION AND HOUSING, 2010–2016**

| | 2010 | 2016 | Annual Growth 2010–2016 |
|---|---|---|---|
| Population | 805,235 | 850,282 | 0.8 |
| Housing Units | 372,560 | 387,597 | 0.6 |
| Persons per Household | 2.26 | 2.33 | — |

Source: San Francisco Planning Department 2017; U.S. Census Bureau 2010, 2017.

As of September 2018, the Hub Plan area had approximately 3,500 housing units and a population of 8,100 people.[35] Residential units in the Hub Plan area account for approximately 0.9 percent of the city's housing units. The Hub Plan area is not home to a large amount of deed-restricted below-market-rate housing. The majority of the Hub Plan area contains between zero and 12 percent below-market-rate housing. For comparison purposes, areas in the Western Addition neighborhood contain 13 to 25 percent below-market-rate housing, and areas in the SoMa neighorhood contain 26 to 44 percent below-market-rate housing.[36] No residents currently reside on the project sites at 30 Van Ness Avenue and 98 Franklin Street.

## GROWTH ANTICIPATED IN REGIONAL AND LOCAL PLANS

San Francisco's central location, historic function as a job nucleus and employment hub for the region, and access to jobs and transit are some reasons why the city's share of regional population is expected to increase.

### PROJECTED GROWTH – PLAN BAY AREA

Senate Bill 375, adopted in 2008, requires preparation of a Sustainable Communities Strategy, as described below, as part of the Regional Transportation Plan for the Bay Area. Plan Bay Area, which incorporates the ABAG *Projections 2013*, is the Sustainable Communities Strategy for the region. It was jointly approved in July 2017 by ABAG and the MTC.[37,38] The plan provides a transportation and land use/housing strategy for the Bay Area to use to address its transportation, mobility, and accessibility needs; land development concerns; and GHG

[35] San Francisco Planning Department, *Hub Plan Development Estimates and Methodology*, September 4, 2018.

[36] City and County of San Francisco Department of Public Health, *Proportion of San Francisco Housing Stock that Is Affordable,* Environmental Health Section, n.d., *http://www.sfindicatorproject.org/img/indicators/pdf/Affordable_Housing.pdf*, accessed: March 8, 2018.

[37] The Metropolitan Transportation Commission is the government agency responsible for regional transportation planning, financing, and coordinating in the nine-county San Francisco Bay Area.

[38] Although Plan Bay Area was updated in 2017, the 2013 projections are still the most current for cities and counties in the Bay Area. Plan Bay Area does have updated projections for 2040 at the regional level.

emission reduction requirements through 2040. The Hub Plan area, including the two individual development projects, is located within the Market-Octavia/Upper Market Priority Development Area, one of 12 Priority Development Areas in the city.[39] Priority Development Areas are areas where new compact development is promoted, particularly near existing and future transit connections, to support the needs of residents and employees.

As shown in **Table E.3-2**, the Bay Area is expected to gain more than 2.1 million residents between 2010 and 2040, reaching a total population of approximately 9.3 million, or a 30 percent increase compared with the 2010 population.[40] The number of households is expected to increase by 29 percent (700,000) to approximately 3.3 million, and the number of housing units is expected to increase by 24 percent (660,000) to approximately 3.45 million.[41] [42] A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters, while households are occupied housing units.

**TABLE E.3-2. CITY AND BAY AREA POPULATION PROJECTIONS, 2010–2040**

| | 2010 | 2020 | 2030 | 2040 | Growth 2010–2040 |
|---|---|---|---|---|---|
| **Population** | | | | | |
| City and County of San Francisco | 805,235 | 890,400 | 981,800 | 1,085,700 | 280,465 (35%) |
| Bay Area | 7,150,739 | 7,786,800 | 8,496,800 | 9,299,100 | 2,148,361 (30%) |
| **Housing Units** | | | | | |
| City and County of San Francisco | 376,940 | N/A | N/A | 469,350 | 92,410 (29%) |
| Bay Area | 2,786,000 | N/A | N/A | 3,450,000 | 660,000 (24%) |
| **Households** | | | | | |
| City and County of San Francisco | 345,811 | 379,600 | 413,370 | 447,350 | 101,539 (29%) |
| Bay Area | 2,608,023 | 2,837,680 | 3,072,920 | 3,308,090 | 700,067 (29%) |

Source: Association of Bay Area Governments, *Projections 2013*, December 2013; Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy,* May 16, 2012.
N/A = information is not available

[39] Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area 2040, Priority Development Area and Transit Priority Area Map for CEQA Streamlining*, 2018, *https://www.planbayarea.org/pda-tpa-map*, accessed: March 8, 2018.

[40] Association of Bay Area Governments, *Projections 2013*, December 2013.

[41] Ibid.

[42] Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy,* May 16, 2012, *https://www.planbayarea.org/sites/default/files/pdf/JHCS/May_2012_Jobs_Housing_Connection_ Strategy_Main_Report.pdf*, accessed: February 6, 2018.

In the Bay Area, the Sustainable Communities Strategy and the Regional Housing Needs Allocation (RHNA) are mutually reinforcing. They were developed together to meet the overlapping objectives of Senate Bill 375 and housing element law. The objectives include increasing the supply, diversity, and affordability of housing; promoting infill development and a more efficient land use pattern; promoting an improved intraregional relationship between jobs and housing; protecting environmental resources; and promoting socioeconomic equity. Senate Bill 375, which requires the RHNA to be consistent with the Sustainable Communities Strategy, establishes an 8-year cycle for the RHNA. The 2014–2022 RHNA, discussed below, has been incorporated into Plan Bay Area.[43]

#### PROJECTED GROWTH – SAN FRANCISCO HOUSING ELEMENT

The 2014 housing element (adopted April 2015) of the San Francisco General Plan identifies the Hub Plan area as an appropriate location for high-density housing near transit and jobs to meet the city's short-term (to 2025) and longer-term (to 2040) housing production goals.[44] The housing element requires zoning and development standards that encourage and promote below-market-rate housing as well as a diverse range of housing opportunities. In addition, it describes housing needs in the city and identifies development capacity for new housing, based on land supply. The element focuses on the city's critical need for below-market-rate housing. The housing element establishes goals for housing production as well as policies related to reducing the impacts of growth on the housing market.[45]

According to the department and ABAG, San Francisco is expected to gain approximately 101,000 households and 280,000 residents between 2010 and 2040 and have a population of more than 1 million, a 35 percent increase in residential population. Employment is forecast to increase by 34 percent (191,000 jobs) during this period to a total of approximately 760,000.[46]

ABAG, in coordination with the California State Department of Housing and Community Development, determines the Bay Area's regional housing need, which is based on regional

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[43] Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area 2040: Strategy for a Sustainable Region,* adopted: July 26, 2017.

[44] San Francisco Planning Department, *2014 Housing Element: An Element of the General Plan of the City and County of San Francisco,* April 2015, *http://default.sfplanning.org/plans-and-programs/planning-for-the-city/housing-element/2014HousingElement-AllParts_ADOPTED_web.pdf**http://208.121.200.84/ftp/files/plans-and-programs/planning-for-the-city/housing-element/2014HousingElement-AllParts_ADOPTED_web.pdf*, accessed: February 6, 2018.

[45] Ibid.

[46] Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy,* May 16, 2012, *https://www.planbayarea.org/sites/default/files/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf*, accessed: February 6, 2018.

trends, projected job growth and existing needs. San Francisco's fair share of the regional housing need for January 2015 through June 2022 was calculated to be 28,870 units, or about 3,850 units per year.[47] The goal is to alleviate the tight housing market stemming from forecast household and employment growth as well as allocate regional household and employment growth to jurisdictions with established or planned transit infrastructure. More important, the RHNA determination includes production targets that address the housing needs of a range of household income categories. A total of about 16,333 units, or 57 percent of the RHNA target, must be below-market-rate to households making 120 percent of the area median income or less**.** With respect to income category, ABAG determined that, between January 2015 and June 2022, the city would need to provide approximately 6,234 housing units to those with very low incomes, 4,639 housing units to those with low incomes, and 5,460 housing units to those with moderate incomes to meet its RHNA obligations.[48]

As discussed in the 2014 housing element, between 2007 and the first quarter of 2014, the City made progress toward meeting targets for market-rate housing under the 2007–2014 RHNA. The City met 41 percent of its production goal for low-income housing (i.e., less than 80 percent of area median income) and 16 percent of its production goal for moderate-income housing (i.e., 80 to 120 percent of area median income). When the 2014 housing element was prepared, the 2015–2022 planning period had not begun; therefore, the "housing pipeline" was used to provide an estimate of the future quantity of housing and determine how it compared to the RHNA targets. The department defines the pipeline as those projects that are under construction or that have been approved by the San Francisco Department of Building Inspection (building department) within the past 3 years or filed within the past 5 years. As shown in **Table E.3-3**, housing production in the city is estimated to total approximately 20,170 units, including units in the pipeline, units to be rehabilitated (non-public housing), and units for conservation/preservation (public housing). Compared to the RHNA targets for 2014–2022, this would result in an estimated shortfall in the city of approximately 8,699 units.[49] San Francisco's share of the RHNA is incorporated into the City's 2014 housing element (originally adopted in March 2011 and most recently re-adopted with amendments on April 27, 2015). 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.

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[47] San Francisco Planning Department, *2014 Housing Element: An Element of the General Plan of the City and County of San Francisco*, April 2015, *http://generalplan.sfplanning.org/2014HousingElement-AllParts_ADOPTED_web.pdf*, accessed: February 6, 2018.

[48] Ibid.

[49] Ibid.

**TABLE E.3-3. ABAG REGIONAL HOUSING NEED ALLOCATION FOR 2014–2022 (UNITS) COMPARED TO THE NEW HOUSING CONSTRUCTION PIPELINE, Q2 2014**

| | Regional | City/County | | |
|---|---|---|---|---|
| Income Level | RHNA Targets | RHNA Targets | Total Estimated Housing Production[a,b] | Estimated Shortfall |
| *Very Low* | 46,680 | 6,234 | 1,425 | -4,809 |
| *Low* | 28,940 | 4,639 | 5,880 | 1,241 |
| *Moderate* | 33,420 | 5,460 | 695 | -4,765 |
| Subtotal of Below-Market-Rate Units | 109,040 | 16,333 | 8,000 | -8,333 |
| Above Moderate[c] | 78,950 | 12,536 | 12,170 | -366 |
| Total | 187,990 | 28,869 | 20,170 | -8,699 |

Sources: Association of Bay Area Governments. 2013. *Regional Housing Need Plan for the San Francisco Bay Area: 2014–2022.* Adopted: July 18, 2013; City and County of San Francisco. 2015. *City and County of San Francisco General Plan* (2014 Housing Element). Adopted: April 27, 2015. Available: *https://www.sf-planning.org/ftp/General_Plan/2014HousingElement-AllParts_ADOPTED_web.pdf*, Accessed: February 6, 2018.

Notes:

a. Does not include three major development projects with a net total of 23,700 units: Hunters Point, Treasure Island, and Parkmerced, which include a total of up to 5,400 net below-market-rate units.

b. Includes entitled units, rehabilitation (non-public housing), and conservation/preservation (public housing).

c. Above Moderate: Households with incomes greater than 120 percent of the county median family income. ABAG does not use the Above Moderate category. This category is included in the RHNA and the analysis below to provide decision-makers with more information on housing impacts for the broad spectrum of new worker households associated with the proposed project.

## ACCOMMODATING JOBS AND HOUSING GROWTH AND PLAN RATIONALE

As discussed above, San Francisco's official quantified targets for addressing housing needs are provided by ABAG, in coordination with the California Department of Housing and Community Development, as part of the RHNA. The RHNA is required by state law to promote the state's interest in increasing housing supply, increasing the mix of housing types and affordability in all jurisdictions, facilitating infill development and efficient development patterns, protecting environmental resources, and reducing inter-regional commuting. The needs are defined in terms of housing market factors, such as accommodating projected demand due to household growth, employment growth, and the need to transition commuters into residents; increasing the vacancy rate to provide more choice and less upward pressure on prices and rents; and increasing the supply of below-market-rate housing options. ABAG allocates regional housing needs among jurisdictions, based on factors that consider existing employment, employment growth, household growth, and the availability of transit. Region-wide income distributions complete the allocation by household income category.

The adoption of Senate Bill 375, which required California regions as a whole to reduce GHG emissions by linking growth to transit, resulted in increased pressure on San Francisco (and other major cities, such as San José and Oakland) to accommodate a major portion of the region's growth. The City has undertaken significant planning efforts to direct housing toward transit-supported areas. The Hub Plan area was identified as one of the areas that would be able to accommodate additional housing, particularly below-market-rate housing, given its proximity to transit.

Among San Francisco's neighborhoods, the Hub Plan area (including the locations for the two individual development projects) provides a unique opportunity to create more housing space at locations that are readily accessible to both regional and local transit. As discussed in Section B, Project Setting, the Hub Plan area is in the vicinity of numerous public transit routes, including San Francisco Municipal Railway (Muni) light-rail lines, Muni coach routes, Muni rapid routes, the F-line's historic streetcar, and regional transit routes provided by Golden Gate Transit, the Blue & Gold Fleet water ferries, and the Water Emergency Transportation Authority. Its location contains many local transit options and several connections to regional transit, such as the Bay Area Rapid Transit (BART) stations approximately 0.25 mile east of the Hub Plan area at the Civic Center on Market Street. The Hub Plan area's adjacency to the major job centers in downtown and Mission Bay makes it a natural next step for housing growth. Finally, its capacity for new development, combined with its existing building stock, provides the opportunity to expand not only the amount but also the types of housing that the city has to offer.

Planning for more intensive new development in the Hub Plan area, including the two individual development projects, to accommodate a larger population and more employment than would otherwise be the case is one of the means by which San Francisco and the region as a whole can meet state mandates under Senate Bill 375 for a Sustainable Communities Strategy to reduce per-capita GHG emissions. The long-term projections for city and regional population and employment growth are the basis for the housing, transportation, other infrastructure, and public services and utilities planning conducted at a city and regional level. They are also the basis for efforts to secure the funding and financial support essential to realizing this level of infill development.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The

proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

Effects on population and housing could result as subsequent development projects allowed under the Hub Plan replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area and therefore are analyzed on a project-specific level.

Population growth is considered in the context of local and regional plans as well as population, housing, and employment projections. Generally, a project that induces population growth is not viewed as having a significant impact on the environment unless the physical changes that would be needed to accommodate project-related population growth would have adverse impacts on the environment. CEQA Guidelines, section 15064(e), states that an economic or social change by itself would not be considered a significant effect on the environment. Employment and residential growth related to the Hub Plan would result primarily in physical changes related to transportation, noise, air pollutant emissions, GHG emissions, and demand for public services, utility capacity, and recreational facilities. These physical impacts are analyzed under the other environmental topics in this document, such as Section E.9, Greenhouse Gas Emissions; Section E.12, Recreation; Section E.13, Utilities and Services Systems; and Section E.14, Public Services.

An indirect environmental impact is a change to the physical environment that is not immediately related to the proposed project (CEQA Guidelines section 15064(d)(2)). Specifically, project-related growth-inducing effects include ways in which a project could foster economic or population growth or the construction of additional housing, either directly

or indirectly. Projects that would remove obstacles to population growth (e.g., a major expansion of a wastewater treatment plant) might, for example, allow for development to occur in an area that was not previously considered feasible for development because of infrastructure limitations (CEQA Guidelines section 15126.2(d)). As such, indirect population growth is a secondary impact, which is considered below under Impact PH-1.

This analysis considers whether the population and household growth that would occur with implementation of the Hub Plan and the two individual development projects would be considered substantial relative to remaining planned growth potential in the city. ABAG projections were used to analyze whether the growth caused by the project would be within planned growth projections. Specifically, ABAG projections for 2020 are used to represent existing (baseline) conditions, and projections for 2040 are used to represent future (build-out) conditions. Growth that exceeds planned growth would be considered substantial. As shown in **Table E.3-4**, the Hub Plan could result in up to 15,700 new city residents.

This analysis also considers the Hub Plan's impact on the projected (2040) jobs/housing ratio in the city by calculating the projected jobs/housing ratio with and without the Hub Plan.

**TABLE E.3-4. PROJECTED RESIDENTS AND EMPLOYEES WITHIN THE HUB PLAN AREA AND THE INDIVIDUAL PROJECT SITES**

| Land Use | Units/Gross Square Footage (sf) | Generation Rate | Estimated Residents/Employees |
|---|---|---|---|
| **Residents** | | | |
| The Hub Plan | 8,100 units[a] | 1.3 persons/studio<br>1.7 persons/one bedroom<br>2.5 persons/two bedrooms+[b] | 15,700 residents[c] |
| 30 Van Ness Avenue[d] | 520,000 sf/610 units<br>229 studios<br>229 one-bedroom units<br>92 two-bedroom units<br>60 three-bedroom units | 1.3 persons/studio<br>1.7 persons/one bedroom<br>2.5 persons/two bedrooms+[b] | 1,067 residents |
| 98 Franklin Street[d] | 384,080 sf/345 units<br>172 studios<br>86 one-bedroom units<br>54 two-bedroom units<br>33 three-bedroom units | 1.3 persons/studio<br>1.7 persons/one bedroom<br>2.5 persons/two bedrooms+[b] | 587 residents |

**TABLE E.3-4. PROJECTED RESIDENTS AND EMPLOYEES WITHIN THE HUB PLAN AREA AND THE INDIVIDUAL PROJECT SITES**

| Land Use | Units/Gross Square Footage (sf) | Generation Rate | Estimated Residents/Employees |
|---|---|---|---|
| **Employees** | | | |
| The Hub Plan – Commercial | N/A | N/A | 275 employees[e] |
| 30 Van Ness Avenue – Office | 350,000 sf | 240 sf/employee | 1,460 employees[f] |
| 30 Van Ness Avenue – Retail | 21,000 sf | 350 sf/employee | 60 employees |
| 98 Franklin Street – Retail | 3,100 sf | 350 sf/employee | 9 employees[g] |
| 98 Franklin Street – Institutional (school) | 81,000 sf | N/A | 5 employees |

Source: San Francisco Planning Department, *Hub Plan Development Estimates and Methodology*, June 13, 2019.

a. Future residential development under the Hub Plan was calculated by taking anticipated total gross square footage and dividing by 1,200 gross square feet per residential unit. This number was then increased by 15 percent to account for the potential density bonuses, including the State Density Bonus Program, 100 percent Affordable Housing Bonus Program, and HOME-SF (the City and County of San Francisco's [City's] local density bonus program).

b. Two or more bedrooms.

c. Future population estimated from a weighted average of 1.94 persons per developed residential unit, assuming a unit mix of 20 percent studio, 40 percent one bedroom, and 40 percent two bedroom, with average occupancy of 1.3, 1.7, and 2.5, respectively. Future population estimate reflects the 15 percent increase in the number of residential units assumed in note "a," above.

d. The total number of residential units and residents under the 30 Van Ness Avenue and 98 Franklin Street projects is included in the totals provided for the Hub Plan.

e. Jobs were estimated from anticipated gross square footage of development by use type. It is noted that the transportation model run that was completed before 170 Otis was added as one of the Hub Plan sites; however, the approximately 125 employees that could be added on this site as a result of the upzoning under the Hub Plan are accounted for in the 275 additional employees listed in this table under the Hub Plan.

f. This table presents the estimated maximum number of employees that would be generated by the 30 Van Ness Avenue Project. As discussed in Chapter 3, the existing uses at the project site include general office, pharmacy, and restaurant uses. Based on the employee density factors used by the planning department for non-residential uses, these existing uses, in combination, would yield approximately 816 existing employees at the site. Thus, the total number of net new employees that would be generated by the proposed 30 Van Ness Avenue Project is approximately 700. The SF-CHAMP transportation model that was run for the proposed project, with outputs that feed into the transportation, air quality, and noise analyses in this EIR, nets out the existing uses at this site.

g. This table does not take into account approximately two employees associated with the existing parking lot use at 98 Franklin Street.

# IMPACTS AND MITIGATION MEASURES

**Impact PH-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not induce substantial unplanned population growth beyond that projected by regional forecasts, either directly or indirectly. (Less than Significant)**

## CONSTRUCTION

It is anticipated that construction employees associated with subsequent development projects under the Hub Plan, the streetscape and street network improvements, and the individual development projects, who are not already living in the city would commute from their residences elsewhere in the Bay Area rather than permanently relocate to San Francisco from more distant locations; this is typical for employees in the various construction trades. Once the construction phases are complete, construction workers typically seek employment at other job sites in the region that require their particular skills. Thus, construction of the subsequent development projects under the Hub Plan, the streetscape and street network improvements, and the individual development projects, would not generate a substantial unplanned population increase in the city or region. Temporary impacts associated with an unplanned increase in population during the construction periods for subsequent development projects under the Hub Plan, the streetscape and street network projects, and the individual development projects, would be ***less than significant***.

## OPERATION

Subsequent development projects under the Hub Plan would result in greater development density within the Hub Plan area compared with what is allowed under existing zoning. This is because of the proposed revisions to height and bulk districts at 18 sites and proposed revisions to the zoning districts throughout the southern portion of the Hub Plan area. The Hub Plan seeks to help shape and accommodate population growth within San Francisco, primarily by replacing zoning that currently restricts development at the 18 sites. In addition, the Hub Plan seeks to increase the space available for housing through changes to the planning code that would allow the development of a taller, larger, and overall more diverse array of buildings and heights within the Hub Plan area. The subsequent development projects in the Hub Plan area that could be approved pursuant to the proposed zoning would accommodate the population and job growth already identified for San Francisco and projected to occur within city boundaries. Therefore, they would not induce substantial unplanned population growth, either directly or indirectly.

**Table E.3-5** presents estimates for population and housing within the Hub Plan area as a whole, comparing existing conditions (2016) and future no-project conditions in 2040 (growth allowed under current zoning) to the growth allowed under the Hub Plan and under the cumulative

conditions. As shown in **Table E.3-5**, the Hub Plan could result in up to approximately 15,700 new residents and 275 new jobs in the Hub Plan area compared with existing conditions. It is noted that although the number of jobs anticipated as a result of the 30 Van Ness Avenue and 98 Franklin Street projects (1,534) surpasses the total number of jobs listed in **Table E.3-4**, p. E.3-9, for the entire Hub Plan area (275), it is expected that other sites throughout the Hub Plan area that currently include non-residential uses (and therefore, jobs) would, over time, be replaced with residential uses, resulting in an overall net increase of approximately 275 jobs area wide.

**TABLE E.3-5. EXISTING AND FORECAST HOUSING AND POPULATION IN THE HUB PLAN AREA**

| | Existing | 2040 No Project (Growth Allowed under Current Zoning) | The Hub Plan | 2040 with the Hub Plan (Cumulative Condition) |
|---|---|---|---|---|
| Households (units) | 3,500 | 9,300 | 8,100 | 22,500 |
| Population | 8,100 | 19,300 | 15,700 | 47,500 |
| Jobs | 13,200 | 10,400 | 275 | 11,600 |

Source: San Francisco Planning Department, *Hub Plan Development Estimates and Methodology*, June 13, 2019.

The Hub Plan would not stimulate population or job growth within the city that is not already projected to occur in regional growth forecasts and regional air quality planning efforts. For the city, the number of households and the number of jobs is projected to increase by approximately 101,000 and 191,000, respectively, during the period from 2010 to 2040 (see Growth Anticipated in Local and Regional Plans, above). The Hub Plan would not trigger a need for roadway expansion or result in the extension of infrastructure into previously unserved areas. Rather, by allowing for more density within the Hub Plan area, as well as accommodating the growth that is projected to occur within the city, development under the Hub Plan would alleviate development pressure elsewhere in the city and promote density in the already urbanized and transit-rich Hub Plan area. Therefore, the Hub Plan would not induce substantial unplanned population growth beyond that projected by regional forecasts, either directly or indirectly.

As shown in **Table E.3-4**, p. E.3-9, the 30 Van Ness Avenue Project could generate up to 1,067 onsite residents; the 98 Franklin Street Project could generate up to 587 residents. In total, the two individual development projects could employ up to 1,534 workers (a net increase of 822 workers compared to existing conditions), which is more than the total new jobs under the Hub Plan (275 jobs). However, it is expected that other sites throughout the Hub Plan area that currently include non-residential uses (and therefore, jobs) would, over time, be replaced with residential uses, resulting in an overall net increase of approximately 275 jobs area wide. Because of this very small increase in jobs, induced population growth from employees is not expected in the Hub Plan area.

The 30 Van Ness Avenue project site is within Census Tract 124.02; the 98 Franklin Street project site is within Census Tract 168.02. Combined, these two census tracts have a total population of approximately 6,961.[50,51] The two individual development projects would add 1,654 new residents to these two census tracts, which represents a 23.7 percent increase in population compared with existing conditions in the immediate area. Although this increase would be substantial within the local census tracts, it would not be substantial in the context of citywide growth, as described below. In addition, the two individual development projects are within the Market-Octavia/Upper Market Priority Development Area, which is designated for new development that supports the needs of residents and employees.

As shown in **Table E.3-2**, p. E.3-3, ABAG projects that the city's population will increase by approximately 195,300, from 890,400 in 2020 to 1,085,700 in 2040, while the Bay Area population will increase by approximately 1,512,300. Therefore, the maximum amount of residential growth that would occur under the Hub Plan, including the two individual development projects, would be approximately 8 percent of the residential growth expected in the city and individual development projects, in total, would represent 0.8 percent of the city's expected approximately 1 percent of the residential growth expected in the Bay Area.[52] The two growth from 2020 to 2040 and approximately 0.1 percent of expected Bay Area growth.[53] Per ABAG population projections, this is anticipated growth for the city.

Infrastructure (e.g., wastewater and electricity transmission infrastructure) that would be developed would be sized to meet the needs of visitors, businesses, and residents at the two individual development project sites. Because this proposed infrastructure would be sized to meet the needs of each individual development project, it would not lead to additional unplanned indirect population growth or the need for additional housing beyond that generated by each individual development project. The proposed streetscape and street network changes that would be implemented as part of the Hub Plan would not have any impacts on population and housing because they would not induce unplanned population

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[50] U.S. Census Bureau, *B01003 Total Population, 2012–2016, American Community Survey 5-year Estimates,* 2017, *https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_B01003&prodType=table*, accessed: February 6, 2018.

[51] The two census tracts that include 30 Van Ness Avenue and 98 Franklin Street compose an area smaller than and different from the exact Hub Plan area boundaries, which accounts for the larger population located within the Hub Plan area (8,100) compared to the two census tracts (6,961).

[52] To calculate the amount of growth in the city and Bay Area, the total number of new residents added under the Hub Plan (15,700) is divided by the anticipated growth in the city (195,300) and Bay Area (1,512,300). City growth: (15,700 new residents/195,300) x 100 = 8%; Bay Area growth: (15,700 new residents/1,512,300) x 100 = 1%.

[53] To calculate the amount of growth in the city and Bay Area, the total number of new residents added under the two individual development projects (1,654) is divided by the anticipated growth in the city (195,300) and Bay Area (1,512,300). City growth: (1,654 new residents/195,300) x 100 = 0.8%; Bay Area growth: (1,654 new residents/1,512,300) x 100 = 0.1%.

growth in the Hub Plan area, either directly or indirectly. Specifically, changes to the streetscape and street network would be related primarily to improving circulation for people bicycling or walking and would not provide additional access to the area that would further induce population. Therefore, the Hub Plan and the two individual development projects would not induce substantial unplanned population growth beyond that projected by regional forecasts, either directly or indirectly. This impact would be ***less than significant***.

**Mitigation**: None required.

**Impact PH-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not generate housing demand beyond projected housing forecasts. (Less than Significant)**

As a regulatory program, the Hub Plan would not result in immediate physical effects but rather would result in new planning policies and zoning controls to accommodate additional housing. The Hub Plan would help accommodate regional growth projections for San Francisco and shape and direct that growth toward appropriate locations. Because San Francisco is a regional job center, and because the Hub Plan area is near local and regional transit lines, the Hub Plan area is appropriate for new housing development. As discussed below, potential housing demand generated by commercial and office development is not expected in the Hub Plan area.

This section also analyzes the effects of housing demand generated by the two individual development projects. The proposed streetscape and street network changes that would be implemented as part of the Hub Plan would not have any impacts on population and housing because they would not generate demand for housing units.

### EMPLOYMENT-RELATED HOUSING DEMAND

As shown in **Table E.3-4**, p. E.3-9, the Hub Plan could result in 275 new jobs in the Hub Plan area compared with existing conditions. The two individual development projects could employ up to 1,534 workers (a net increase of 822 workers compared to existing conditions). For the reasons discussed above, induced population growth and employment-related housing demand are not expected in the Hub Plan area. Therefore, there would be a ***less–than-significant*** impact from employment-related housing demand.

### HOUSING DEMAND

Given the regional imbalance between housing supply and demand, the Hub Plan recognize that it is important to capitalize on opportunities to provide more housing in appropriate locales. Specific sites have been identified in the Hub Plan area for height increases in order to provide more housing (see **Table 2-1**, p. 2-24); these include the sites for the two individual development projects. Moreover, the proposed zoning district reclassifications, as well as the proposed expansion of the Van Ness and Market Downtown Residential SUD, are intended to incentivize and encourage residential development in the Hub Plan area. From a location and

transit perspective, the Hub Plan area is a logical housing growth center. The Hub Plan's key strategies for enhancing development potential include increased densities, a wide and flexible range of uses, and increased height limits. With these changes to height and bulk limits, as well as development densities, the department estimates that 8,100 additional housing units could be developed in Hub Plan area by 2040.

An increase in development would improve San Francisco's ability to meet housing demand and reduce the number of commuters who live outside the city and drive to work. Furthermore, an increase in housing supply in the Hub Plan area would reduce demand pressure from employment growth on the older housing stock in the city.

Developers of new housing (projects with five or more units) in the Hub Plan area would be required to participate in San Francisco's Inclusionary Affordable Housing Program. The fees required of these developers would generate revenue for the Citywide Affordable Housing Fund, which would be used to increase the supply of below-market-rate housing in San Francisco. Payment of the fees would satisfy the City's land use regulatory requirement and offset the documented impact of market-rate housing development on demand for below-market-rate housing in San Francisco. Furthermore, non-residential development in the Hub Plan area would be required to participate in the Jobs-Housing Linkage Program, which would offset any residual impact related to increased housing prices and rents and the need for below-market-rate housing in San Francisco. Any Jobs-Housing Linkage Program revenue generated by development projects in the Hub Plan area would be deposited in the Citywide Affordable Housing Fund and used to increase the supply of below-market-rate housing in San Francisco.

Individual development projects would be consistent with City and regional planning efforts related to housing and would help the City reach its RHNA targets by constructing both market-rate and below-market-rate housing units. New rental housing built for the individual development projects would meet or exceed the inclusionary housing requirements set forth in section 415 of the City's planning code. Consistent with these requirements, the project sponsors would provide onsite below-market-rate residential units. Income restrictions would be enforceable through a development agreement or other similar binding agreement as well as deed restrictions on the property. The 30 Van Ness Avenue Project would provide approximately 25 percent of all residential units as below-market-rate units for a mix of low- to moderate-income households or approximately 33 percent as below-market-rate at an offsite location nearby. For the 98 Franklin Street Project, 18 percent of the residential units at each site would be below-market-rate units. Therefore, the individual development projects would contribute to the City's RHNA targets.

As noted above, the individual development projects would focus development in an area that has been identified by the City and ABAG as a Priority Development Area. As such, the sites for the two individual development projects would be suitable for the population, housing, and employment growth forecast in local and regional planning documents. Development on the sites would help the City accommodate planned population and employment growth.

## JOBS/HOUSING BALANCE

The jobs/housing balance refers to the ratio of the total job count in a jurisdiction to the total household count in the same area. The ratio is an indicator of the extent to which the workforce may have an opportunity to live and work in the same community, assuming that the occupations and skills of the employees match the occupations and skills required for the jobs and that the housing supply meets the needs of those employees. Local governments may use the jobs/housing balance as a planning tool for achieving particular policy outcomes. It is not, however, a regulatory tool and does not necessarily imply a physical change in the environment or relate to any recognized threshold of significance under CEQA. A worsening of the jobs/housing balance may, however, be an indicator of longer commute times, the associated environmental consequences of which, such as impacts related to transportation, air quality, and GHG emissions, are discussed in the EIR. Therefore, the jobs/housing balance is discussed below for informational purposes.

As discussed above, the Hub Plan, including the two individual development projects, would allow for the construction of approximately 8,100 housing units (expected to house approximately 15,700 residents). As shown in **Table E.3-6**, implementation of the Hub Plan, including the two individual development projects, would allow for the improvement the city's projected jobs/housing ratio in 2040, moving from 1.70 to 1.67 (the ideal jobs/housing ratio is 1.0).

**TABLE E.3-6. JOBS AND HOUSING UNITS IN THE CITY THROUGH 2040 WITH THE HUB PLAN**

| | 2020 | 2040 |
|---|---|---|
| Jobs in San Francisco (Baseline with the Proposed Project) | 671,230 | 759,500 |
| Housing in San Francisco (Baseline with the Proposed Project) | 379,600 | 447,350 |
| Jobs/Housing Unit Ratio without the Proposed Project | 1.77 | 1.70 |
| Jobs/Housing Unit Ratio with the Proposed Project[a] | N/A | 1.67 |

Source: Association of Bay Area Governments, *Projections 2013*, December 2013.

[a.] The following calculations were completed: Jobs: 759,500 + 275 = 759,775; Housing: 447,350 + 8,100 = 455,450; Jobs/Housing Ratio: 759775,/455,450 = 1.67.

Overall, the conservatively estimated housing demand resulting from the Hub Plan and the two individual development projects would be accommodated by increases in the housing supply, primarily within the Hub Plan area. The impact would be ***less than significant***.

**Mitigation**: None required.

**Impact PH-3: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing outside of the Hub Plan area. (Less than Significant)**

## THE HUB PLAN

Although the Hub Plan is a regulatory program with no immediate physical effects, subsequent development projects under the Hub Plan would incentivize new development, which could require the demolition of housing units within the Hub Plan area. However, from the perspective of the city's housing stock, the potential loss of housing units as a result of development under the Hub Plan would be offset by the potential production of up to approximately 8,100 net new housing units within the Hub Plan area, in addition to residential development elsewhere in San Francisco that has been occurring or is expected to occur in the future. In addition, project sponsors associated with subsequent development projects in the Hub Plan area would be required to either provide onsite or offsite residential units or pay fees under the Jobs/Housing Linkage Program and Inclusionary Affordable Housing Program.

The proposed streetscape and street network changes that would be implemented as part of the Hub Plan would not have any impacts on population and housing because they would not displace housing units or people or necessitate the construction of replacement housing.

It would be speculative to estimate precisely how many of the 3,500 existing housing units that exist in the Hub Plan area would be demolished as a result of subsequent development projects allowed under the Hub Plan, but it is likely that some of them would be demolished. However, the Hub Plan is designed to promote density within the Hub Plan area, and neither would displace larger numbers of housing units or people than could be accommodated in the new construction. Furthermore, adherence to Planning Code section 317, which requires replacement of residential structures lost through demolition, would ensure that the city's housing stock would be conserved and maintained. Therefore, any housing displacement that would occur as a result of subsequent development projects allowed under the Hub Plan would not necessitate the construction of replacement housing elsewhere. This impact would be ***less than significant***.

## INDIVIDUAL DEVELOPMENT PROJECTS

The proposed project at 30 Van Ness Avenue includes retention of portions of the existing building and construction of an approximately 45-story building with ground-floor commercial space, 11 floors of office space, and 33 floors of residential space. The proposed project at 98 Franklin Street includes demolition of a surface vehicular parking lot and construction of a 31-story residential tower above a five-story podium that would serve as new high school facilities for the International High School (grades 9–12 of FAIS). None of these individual development

projects would involve demolition of any existing housing units. Therefore, the two individual development projects would not displace housing units or people or necessitate construction of replacement housing elsewhere. This impact would be ***less than significant***.

**Mitigation**: None required.

**Impact C-PH-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and, cumulatively, other past, present, and reasonably foreseeable future development, would not make a considerable contribution to any cumulative impact on population or housing. (Less than Significant)**

Housing and employment growth in San Francisco is consistent with the projections contained in Plan Bay Area, which is the current Regional Transportation Plan/Sustainable Communities Strategy that was adopted by MTC and ABAG in July 2017, in compliance with California's governing GHG reduction legislation, Senate Bill 375. Plan Bay Area calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and where the services necessary for daily living are provided in proximity to housing and jobs. With its abundant transit service and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth. Therefore, the Plan Bay Area projections represent the context for the cumulative analyses.

The purpose of the Hub Plan, subsequent development projects under the Hub Plan, and the two individual development projects is to accommodate the projected housing growth identified for San Francisco. Therefore, the subsequent development projects that would be incentivized under the Hub Plan, including the two individual development projects, would not (1) induce unplanned population growth beyond that projected and (2) would not directly displace housing or necessitate the construction of replacement housing outside of the Hub Plan area. Subsequent development projects could result in the displacement of housing; however, the replacement of displaced units would be required on a project-specific basis, based on regulations in Planning Code section 317 related to the removal of dwelling units. Office and other non-residential development would be required to pay in-lieu fees pursuant to the Jobs-Housing Linkage Program. Therefore, subsequent development projects pursuant to the Hub Plan would not make a considerable contribution to any housing displacement anticipated as a result of implementation of Plan Bay Area.

The majority of the projects included in **Table 3-2**, Cumulative Projects, p. 3-7, of the Draft EIR are residential mixed-use or housing projects that would increase the residential population of the project area. Consistent with the 2014 housing element and the 2008 Market and Octavia Neighborhood Plan, a substantial residential population increase is anticipated in the vicinity of the Hub Plan area. This growth is consistent with the goals of Plan Bay Area.

San Francisco Mayor's Executive Directive 17-0225 calls for the construction of "at least 5,000 units of new or rehabilitated housing every year for the foreseeable future" as well as

implementation of the policies needed to facilitate the construction.[54] Almost all of the projects in **Table 3-2**, Cumulative Projects, p. 3-7, of the Draft EIR include substantial housing components. Therefore, cumulative growth in the Hub Plan area is not expected to result in a cumulative demand for new housing. The Hub Plan area is well served by existing infrastructure, and past, present, and reasonably foreseeable transportation projects, such as Better Market Street and Van Ness Bus Rapid Transit, will provide transportation improvements to serve the anticipated population growth.

The proposed streetscape and street network changes that would be implemented as part of the Hub Plan would not have any impacts on population and housing; therefore, they would not make a considerable contribution to any cumulative impact on population or housing. For these reasons, the Hub Plan and the two individual development projects, in combination with other past, present, and reasonably foreseeable future projects, would result in a cumulatively considerable population and housing impact. Accordingly, cumulative effects related to population and housing would be ***less than significant***.

**Mitigation**: None required.

[54] Office of the Mayor, *Executive Directive 17-02*, *https://sfmayor.org/article/executive-directive-17-02*, accessed: November 9, 2018.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **4.** | **CULTURAL RESOURCES. Would the project:** | | | | | |
| a) | Cause a substantial adverse change in the significance of a historical resource pursuant to section 15064.5, including those resources listed in article 10 or article 11 of the San Francisco Planning Code? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5? | ☒ | ☐ | ☐ | ☐ | ☐ |
| c) | Disturb any human remains, including those interred outside of formal cemeteries? | ☒ | ☐ | ☐ | ☐ | ☐ |

Implementation of any of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would have the potential to result in significant impacts on cultural resources. Accordingly, this topic is further analyzed and included in the EIR.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **5. TRIBAL CULTURAL RESOURCES. Would the project:** | | | | | |
| a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | | |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☒ | ☐ | ☐ | ☐ |
| ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☒ | ☐ | ☐ | ☐ |

## REGULATORY SETTING

This section describes the applicable state regulations that define and provide guidance for the identification of, and analysis of impacts on, tribal cultural resources. Tribal cultural resources were originally identified as a distinct CEQA environmental category with the adoption of Assembly Bill 52 in September 2014. For all projects that are subject to CEQA that received a notice of preparation, notice of negative declaration, or mitigated negative declaration on or after July 1, 2015, Assembly Bill 52 requires the lead agency on a proposed project to consult with the geographically affiliated California Native American tribes. The legislation creates a broad new category of environmental resources, "tribal cultural resources," which must be considered under CEQA. Assembly Bill 52 requires a lead agency to not only consider the resource's scientific and historical value but also whether it is culturally important to a California Native American tribe.

Assembly Bill 52 defines tribal cultural resources as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register); included in a local register of historical resources, as defined in Public Resources Code section 5020.1(k); or determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria of Public Resources Code section 5024.1(c) (CEQA section 21074). The California Register criteria for the listing of resources, as defined in Public Resources Code section 5024.1(c), are the following:

(1) The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(2) The resource is associated with the lives of persons important in our past.

(3) The resource embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.

(4) The resource has yielded, or may be likely to yield, information important in prehistory or history.

Assembly Bill 52 also sets up an expanded consultation process. For projects initiated after July 1, 2015, lead agencies are required to provide notice of the proposed projects to any tribe that is traditionally and culturally affiliated with the geographic area that requested to be informed by the lead agency, following Public Resources Code section 21018.3.1 (b). If, within 30 days, a tribe requests consultation, the consultation process must begin before the lead agency can release a draft environmental document. Consultation with the tribe may include discussion of the type of review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. The consultation process will be deemed concluded when either (a) the parties agree to mitigation measures or (b) any party concludes, after a good-faith effort, that an agreement cannot be reached. Any mitigation measures agreed to by the tribe and lead agency must be recommended for inclusion in the environmental document. If a tribe does not request consultation, or otherwise assist in identifying mitigation measures during the consultation process, a lead agency may still consider mitigation measures if the agency determines that a project will cause a substantial adverse change to a tribal cultural resource.

## APPROACH TO ANALYSIS

In 2015, the department undertook discussions with legally recognized Native Americans of San Francisco regarding tribal cultural resources as part of implementation of recent changes in CEQA. Based on discussions with Native American tribal representatives, prehistoric archaeological resources are presumed to be potential tribal cultural resources. No other known or potential tribal cultural resources in San Francisco were identified at that time. An agreement on a tribal cultural resource notification list, procedural requirements for notification, tribal consultation procedures, the types of sites that would be treated as prima facie tribal cultural resources, and appropriate mitigation strategies for the treatment of identified tribal cultural resources that may be adversely affected by a project also resulted from those discussions. Mitigation strategies developed with local Native American tribal representatives included preservation-in-place strategies or interpretive programs developed in consultation with the consulting Native American tribal group.

On January 29, 2019, the department sent out notification letters to legally recognized Native American tribes that had requested notification, per the process just outlined, regarding the Hub Plan, the two individual projects, and the Hub HSD.

On March 13, 2019, the department followed up with Andrew Galvan, who had requested information on the project after being notified by ICF on December 11, 2018, as part of Native American outreach conducted outside the Assembly Bill 52 process. On March 21, 2019, Mr. Galvan requested a copy of any phase 1 literature search and/or foot survey conducted for this project. A copy of the archaeological research design and treatment plan[55] was provided by the department to Mr. Galvan on April 2, 2019. As of June 21, 2019, no responses to the letters or further requests have been received.

As indicated previously, the department considers prehistoric archaeological resources to be potential tribal cultural resources. As identified in the archaeological research design and treatment plan,[56] three such resources (CA-SFR-28, CA-SFR-136/H, and CA-SFR-148) are in the Hub Plan area. As of the writing of this document, no Native American tribes have identified these resources as being tribal cultural resources; however, based on previous discussions with Native American representatives, the department assumes that these prehistoric sites are tribal cultural resources. In addition, as outlined in the archaeological research design and treatment plan, the Hub Plan area, along with areas for proposed streetscape work and the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, is sensitive for prehistoric archaeological resources. Therefore, the potential exists for impacts on tribal cultural resources.

## IMPACTS AND MITIGATION MEASURES

**Impact TCR-1. The Hub Plan, as well as the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, could result in a substantial adverse change in the significance of a tribal cultural resource. (Less than Significant with Mitigation)**

CEQA section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. Based on the archaeological sensitivity assessment, there is the potential for prehistoric archaeological resources to be present in the Hub Plan area, including on the sites for the two individual development projects. As discussed above, prehistoric archaeological resources may also be considered tribal cultural resources. In the event that project activities associated with the Hub Plan, including streetscape and street network improvements, and the two individual development projects disturb unknown archaeological sites that are considered tribal cultural resources, any inadvertent damage would be considered a ***significant*** impact.

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[55] ICF, *Archaeological Research Design and Treatment Plan for the Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District, San Francisco, California*, prepared for the San Francisco Planning Department, December 2018.

[56] Ibid.

## MITIGATION MEASURES

*M-TCR-1:* ***Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance****.* This tribal cultural resources cultural mitigation measure shall apply to any project involving any soils-disturbing or soils-improving activities, including excavation, utility installation, grading, soil remediation, or compaction/chemical grouting at depths that would extend into sand dune and marsh deposits, that occur at depths of 2 feet or more below the ground surface.

Projects to which this mitigation measure applies shall be reviewed for the potential to affect a tribal cultural resource in tandem with Preliminary Archaeological Review of the project by the San Francisco Planning Department senior archaeologist. For projects requiring a Mitigated Negative Declaration or Environmental Impact Report, the San Francisco Planning Department "Notification Regarding Tribal Cultural Resources and the California Environmental Quality Act" shall be distributed to the San Francisco Planning Department tribal distribution list. Consultation with California Native American tribes regarding the potential of the project to affect a tribal cultural resource shall occur at the request of any notified tribe. For all projects subject to this mitigation measure, if the San Francisco Planning Department senior archaeologist determines that the proposed project may have a potential significant adverse effect on a tribal cultural resources, then the following shall be required as determined warranted by the Environmental Review Officer.

If the Environmental Review Officer determines that preservation-in-place of the tribal cultural resource is both feasible and effective, based on information provided by the applicant regarding feasibility and other available information, then the project's archaeological consultant shall prepare an archaeological resource preservation plan. Implementation of the approved archaeological resource preservation plan by the archaeological consultant shall be required when feasible. If the Environmental Review Officer determines that preservation in place of the tribal cultural resource is not a sufficient or feasible option, then the project sponsor shall implement an interpretive program of the tribal cultural resource in coordination with affiliated Native American tribal representatives. An interpretive plan produced in coordination with affiliated Native American tribal representatives, at minimum, and approved by the Environmental Review Officer shall be required to guide the interpretive program. The plan shall identify proposed locations for installations or displays, the proposed content and materials of those displays or installation, the producers or artists of the displays or installation, and a long-term

maintenance program. The interpretive program may include artist installations, preferably by local Native American artists, oral histories with local Native Americans, artifact displays and interpretation, and educational panels or other informational displays.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure M-TCR-1, Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance, would require subsequent development projects approved under the Hub Plan and the two individual development projects to be redesigned to avoid adverse effects on significant tribal cultural resource, if feasible. If preservation in place is not feasible, the measure would require implementation of an interpretative program for the tribal cultural resource, in consultation with affiliated tribal representatives. With implementation of this mitigation measure, the Hub Plan and the two individual development projects would have a less-than-significant impact on tribal cultural resources.

**Impact C-TCR-1. The Hub Plan, as well as the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with past, present, and reasonably foreseeable projects in the city, could result in a significant cumulative impact on tribal cultural resources. (Less than Significant with Mitigation)**

The cumulative context for tribal cultural resources includes urban development projects and transportation and streetscape improvements occurring within and surrounding the Hub Plan area, which together could lead to ground-disturbing activities and could result in impacts to archaeological resources, which also have the potential to be tribal cultural resources. The past, present, and reasonably foreseeable future projects within and surrounding the Hub Plan area include numerous development projects that propose new buildings, which would range from five to 55 stories in height, as well as streetscape and street network improvements. These cumulative projects, in concert with the Hub Plan and two individual development projects, have the potential to alter tribal cultural resources through development of sites and associated excavation activites. The total cumulative impact is considered significant. The Hub Plan would result in ground-disturbing activities that will occur in areas identified as having moderate to high sensitivity for containing buried undocumented historical and prehistoric archaeological resources, the latter of which may also be tribal cultural resources. In addition, the proposed 30 Van Ness Avenue Project would result in excavation to a depth of 48 feet below grade within the boundaries of the entire lot, and the proposed 98 Franklin Street Project would result in excavation to a depth of 39 feet within the boundaries of the entire lot. These ground-disturbing activities would also occur in areas identified as having moderate to high sensitivity for containing buried undocumented historical and prehistoric archaeological resources, the latter of which may also be tribal cultural resources. Therefore, these ground-disturbing activities have the potential to affect undocumented tribal cultural resources. Without mitigation, the

Hub Plan and two individual development projects, when considered against the past, present, and reasonably foreseeable future projects within and surrounding the Hub Plan area that would include ground-disturbing activities that have the potential to encounter sediments that have moderate to high archaeological sensitivity, has the potential to contribute considerably to the overall cumulative impact on tribal cultural resources. This is because they have the potential to damage or destroy as-yet undocumented archaeological resources that have the potential to be eligible for listing in the California Register, and which may be considered of traditional importance to Native American tribes.

## MITIGATION MEASURES

Implemetation of Mitigation Measure M-TCR-1, Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance, would reduce the cumulative impacts of the Hub Plan and individual development projects on potential tribal cultural resources to less-than-significant levels by providing mitigation for impacts on these resources.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of mitigation measures, the contribution from the Hub Plan and individual development projects on tribal cultural resources would be reduced to a less-than-considerable level. The impact is ***less than significant with mitigation***.

| *Topics:* | | *Potentially Significant Impact* | *Less than Significant with Mitigation Incorporated* | *Less-than-Significant Impact* | *No Impact* | *Not Applicable* |
|---|---|---|---|---|---|---|
| **6.** | **TRANSPORTATION AND CIRCULATION. Would the project:** | | | | | |
| a) | Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) | Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☒ | ☐ | ☐ | ☐ | ☐ |
| c) | Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses? | ☒ | ☐ | ☐ | ☐ | ☐ |
| d) | Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ | ☐ |

Any of the project's components, including the Hub Plan, the two individual development projects, and the Hub HSD, would have the potential to result in significant impacts on transportation and circulation. Accordingly, this topic is further analyzed and included in the EIR.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **7.** | **NOISE. Would the project:** | | | | | |
| a) | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) | Generation of excessive ground-borne vibration or ground-borne noise levels? | ☒ | ☐ | ☐ | ☐ | ☐ |
| c) | For a project located within the vicinity of a private airstrip or an airport land use plan area or, where such a plan has not been adopted, an area within 2 miles of a public airport or public use airport, expose people residing or working in the area to excessive noise levels? | ☐ | ☐ | ☐ | ☐ | ☒ |

The Hub Plan area, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD are not within an airport land use plan area, nor are they in the vicinity of a private airstrip. The nearest airport land use plan area and private airstrip is San Francisco International Airport, approximately 10 miles away. Therefore, topic 7c is not applicable to any of the project's components and not addressed further in the EIR. With respect to the other questions, any of the project's components, including the Hub Plan, the two individual development projects, and the Hub HSD, would have the potential to result in significant noise impacts. Accordingly, this topic, with the exception of aircraft noise, is further analyzed and included in the EIR.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **8.** | **AIR QUALITY. Would the project:** | | | | | |
| a) | Conflict with or obstruct implementation of the applicable air quality plan? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) | Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in non-attainment status under an applicable federal, state, or regional ambient air quality standard? | ☒ | ☐ | ☐ | ☐ | ☐ |
| c) | Expose sensitive receptors to substantial pollutant concentrations? | ☒ | ☐ | ☐ | ☐ | ☐ |
| d) | Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☒ | ☐ | ☐ | ☐ | ☐ |

Implementation of any of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would have the potential to result in significant impacts on air quality. Accordingly, this topic is further analyzed and included in the EIR.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **9. GREENHOUSE GAS EMISSIONS. Would the project:** | | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ | ☐ |

## SETTING

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs contributes to global climate change. The primary GHGs, or climate pollutants, are carbon dioxide ($CO_2$), black carbon, methane ($CH_4$), nitrous oxide ($N_2O$), ozone, and water vapor.

Individual projects contribute to the cumulative effects of climate change by emitting GHGs during demolition, construction, and operational phases. Although the presence of some of the primary GHGs in the atmosphere is naturally occurring, $CO_2$, $CH_4$, and $N_2O$ are also emitted from human activities, accelerating the rate at which these compounds occur within Earth's atmosphere. Emissions of $CO_2$ are largely by-products of fossil fuel combustion, whereas $CH_4$ results from off-gassing associated with agricultural practices and landfills. Black carbon has emerged as a major contributor to global climate change, possibly second only to $CO_2$. Black carbon is produced naturally and by human activities as a result of the incomplete combustion of fossil fuels, biofuels, and biomass.[57] $N_2O$ is a by-product of various industrial processes. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated in certain industrial processes. GHGs are typically reported in "carbon-dioxide-equivalent" measures.[58]

There is international scientific consensus that human-caused increases in GHGs contribute to global warming and, thus, climate change. Many impacts resulting from climate change, including sea-level rise (SLR), increased fires, floods, severe storms, and heat waves, already

[57] Center for Climate and Energy Solutions, *What is Black Carbon?* April 2010, *https://www.c2es.org/site/assets/uploads/2010/04/what-is-black-carbon.pdf*, accessed February 22, 2018.

[58] Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average, based on each gas's heat absorption (or "global warming") potential.

occur and will only become more severe and costly.[59] Secondary effects of climate change very likely include impacts on agriculture, the state's electricity system, and native freshwater fish ecosystems; an increase in the vulnerability of levees, such as in the Sacramento-San Joaquin Delta; changes in disease vectors; and changes in habitats and biodiversity.[60,61]

## GREENHOUSE GAS EMISSION ESTIMATES AND ENERGY PROVIDERS IN CALIFORNIA

The California Air Resources Board (air board) estimated that, in 2016, California produced about 429 million gross metric tons of carbon dioxide equivalents.[62] The air board found that transportation is the source of 41 percent of the state's GHG emissions, followed by industrial uses, at 23 percent, and electricity generation (both in-state and imported electricity), at 16 percent. Commercial and residential fuel use (primarily for heating) accounted for 12 percent of GHG emissions.[63] In San Francisco, motorized transportation and buildings (including natural gas and electricity use) were the two largest sources of GHG emissions, accounting for approximately 45 percent (1.98 million metric tons of carbon dioxide equivalents) and 46 percent (2.04 million metric tons of carbon dioxide equivalents), respectively, of San Francisco's 4.4 million metric tons of carbon dioxide equivalents emitted in 2016.[64] Other sources include landfilled organics (6.6 percent) and municipal emissions (2.7 percent, including both municipal buildings and fleets).[65]

Electricity in San Francisco is provided primarily by Pacific Gas & Electric and the San Francisco Public Utilities Commission. In 2015, electricity consumption in San Francisco was approximately 5.8 million megawatt-hours. Of this total, Pacific Gas & Electric produced approximately 84 percent

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[59] Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis, Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change,* 2013, *https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_all_final.pdf*, accessed April 24, 2019.

[60] Ibid.

[61] California Climate Change Center, *Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California*, 2012, *http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf*, accessed February 22, 2018.

[62] California Air Resources Board, *California Greenhouse Gas Inventory for 2000–2016 by Category as Defined in the Scoping Plan, https://www.arb.ca.gov/cc/inventory/data/data.htm*, accessed July 19, 2018.

[63] California Air Resources Board, *California Greenhouse Gas Inventory for 2000–2010 by Category, as Defined in the Scoping Plan,* 2013, *http://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2010/ghg_inventory_scopingplan_00-10_2013-02-19.pdf*, accessed April 24, 2019.

[64] San Francisco Department of the Environment, *Community GHG Inventory, 1990–2016, https://sfenvironment.org/carbon-footprint*, accessed July 19, 2018.

[65] San Francisco Department of the Environment, *Community GHG Inventory, 1990–2012.*

of electricity distributed (4.9 million megawatt-hours;) and the San Francisco Public Utilities Commission produced approximately 16 percent of electricity distributed (0.9 million megawatt-hour; 0 percent of San Francisco's electricity-driven GHG emissions).

Pacific Gas & Electric's 2016 power mix was as follows: 17 percent natural gas, 24 percent nuclear, 33 percent eligible renewables (described below), 12 percent large hydroelectric, and 14 percent unspecified power.[66]

The San Francisco Public Utilities Commission, which operates four hydroelectric power plants in association with San Francisco's Hetch Hetchy water supply system as well as solar energy, biomass, and biowaste infrastructure, provides electrical power to Muni, City buildings, and a limited number of other commercial accounts in San Francisco. Electricity generated by the Hetch Hetchy system achieved net-zero GHG emissions in 2015.[67]

## REGULATORY SETTING

### STATE

**Executive Orders S-3-05, B-30-15, and B-55-18.** Executive Order S-3-05[68] sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: reduce emissions to 1990 levels by 2020 (approximately 427 million metric tons of carbon dioxide equivalents) and 80 percent below 1990 levels by 2050 (approximately 85 million metric tons of carbon dioxide equivalents). California produced about 429 million metric tons of carbon dioxide equivalents in 2016.[69]

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[66] Pacific Gas & Electric, *PG&E's Power Mix. Understanding our Clean Energy Solutions, https://www.pge.com/pge_global/local/assets/data/en-us/your-account/your-bill/understand-your-bill/bill-inserts/2017/november/power-content.pdf*, accessed July 23, 2018.

[67] San Francisco Department of the Environment, *Community GHG Inventory, 1990-2015, https://sfenvironment.org/carbon-footprint*, accessed September 13, 2017.

[68] Office of the Governor, *Executive Order S-3-05*, June 1, 2005. *http://static1.squarespace.com/static/549885d4e4b0ba0bff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf*, accessed April 24, 2019. Executive Order S-3-05 sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced, as follows: by 2010, reduce GHG emissions to 2000 levels (approximately 457 million metric tons of carbon dioxide equivalents); by 2020, reduce emissions to 1990 levels (approximately 427 million metric tons of carbon dioxide equivalents); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million metric tons of carbon dioxide equivalents). Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

[69] California Air Resources Board, *California Greenhouse Gas Inventory for 2000-2016 by Category as Defined in the Scoping Plan, https://www.arb.ca.gov/cc/inventory/data/data.htm*, accessed April 24, 2019.

Executive Order B-30-15 set an interim statewide GHG reduction target of 40 percent below 1990 levels to be achieved by 2030. The purpose of this interim target is to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050.[70] Executive Order B-30-15 also requires all state agencies with jurisdiction over sources of GHG emissions to implement measures within their statutory authority to achieve reductions in GHG emissions to meet the 2030 and 2050 GHG emission reductions targets.

Executive Order B-55-18 established a statewide goal of achieving carbon neutrality as soon as possible, but no later than 2045, and achieving and maintaining net negative emissions thereafter. The air board was tasked with developing a framework to implement and account for progress toward the goal. Executive Order B-55-18 also requires that all policies and programs undertaken to achieve carbon neutrality be implemented in a manner that supports climate adaptation and biodiversity.[71]

**Assembly Bill 32 and California Climate Change Scoping Plan**. In 2006, the California legislature passed Assembly Bill 32 (California Health and Safety Code division 25.5, sections 38500, et seq.), also known as the California Global Warming Solutions Act. Assembly Bill 32 requires the air board to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

Pursuant to Assembly Bill 32, the air board adopted the 2008 Climate Change Scoping Plan, which outlines measures to meet the 2020 GHG reduction limits. In order to meet the goals of Assembly Bill 32, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels (approximately 15 percent below 2008 levels).[72] The plan estimates a reduction of 174 million metric tons of carbon dioxide equivalents from transportation, energy, agriculture, forestry, and other high global warming sectors (see **Table E.9-1**).[73]

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[70] Office of the Governor, *Executive Order B-30-15,* April 29, 2015, *https://www.ca.gov/archive/gov39/2015/04/29/news18938/index.html*, accessed April 26, 2019.

[71] Office of the Governor, *Executive Order B-55-18*, September 10, 2018, *https://www.gov.ca.gov/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf*, accessed September 27, 2018.

[72] California Air Resources Board, *California's Climate Plan: Fact Sheet, http://www.arb.ca.gov/cc/facts/scoping_plan_fs.pdf*, accessed April 24, 2019.

[73] Ibid.

**Table E.9-1. GHG Reductions from the Assembly Bill 32 Scoping Plan Categories[74]**

| Scoping Plan Category | GHG Reductions (million metric tons of carbon dioxide equivalents) |
|---|---|
| **Transportation** | 62.3 |
| **Electricity and Natural Gas** | 49.7 |
| **Industry** | 1.4 |
| **Landfill Methane Control** | 1 |
| **Forestry** | 5 |
| **High Global Warming Potential GHGs** | 20.2 |
| **Additional Reductions Needed to Achieve the GHG Cap** | 34.4 |
| **Other Recommended Measures** | |
| Government Operations | 1–2 |
| Agriculture – Methane Capture at Large Dairies | 1 |
| Water | 4.8 |
| Green Buildings | 26 |
| Recycling/Zero Waste | 9 |
| **Total Reductions Counted Toward 2020 Target** | **216.8–217.8** |

California Air Resources Board, *Climate Change Scoping Plan,* December 2008, *http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf*, accessed April 26, 2019.

The plan also anticipates that actions by local governments will result in reduced GHG emissions because local governments have the primary authority to plan, zone, approve, and permit development to accommodate population growth and the changing needs of their jurisdictions.[75] The plan also relies on the requirements of Senate Bill 375 (discussed below) to align local land use and transportation planning to achieve GHG reductions.

The plan must be updated every 5 years to evaluate Assembly Bill 32 policies and ensure that California is on track with respect to achieving long-term climate stabilization goals. In 2017, the air board released an updated Climate Change Scoping Plan, which builds upon the First Update to the Climate Change Scoping Plan from 2014 with new strategies and recommendations. The plan identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low-carbon investments. This update defines the air board's climate change priorities for the next 5 years

[74] California Air Resources Board, *Climate Change Scoping Plan,* December 2008, *http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf*, accessed April 26, 2019.

[75] Ibid.

and sets the groundwork to reach long-term goals set forth in Executive Order B-30-15 and Senate Bill 32. The plan highlights California's progress toward meeting the 2030 GHG emission reduction goals of Senate Bill 32. It also evaluates how to align the state's longer-term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use.[76]

**Senate Bill 32 and Assembly Bill 197.** On August 24, 2016, the California legislature passed Senate Bill 32 (California Health and Safety Code division 25.5, section 38566), amending the California Global Warming Solutions Act of 2006. Senate Bill 32 directs the air board to adopt, to the extent technologically feasible and cost-effective, any rules and regulations necessary to achieve a reduction in statewide GHG emissions of 40 percent below 1990 levels by 2030. The passage of Senate Bill 32 codifies the 2030 interim GHG emission reduction target established by Executive Order B-30-15.

Senate Bill 32 was paired with Assembly Bill 197 (California Government Code division 2 of title 2, article 7.6 of chapter 1.5, California Health and Safety Code section 39510, 39607, 38506, 38531, and 38562.5). Assembly Bill 197 provides additional guidance on how to achieve the reduction targets established in Executive Order B-30-15 and Senate Bill 32. Senate Bill 32 and Assembly Bill 197 became effective January 1, 2017.

**Senate Bill 375.** The 2008 Climate Change Scoping Plan also relies on the requirements of Senate Bill 375 (chapter 728, statutes of 2008), also known as the Sustainable Communities and Climate Protection Act of 2008, to reduce carbon emissions from land use decisions. Senate Bill 375 requires regional transportation plans developed by each of the state's 18 metropolitan planning organizations to incorporate a *sustainable communities strategy* in each regional transportation plan, which will then achieve GHG emission reduction targets set by the air board. For the Bay Area, the per-capita GHG emission reduction target is a 7 percent reduction by 2020 and a 15 percent reduction by 2035 in GHG emissions from vehicles and light-duty trucks compared with 2005 levels.[77] Plan Bay Area, the Metropolitan Transportation Commission's regional transportation plan, adopted in July 2017, provides a strategy for accommodating household and employment growth in the Bay Area as well as meeting the GHG reduction targets for passenger vehicles to comply with Senate Bill 375.[78]

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[76] California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, January 2017, *https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf*, accessed July 23, 2017.

[77] California Air Resources Board, *Executive Order No. G-11-024, Relating to Adoption of Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375,* February 2011, *http://www.arb.ca.gov/cc/sb375/executive_order_g11024.pdf*, accessed April 24, 2019.

[78] Association of Bay Area Governments and Metropolitan Transportation Commission, *Plan Bay Area 2040,* adopted: July 26, 2017, *http://2040.planbayarea.org/cdn/ff/buje2Q801oUV3Vpib-FoJ6mkOfWC9S9sgrSgJrwFBgo/1510696833/public/2017-11/Final_Plan_Bay_Area_2040.pdf*, accessed February 22, 2018.

**Senate Bills 1078, 107, X1-2,350, and 100 and Executive Orders S-14-08 and S-21-09.** California established aggressive renewable portfolio standards under Senate Bill 1078 (chapter 516, statutes of 2002) and Senate Bill 107 (chapter 464, statutes of 2006), which require retail sellers of electricity to provide at least 20 percent of their electricity supply from renewable sources by 2010. Executive Order S-14-08 (November 2008) expanded the state's renewable portfolio standard, which calls for 20 to 33 percent of electricity to come from renewable sources by 2020. In 2009, Governor Schwarzenegger continued California's commitment to the renewable portfolio standard by signing Executive Order S-21-09, which directed the air board to enact regulations to help California meet the renewable portfolio standard goal of 33 percent renewable energy by 2020.[79]

In April 2011, Governor Brown signed Senate Bill X1-2 (chapter 1, statutes of 2011) codifying the GHG reduction goal of 33 percent by 2020 for energy suppliers. This renewable portfolio standard preempts the air board's 33 percent renewable sources electricity standard and applies to all electricity suppliers (not only retail sellers) in the state including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. Under Senate Bill X1-2, all of these entities must adopt the new renewable portfolio standard goals of 20 percent of retail sales from renewable sources by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020.[80] Eligible renewable sources include geothermal, ocean wave, solar photovoltaic, and wind but exclude large hydroelectric (30 megawatts or more). Therefore, because the San Francisco Public Utilities Commission receives more than 67 percent of its electricity from large hydroelectric facilities, the remaining electricity provided by the San Francisco Public Utilities Commission is required to be 100 percent renewable.[81] Senate Bill 350 (chapter 547, statutes of 2015), signed by Governor Brown in October 2015, dramatically increased the stringency of the renewable portfolio standard. Senate Bill 350 establishes a renewable portfolio standard target of 50 percent by 2030, along with interim targets of 40 percent by 2024 and 45 percent by 2027.

Senate Bill 100 further accelerates renewable energy targets set by earlier legislation. The goal of the renewable portfolio standard was revised to achieve a 50 percent renewable resource target by the end of 2026 and 60 percent target by the end of 2030. The bill states that it is the

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79 California Public Utilities Commission, *RPS Program Overview*, June 2015, *http://www.cpuc.ca.gov/RPS_Overview/*, accessed April 24, 2019.

80 Ibid.

81 San Francisco Public Utilities Commission, *Approval of the Enforcement Program for the California Renewable Energy Resources Act,* December 13, 2011, *https://ww2.energy.ca.gov/portfolio/rps_pou_reports.html*, accessed April 24, 2019.

policy of the state that eligible renewable energy resources and zero-carbon resource supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to supply all state agencies by the end of 2045.[82]

## REGIONAL

The air district is responsible for attaining and maintaining federal and state air quality standards in the San Francisco Bay Area Air Basin, as established by the federal Clean Air Act and the California Clean Air Act, respectively. The acts require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the *Bay Area 2017 Clean Air Plan*, includes a goal of reducing GHG emissions to 1990 levels by 2020, 40 percent below 1990 levels by 2035, and 80 percent below 1990 levels by 2050.[83]

In addition, the air district established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the air basin; the program includes GHG-reduction measures that promote energy efficiency, reduce vehicle miles traveled, and develop alternative energy sources.[84]

The air district's CEQA Air Quality Guidelines also assist lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts on air quality. The air district advises lead agencies to consider adopting a GHG reduction strategy that meets climate stabilization goals and then reviewing projects for compliance with the GHG reduction strategy as a CEQA threshold of significance.[85] This is consistent with the approach to analyzing GHG emissions described in CEQA Guidelines section 15183.5.

## LOCAL

**San Francisco Greenhouse Gas Reduction Ordinance.** In May 2008, the City adopted Ordinance No. 81-08, amending the San Francisco Environment Code to establish GHG emissions targets and require departmental action plans and authorize the San Francisco Department of the Environment to coordinate efforts to meet these targets. The City ordinance establishes the following GHG emission reduction limits and target dates by which to achieve

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[82] Senator Kevin De Leon, *Senate Bill No. 100: California Renewable Portfolio Standards Program: Emissions of Greenhouse Gases*. September 10, 2018, *https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100*, accessed September 27, 2018.

[83] Bay Area Air Quality Management District, *2017 Clean Air Plan*, April 2017, *http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans*, accessed July 24, 2017.

[84] Bay Area Air Quality Management District, *Climate Protection Program*, *http://www.baaqmd.gov/plans-and-climate/climate-protection/climate-protection-program*, accessed April 24, 2019.

[85] Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, *http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en*, accessed January 7, 2019.

them: determine 1990 citywide GHG emissions by 2008, the baseline level, with reference to which target reductions are set; reduce GHG emissions by 25 percent below 1990 levels by 2017; reduce GHG emissions by 40 percent below 1990 levels by 2025; and reduce GHG emissions by 80 percent below 1990 levels by 2050.[86] The City's GHG reduction targets are consistent with—in fact, are more ambitious than—those set forth in Governor Brown's Executive Order B-30-15 by targeting a 40 percent reduction in GHGs by 2025 rather than a 40 percent reduction by 2030.

**San Francisco Greenhouse Gas Reduction Strategy.** San Francisco has developed many plans and programs to reduce the city's contribution to global climate change and meet the goals of the Greenhouse Gas Reduction Ordinance. San Francisco's Strategies to Address Greenhouse Gas Emissions[87] documents the City's actions to pursue cleaner energy, reduce energy consumption, support alternative transportation, and implement solid waste policies. For instance, the City has implemented mandatory requirements and incentives that have measurably reduced GHG emissions, including, but not limited to, increased energy efficiency in new and existing buildings, the installation of solar panels on building roofs, implementation of a green building strategy, implementation of a transportation sustainability program, implementation of a better roofs program, adoption of a zero-waste strategy, adoption of a construction and demolition debris recovery ordinance, creation of a solar energy generation subsidy, incorporation of alternative-fuel vehicles in the City's transportation fleet (including buses), and adoption of a mandatory recycling and composting ordinance. The strategy also includes 31 specific regulations for new development, which would reduce the project's GHG emissions. These GHG reduction actions resulted in a 30 percent reduction in GHG emissions in 2016 compared with 1990 levels,[88] exceeding the 2020 reduction goals in the air district's 2017 Clean Air Plan, Executive Orders S-3-05 and B-30-15, Assembly Bill 32, and the City's 2017 GHG reduction goal.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown

[86] City and County of San Francisco, *Greenhouse Gas Emissions Targets and Departmental Action Plans*, May 13, 2008, *http://library.amlegal.com/nxt/gateway.dll/California/environment/chapter9greenhousegasemissionstargetsand?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_Chapter9*, accessed April 24, 2019.

[87] San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, July 2017, *https://sfplanning.org/project/greenhouse-gas-reduction-strategies*, accessed April 24, 2019.

[88] San Francisco Department of the Environment, *San Francisco's Carbon Footprint, https://sfenvironment.org/carbon-footprint*, accessed September 27, 2018.

Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Although the Hub Plan and Hub HSD would not result in immediate physical changes to the environment, subsequent development projects allowed under the Hub Plan and Hub HSD could result in changes in GHG emissions in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area and could contribute to cumulatively significant GHG emissions.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

CEQA Guidelines section 15064.4 calls for a "good-faith effort" to "describe, calculate or estimate" GHG emissions. In accordance with section 15064.4, the significance of GHG impacts should include consideration of the extent to which the Hub Plan and the two individual projects would increase or reduce GHG emissions, exceed a locally applicable threshold of significance, and comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions." The CEQA Guidelines also state that a project may be found to have a less-than-significant impact if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (section 15064(h)(3)).

With respect to GHG emissions, the impacts of the Hub Plan and the two individual development projects are based on compliance with local, regional, and state plans, policies, and regulations adopted for the purpose of reducing the cumulative impacts of climate change. GHG emissions are analyzed in the context of their contribution to the cumulative effects of climate change because a single land use project could never generate enough GHG emissions to noticeably change the global average temperature. As discussed above, the Assembly Bill 32 Scoping Plan is the state's overarching plan for addressing climate change. The Assembly Bill

32 Scoping Plan recommendations are intended to curb projected business-as-usual growth in GHG emissions and reduce those emissions to 1990 levels. Therefore, meeting Assembly Bill 32 GHG emission reduction goals would result in an overall annual net decrease in GHG emissions compared with current levels and account for projected increases in emissions resulting from anticipated growth.

A third transportation, land use, and GHG emission reduction plan that would be applicable to the Hub Plan and the two individual development projects is Plan Bay Area. This regional plan sets forth a forecast development pattern for the region that concentrates growth in walkable communities along the region's extensive transit network, provides incentives for clean vehicles and smart driving, and directs investment into operating and maintaining, rather than expanding, the region's current transportation network. With implementation of these strategies, by 2035, per capita GHG emissions from transportation are projected to decline by 16 percent from today, exceeding the region's target of 15 percent.

In summary, the three applicable GHG reduction plans, the Assembly Bill 32 Scoping Plan, Plan Bay Area, and the San Francisco Greenhouse Gas Reduction Strategy, are intended to reduce GHG emissions to levels below current levels. Given that the City's local GHG emission reduction targets are more aggressive than the state's 2020 GHG emission reduction targets, and consistent with the long-term 2050 reduction targets, the San Francisco Greenhouse Gas Reduction Strategy is consistent with the goals of Assembly Bill 32. Therefore, projects that are consistent with the San Francisco Greenhouse Gas Reduction Strategy would be consistent with the goals of Assembly Bill 32 and would not conflict with either plan or generate GHG emissions that would make a considerable contribution to global climate change. This analysis also considers the Hub Plan's and the two individual development projects' consistency with the primary goals of Plan Bay Area, which are expected to reduce GHG emissions from the land use section by 16 percent by 2035. As such, the analysis of a project's impact with respect to GHG emissions is based on compliance with the San Francisco Greenhouse Gas Reduction Strategy and, for this analysis, with Plan Bay Area as well.

The air district has prepared guidelines and methodologies for analyzing GHGs. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHG and describes the required contents of such a plan. Accordingly, the City has prepared its own GHG reduction strategy (described above), which the air district has reviewed and concluded that "aggressive GHG reduction targets and comprehensive strategies like San Francisco's help the Bay Area move toward reaching the state's Assembly Bill 32 goals, and also serve as a model from which other communities can learn."

In addition to considering the Hub Plan, the following analysis also considers the impact on climate change from each of the two individual development projects and focuses on the projects' contribution to cumulatively significant GHG emissions. Because no individual project could emit GHGs at a level that could result in a significant impact on the global climate, this analysis is in a cumulative context; this section does not include an individual project-specific impact statement.

## IMPACTS AND MITIGATION MEASURES

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

With the exception of streetscape and street network improvements (which are discussed further below), adoption and implementation of the Hub Plan would not immediately result in GHG emissions. However, subsequent development projects in the Hub Plan area resulting from its implementation would result in GHG emissions. Direct operational emissions include GHG emissions from new vehicle trips and area sources (e.g., natural gas combustion). Indirect emissions include emissions from electricity providers; emissions associated with the energy required to pump, treat, and convey water; emissions associated with waste removal and disposal as well as landfill operations; and construction-related GHGs.

The proposed Hub Plan is, in substantial part, being proposed as a response to the Bay Area's regional GHG reduction strategy. As mentioned above, Senate Bill 375 required each metropolitan region in the state to prepare a Sustainable Communities Strategy to reduce GHGs by linking growth and transportation planning. The Association of Bay Area Governments and Metropolitan Transportation Commission adopted Plan Bay Area, the region's Sustainable Communities Strategy and regional transportation plan, in July 2013. The Association of Bay Area Governments' 2013 projections anticipate that city and county of San Francisco will add, between 2010 and 2040, approximately 101,539 housing units, and nearly 191,000 additional jobs.[89] Although the City has adopted plans in recent years to accommodate much of the anticipated new housing units, there is still a housing shortage. Accordingly, the Hub Plan seeks to accommodate growth, in particular residential growth, in proximity to local and regional transit. **Table E.9-2** describes goals from the Market and Octavia Area Plan related to reducing potential GHG emissions by concentrating growth near transit, discouraging the use of single-occupancy vehicles for commuter travel, encouraging alternative forms of travel, and maintaining the area's vibrant economic and physical diversity. Thus, the Hub Plan represents a key step in San Francisco's approach to

[89] Association of Bay Area Governments, *Projections 2013*, December 2013.

implementation of the GHG reduction policies set forth in both Assembly Bill 32 and Senate Bill 375. The Hub Plan also represents a key step in San Francisco's ability to accommodate housing growth projected by Plan Bay Area as well as the manner in which that growth occurs as infill development in transit-rich neighborhoods. This manner of development, encouraged through Hub Plan policies, is consistent with the Plan Bay Area's goals of reducing GHG emissions by 16 percent by 2035.

**TABLE E.9-2. GOALS, POLICIES, AND STRATEGIES FROM THE MARKET AND OCTAVIA AREA PLAN THAT COULD AFFECT EMISSIONS OF GREENHOUSE GAS**

| Goal, Policy, or Strategy | Potential Effect on Greenhouse Gas Emissions |
|---|---|
| Policy 1.1.2 Concentrate more intense uses and activities in those areas best served by transit and most accessible on foot. | By accommodating a share of regional growth in an area with good transit access, the Hub Plan would result in lesser GHG emissions than would a comparable degree of development elsewhere in the region with less transit access. As noted above, these goals will contribute to Plan Bay Area's target of reducing GHG emissions from transportation by 16.4 percent by 2035. |
| Policy 2.2.1 Eliminate housing density maximums close to transit and services. | |
| Policy 2.2.6 Where possible, simplify zoning and planning controls to expedite the production of housing. | |
| Policy 4.1.1 Widen sidewalks and shorten pedestrian crossings with corner plazas and boldly marked crosswalks where possible without affecting traffic lanes. Where such improvements may reduce lanes, the improvements should first be studied. | The Hub Plan seeks to reduce reliance on personal vehicle travel and increase the attractiveness and convenience of alternative means of travel, such as transit, bicycling, and walking. To the extent that the Hub Plan achieves a decrease in personal vehicle travel and an increase in travel by alternative, non-auto means, the Hub Plan would decrease vehicle miles traveled and vehicle emissions, including those of GHGs. |
| Policy 4.1.2 Enhance the pedestrian environment by planting trees along sidewalks, closely planted between pedestrians and vehicles. | |
| Objective 5.1 Improve public transit to make it more reliable, attractive, convenient, and responsive to increasing demand. | |
| Policy 5.1.1 Implement transit improvements on streets designated as "Transit Preferential Streets" in this plan. | |
| Policy 5.1.3 Establish a Market Octavia neighborhood improvement fund to subsidize transit, pedestrian, bicycle, and other priority improvements in the area. | |
| Policy 5.1.4 Support innovative transit solutions that improve service, reliability, and overall quality of the transit rider's experience. | |
| Objective 5.2 Develop and implement parking policies for areas well served by public transit that encourage travel by public transit and alternative | |

**TABLE E.9-2. GOALS, POLICIES, AND STRATEGIES FROM THE MARKET AND OCTAVIA AREA PLAN THAT COULD AFFECT EMISSIONS OF GREENHOUSE GAS**

| Goal, Policy, or Strategy | Potential Effect on Greenhouse Gas Emissions |
|---|---|
| transportation modes and reduce traffic congestion. | |
| Policy 5.2.4 Support the choice to live without a car. | |
| Objective 5.5 Establish a bicycle network that provides a sage and attractive alternative to driving for both local and citywide travel needs. | |
| Policy 5.5.1 Improve bicycle connections, accessibility, safety, and convenience throughout the neighborhood, concentrating on streets most safely and easily traveled by bicyclists. | |
| Objective 5.6 Improve vehicular circulation through the area. | |
| Objective 7.2 Establish a functional, attractive, and well-integrated system of public streets and open spaces in the SoMa West area to improve the public realm. | |
| Policy 7.2.1 Study a redesign of South Van Ness Avenue from Mission Street to Division Street as a surface boulevard serving regional as well as local traffic. | |
| Policy 7.2.2 Embark on a study to redesign Mission and Otis Streets from South Van Ness Avenue to Duboce Avenue. | |
| Policy 7.2.3 Redesign Gough Street between Otis and Market Streets with widened sidewalks and a community gathering space or garden at the northeastern side of the Gough, Otis and McCoppin Streets intersection. | |
| Policy 7.2.4 Redesign McCoppin Street as a linear green street with a new open space west of Valencia Street. | |
| Policy 7.2.5 Make pedestrian improvements within the block bounded by Market, Twelfth, Otis, and Gough Streets and redesign Twelfth Street between Market and Mission Streets, creating a new park and street spaces for public use, and new housing opportunities. | |
| Policy 7.2.6 Embark on a study to redesign 12th Street between Market and Mission to recapture space for pedestrian use. | |

**TABLE E.9-2. GOALS, POLICIES, AND STRATEGIES FROM THE MARKET AND OCTAVIA AREA PLAN THAT COULD AFFECT EMISSIONS OF GREENHOUSE GAS**

| Goal, Policy, or Strategy | Potential Effect on Greenhouse Gas Emissions |
|---|---|
| Policy 7.2.7 Embark on a study to reconfigure major intersections to make them safer for vehicles and pedestrians alike, to facilitate traffic movement, and to take advantage of opportunities to create public spaces. | |

Source: San Francisco Planning Department, *Market and Octavia Area Plan*, 2010, *http://default.sfplanning.org/Citywide/Market_Octavia/Market_and_Octavia_Area_Plan_2010.pdf*, accessed January 16, 2019.

The Hub Plan would incentivize increased intensity of use. The increase in the number of users of the Hub Plan area would very likely increase foot, bicycle, and vehicular traffic as well as overall energy and water usage. Therefore, future projects resulting from implementation of the proposed Hub Plan would contribute to annual long-term increases in GHG emissions as a result of increased vehicle trips (mobile sources) and residential and commercial operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal.

As described above, the Hub Plan would result in a ***less-than-significant*** impact with respect to GHG emissions.

**Mitigation:** None required.

**Impact C-GG-2: The Hub Plan's streetscape and street network improvements and the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street would generate GHG emissions but not at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing GHG emissions. (Less than Significant)**

#### STREETSCAPE AND STREET NETWORK IMPROVEMENTS

Construction of the Hub Plan's streetscape and street network improvements would result in GHG emissions. The proposed streetscape and street network changes would not have any direct impacts on operational (e.g., traffic- or building-related) GHGs because implementation of the proposed streetscape and street network changes would also not result in substantial increase in automobile travel as demonstrated in Section 3.B, Transportation and Circulation, in the Draft EIR. In fact, the proposed street network changes would further the goals of the applicable GHG reduction plans, such as the Bay Area 2017 Clean Air Plan and the San Francisco Greenhouse Gas Reduction Ordinance, by promoting alternative modes of transportation through improved walking and bicycling environments and reducing the impact from vehicular traffic on transit performance.

Proposed streetscape and street network changes could result in a temporary increase in GHG emissions during construction of individual streetscape and street improvements. The use of construction equipment to make the physical improvements required for the proposed streetscape and street network changes (e.g., mid-block crossings, wider sidewalks, new pavement) would result in a temporary increase in GHG emissions. GHGs would also be emitted from vehicles delivering supplies to construction sites and construction workers' vehicles. In addition, some construction activities would require demolition of portions of the street or sidewalk, resulting in an increase in GHGs related to landfill transport. However, construction activities in connection with the proposed streetscape and street network changes would be relatively small, typically involving a limited area, a limited range of heavy equipment, and a limited number of workers. Moreover, City construction projects are subject to the Clean Construction Ordinance (section 6.25 of the San Francisco Administrative Code), which requires the use of relatively cleaner diesel engines or emission controls; typically, cleaner engines are newer and more efficient than older ones, resulting in the added benefit of reduced GHG emissions during construction.

Given the City's existing GHG reduction strategy and other regulations to reduce GHG emissions from municipal projects, its success in reducing GHG emissions, the likelihood that state and local GHG reduction measures will continue to reduce the contribution of projects to climate change, and the relatively minor scale of the proposed streetscape and street network changes, the improvements would result in a ***less-than-significant*** impact with respect to GHG emissions.

#### INDIVIDUAL DEVELOPMENT PROJECTS

Construction and operation of the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in GHG emissions. The two development individual projects would contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during the construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (e.g., natural gas combustion). Indirect emissions include emissions from electricity providers; emissions associated with the energy required to pump, treat, and convey water; and emissions associated with waste removal and disposal as well as landfill operations.

The two proposed individual development projects would increase the intensity of energy use in the project area by adding residential, office, commercial, retail, and educational uses as well as open spaces. These would contribute to annual long-term increases in GHG emissions as a result of additional vehicle trips (mobile sources) and residential and commercial operations that increase energy use, water use, wastewater treatment, and solid waste disposal. Construction activities associated with the two individual development projects and the streetscape and street network improvements would also result in temporary increases in GHG emissions.

The two individual development projects would be subject to regulations adopted to reduce GHG emissions, as identified in the GHG reduction strategy. As discussed below, compliance with the applicable regulations would reduce GHG emissions related to transportation, energy use, waste disposal, wood burning, and refrigerants associated with future development.

Compliance with the City's Commuter Benefits Program, Emergency Ride-Home Program, and Jobs-Housing Linkage Program, as well as transportation management programs, the transportation sustainability fee, and bicycle parking, low-emission vehicular parking, and car-sharing requirements, would reduce transportation-related emissions from the individual projects. These regulations would reduce GHG emissions from single-occupancy vehicles by promoting the use of alternative transportation modes with zero or lower GHG emissions on a per capita basis.

The two development projects would be required to comply with the energy efficiency requirements of the City's Green Building Code, Water Conservation Ordinance, Irrigation Ordinance, and Residential Energy Conservation Ordinance, which promote energy and water efficiency, thereby reducing energy-related GHG emissions from all projects.[90] In addition, the two individual development projects would be required to meet the renewable energy criteria of the Green Building Code, thereby further reducing project-related energy-related GHG emissions.

The waste-related emissions associated with the two individual development projects would be reduced through compliance with the City's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code. These regulations reduce the amount of material sent to landfills, thereby reducing GHGs emitted by landfill operations. These regulations would also promote the reuse of materials, conserving their embodied energy[91] and reducing the energy required to produce new materials.

Compliance with the City's street tree planting requirements would serve to increase carbon sequestration. Other regulations, including those limiting refrigerant emissions and the Wood Burning Fireplace Ordinance, would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce volatile organic compounds.[92] Therefore, the proposed projects are determined to be consistent with San Francisco's Greenhouse Gas Reduction Strategy.[93,94]

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

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

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

[93] San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for 30 Van Ness Avenue*, 2018.

[94] San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for 98 Franklin Street*, 2018.

The two individual development projects would be required to comply with regulations that have been proven effective. San Francisco's GHG emissions have decreased measurably compared with 1990 emissions levels, demonstrating that the City has met or exceeded Executive Order S-3-05, Assembly Bill 32, and the Bay Area 2010 Clean Air Plan GHG emission reduction goals for 2020. Other existing regulations, such as those implemented through Assembly Bill 32, will continue to reduce project contributions to climate change. In addition, San Francisco's local GHG emission reduction targets are consistent with the long-term GHG emission reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32, and the Bay Area 2017 Clean Air Plan. Therefore, because the two individual development projects would be consistent with the City's GHG emission reduction strategy, they would also be consistent with the GHG emission reduction goals of Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32, Senate Bill 32, and the Bay Area 2017 Clean Air Plan; would not conflict with these plans; and would not exceed San Francisco's applicable GHG threshold of significance. As such, the two individual development projects would result in a ***less than significant*** impact with respect to GHG emissions.

**Mitigation:** None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **10. WIND. Would the project:** | | | | | |
| a) Alter wind hazards in publically accessible areas of substantial pedestrian use (Subsequent development under the Hub Plan, 30 Van Ness Avenue, 98 Franklin Street, Hub HSD)? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) Alter wind hazards in publically accessible areas of substantial pedestrian use (streetscape and street network improvements)? | ☐ | ☐ | ☒ | ☐ | ☐ |

Implementation of subsequent development under the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would have the potential to result in impacts related to wind. Accordingly, these topics are further analyzed and included in the EIR. However, the streetscape and street network improvements would be implemented entirely within existing public rights-of-way and would not involve construction of any buildings or other structures of a height or bulk great enough to result in adverse effects related to wind. Therefore, the proposed streetscape and street network improvements would not affect wind conditions in a substantial manner, impacts would be less than significant, and this project component will not be further analyzed in the EIR.

| *Topics:* | *Potentially Significant Impact* | *Less than Significant with Mitigation Incorporated* | *Less-than-Significant Impact* | *No Impact* | *Not Applicable* |
|---|---|---|---|---|---|
| **11. SHADOW. Would the project:** | | | | | |
| a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces (Subsequent development under the Hub Plan, 30 Van Ness Avenue, 98 Franklin Street, Hub HSD)? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces (streetscape and street network improvements)? | ☐ | ☐ | ☒ | ☐ | ☐ |

Implementation of subsequent development under the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would have the potential to result in impacts related to shadow. Accordingly, these topics are further analyzed and included in the EIR. However, the streetscape and street network improvements would be implemented entirely within existing public rights-of-way and would not involve construction of any buildings or other structures of a height or bulk great enough to result in adverse effects related to shadow. Therefore, the proposed streetscape and street network improvements would not affect shadow conditions in a substantial manner, impacts would be less than significant, and this project component will not be further analyzed in the EIR.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **12. RECREATION. Would the project:** | | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ | ☐ |

## SETTING

The RPD owns and maintains approximately 3,433 acres of publicly accessible recreational and open space in the city.[95] Together with the approximately 2,457 acres of open space properties that are owned and managed by other City, state (255 acres, including the Candlestick Point State Recreation Area and Mount Sutro), and federal (1,642 acres, including the Presidio, Ocean Beach, Fort Funston, Fort Mason, Lands End, Sutro Heights, and China Beach) agencies, approximately 5,890 acres of parkland and open space are available within the city. These publicly owned open spaces make up approximately 20 percent of the city's land area and include a variety of parks, walkways, landscaped areas, recreational facilities, and unmaintained open space. Overseen by the Recreation and Park Commission, the RPD administers more than 220 parks, playgrounds, and open spaces, including two outside the city limits. The system includes 25 recreation centers, nine swimming pools, five golf courses, and numerous tennis courts, baseball diamonds, soccer fields, and other sports venues. Included in the RPD's responsibilities are the Marina Yacht Harbor, San Francisco Zoo, and Lake Merced Complex.

City residents benefit from the Bay Area's regional open space system. Regional resources include public open spaces managed by the Midpeninsula Regional Open Space District in Santa Clara, San Mateo, and Santa Cruz counties; the East Bay Regional Park District in Alameda and Contra Costa counties; and the National Park Service in Marin and San Mateo counties. In addition to state park and recreational areas throughout the area, thousands of acres of watershed and agricultural lands are preserved as open spaces by water and utility districts or in private ownership; however, these lands are generally not accessible to the public.

The Hub Plan area encompasses an intensely developed urban area but does not contain large regional park facilities. The two recreational facilities managed by the RPD within the Hub Plan area are SoMa West Skate Park and SoMa West Dog Park. San Francisco Public Works manages

[95] City and County of San Francisco, *Recreation and Open Space Element*, 2014, *http://generalplan.sfplanning.org/Recreation_OpenSpace_Element_ADOPTED.pdf*, accessed: March 5, 2018.

one recreation facility, McCoppin Hub, in the Hub Plan area. In addition, there is one proposed private park, Brady Park, which will be constructed as part of the 1629 Market Street Project. The approximately 0.6-acre SoMa West Skate Park is located under U.S. 101 at Stevenson Street and Duboce Avenue. It contains skateboarding ramps for recreationalists.[96] The park is in the southern portion of the Hub Plan area. Adjoining the skate park is the SoMa West Dog Park, which is similarly located under U.S. 101, with entrances at the corner of Stevenson Street and Duboce Avenue and at Valencia Street between McCoppin Street and Duboce Avenue. This 0.4-acre park contains an open space area for dogs and their owners.[97] McCoppin Hub is a publically accessible 0.1-acre open space at the cul-de-sac where McCoppin Street terminates at the Central Freeway. The space is bounded on the east by Valencia Street. It features seating areas and landings for food trucks, art/craft display tables, and tents for live music performances.[98] When Brady Park is developed, it will serve as a privately owned public open space with areas of hardscape, gardens, seating, a play structure and play surface, bicycle parking, and pathways for people walking. In addition to these facilities within the Hub Plan area, there are six small parks and gardens; another is proposed outside the Hub Plan area but within 0.25 mile of the Hub Plan area boundary, as shown in **Table E.12-1**.[99]

New open space areas are proposed or being developed in areas adjacent to the Hub Plan area.[100] In 2017, RPD acquired a new property at the intersection of 11th Street and Natoma Street. RPD is proposing to demolish the buildings on the property and covert the site into a 0.48-acre park. Plans for the park are still being developed.[101] The Western SoMa Community Plan, the boundary of which is within 0.25 mile of the Hub Plan area boundary, is being implemented, and prioritizes public realm improvements such as recreational areas and open space.[102] New development under the Western SoMa Community Plan would include small

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96 San Francisco Recreation and Parks Department, *2010–2018, SoMa West Skate Park,* 2018, *http://sfrecpark.org/destination/soma-west-skate-park/*, accessed: February 19, 2018.

97 Ibid.

98 *Shadow Analysis Report for the Hub Plan, San Francisco*, San Francisco Planning Department, Prevision Design, December 20, 2018.

99 San Francisco Recreation and Parks Department, *San Francisco Recreation and Parks Land*, n.d., *http://sfrecpark.org/wp-content/uploads/SF-RecPark-Map.pdf*, accessed: February 26, 2018.

100 San Francisco Planning Department, *Complete List of Plans and Projects*, 2018, *http://sf-planning.org/complete-list-plans-and-projects*, accessed: February 20, 2018.

101 San Francisco Planning Department, *Shadow Analysis Report for the Hub Plan, San Francisco,* Prevision Design, December 20, 2018.

102 Western SoMa Citizens Planning Task Force, *Western SoMa Community Plan*, prepared in partnership with the San Francisco Planning Department, fall 2011, *http://commissions.sfplanning.org/soma/FinalPlan_optimized.pdf*, accessed: February 20, 2018.

**TABLE E.12-1. OPEN SPACES WITHIN 0.25 MILE OF THE HUB PLAN AREA**

| Name | Size (acres) | Amenities | Distance from Hub Plan Area (mile) |
|---|---|---|---|
| McCoppin Hub | 0.10 | Public plaza | Located inside Hub Plan area |
| SoMa West Skate Park | 0.6 | Skate park | Located inside Hub Plan area |
| SoMa West Dog Park | 0.4 | Dog park | Located inside Hub Plan area |
| Brady Park (Future) | 0.46 | Children's play area, seating, walkways | Located inside Hub Plan area |
| 11th/Natoma Park Site (Future) | 0.48 | TBD | 0.04 |
| Page and Laguna Mini Park | 0.15 | Community garden | 0.10 |
| Civic Center Plaza | 4.53 | Children's play area, performing arts plaza | 0.13 |
| Koshland Park | 0.82 | Basketball courts, community garden | 0.15 |
| Patricia's Green | 0.45 | Children's play area, picnic area, art exhibits every 6 months | 0.17 |
| United Nations Plaza | 1.66 | Open plaza | 0.18 |
| Page Street Community Garden | 0.08 | Community and educational garden | 0.25 |

Sources: San Francisco Recreation and Parks Department, 2010–2018 Find A Destination, 2018, *http://sfrecpark.org/parks-open-spaces/find-a-destination/*, accessed: February 20, 2018.
San Francisco Recreation and Parks Department, 2010–2018, Patricia's Green in Hayes Valley, 2018, *http://sfrecpark.org/destination/patricias-green-in-hayes-valley*, accessed: February 21, 2018.

neighborhood parks and better connectivity to larger recreational spaces such as the waterfront and Yerba Buena Gardens. The Better Market Street Project, portions of which are adjacent to the Hub Plan area, is currently undergoing environmental review. This project proposes transportation, streetscape, and safety improvements along 2.2 miles of San Francisco's Market Street between Octavia Boulevard and The Embarcadero.[103] The Market and Octavia Area Plan, the boundary of which includes the Hub Plan area, has been in effect since 2007. It proposes a connected open space system throughout the entire Market and Octavia neighborhood. This system would consist of features such as a new plaza, new parks, light fixtures and benches that would be scaled for people walking, rooftop gardens, and a green connection. Since adoption of the Market and Octavia Area Plan in 2007, many projects have been completed in alignment with open space and recreational objectives. Examples of completed projects include Octavia Boulevard and Patricia's Green in Hayes Valley; bicycle projects, including, but not limited to, a

[103] Better Market Street, *Factsheet, San Francisco*, n.d., *http://bettermarketstreetsf.org/docs/BMS-Factsheet.pdf*, accessed: February 20, 2018.

bicycle lane on Otis Street between South Van Ness Avenue and Gough Street, bicycle improvements along Market Street, enhanced bicycle protection on Market Street at Octavia Street, and bicycle lanes on 17th Street; improvements to the Hayes Valley Playground and Clubhouse, Duboce Park and the Harvey Milk Center for the Recreational Arts, and Koshland Park; new recreational areas, such as McCoppin Hub; and a new skate park and dog play area.

### SAN FRANCISCO PLANNING CODE OPEN SPACE REQUIREMENTS

The planning code requires the provision of usable open space in conjunction with development projects. Project sponsors are required to incorporate certain amounts of open space into development projects, depending on a project's use and size, as well as the zoning district in which the site is located, to serve future project residents and/or employees. Planning Code section 135 requires open space to be provided for the use of residents in new dwelling units, with the amount required ranging from 36 to 300 square feet per unit. The requirement is generally higher in single-use residential districts than in mixed-use residential districts. Commonly accessible open space (designed for joint use by two or more units) is permitted at a ratio that is typically 1.33 times the required amount for private open space. In addition, Planning Code section 138 requires the provision of publicly accessible open space for uses other than residential and institutional uses in C-3-G districts at a ratio of one square foot to 50 square feet. The two individual development projects are currently zoned, or would be rezoned, C-3-G; therefore, they would be required to adhere to Planning Code section 138. The Hub Plan proposes to rezone the majority of the Hub Plan area to C-3-G, while a small area would be zoned as P (Public). All future developments in the C-3-G zoning district would be required to adhere to C-3-G open space requirements.

### FUTURE OPEN SPACE DEVELOPMENT IN THE CITY

In 2012, the voters of San Francisco passed the San Francisco Clean and Safe Neighborhood Parks Bond, providing the RPD an additional $195 million to continue capital projects for the renovation and repair of park, recreational, and open space assets. In addition, an update to the Recreation and Open Space Element (ROSE) of the general plan was adopted in April 2014. The amended ROSE provides a 20-year vision for open spaces in the city. It includes information and policies regarding accessing, acquiring, funding, and managing open spaces in San Francisco. The amended ROSE identifies locations where proposed open space connections should be built, specifically, streets that would be appropriate for potential "living alleys." In addition, the amended ROSE identifies the role of both the Better Streets Plan and the Green Connections Network with respect to open space and recreation. Green Connections are streets and paths that connect people to parks, open spaces, and waterfront areas while enhancing the ecology of the street environment.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on recreational facilities could result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect recreational facilities; therefore, they are analyzed on a project-specific level.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further. This analysis considers how population growth resulting from implementation of the Hub Plan and development of the two individual projects would affect recreational facilities. The analysis also considers whether environmental impacts would result from development of the proposed open space improvements that would be constructed as a part of the two individual development projects. According to the CEQA significance criteria, the Hub Plan and the individual development projects would have an adverse environmental impact if they were to deteriorate existing recreational resources through increased use or require the construction or expansion of recreational facilities that may have an adverse effect on the environment.

## IMPACTS AND MITIGATION MEASURES

**Impact RE-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would increase the use of existing parks and recreational facilities but would not result in substantial deterioration or physical degradation of such facilities or adverse physical environmental effects from development of new recreational facilities. (Less than Significant)**

The Hub Plan would incentivize new development that would add residents and employees to the Hub Plan area. In total, the Hub Plan, including the two individual development projects, would result in approximately 15,700 new residents and approximately 275 new jobs compared to existing conditions. As described above, three existing, as well as one proposed, recreational facilities are within the Hub Plan area; an additional six resources and one proposed park would be within 0.25 mile. Although use of these resources may increase with area population growth, the Hub Plan and the two individual development projects are not expected to deteriorate current recreational facilities for the reasons discussed below.

Because development incentivized under the Hub Plan would increase the number of new residents in the area, there would be an increased demand for, and use of, nearby neighborhood parks and recreational facilities. It can be reasonably assumed that new residents would represent the greatest active use of parks and open spaces, using recreational facilities both within and near the Hub Plan area more than leisurely visitors. Although visitors would use public parks, they would most likely visit parks outside of the Hub Plan area and adjacent open spaces, including Civic Center Plaza and other RPD properties. To accommodate existing and future demand from residents, the Hub Plan proposes construction of a comprehensive streetscape and street network that would be friendly to people walking to increase access to existing, new, and improved open spaces. The new public realm improvements proposed under the Hub Plan are described in Chapter 2, Project Description, of the Draft EIR and include the following:

- Proposed improvements for 12th Street from Market Street to Mission Street would create new linear public green spaces with street trees. This new linear park experience would lead into a public plaza at the south end of 12th Street.
- Proposed improvements for South Van Ness Avenue from Mission Street to 13th Street would add a new signalized crossing for people walking and sidewalk bulb-outs in the middle of the block.
- Proposed improvements for 13th Street/Duboce Avenue from Folsom Street to Valencia Street would add a new protected westbound bikeway on 13th Street from Folsom Street to Mission Street and on Duboce Avenue from Mission Street to Valencia Street and a protected eastbound bikeway on 13th Street from Folsom Street to Mission Street and on Duboce Avenue from Mission Street to Valencia Street. In addition, the currently closed

sidewalk would be opened, and the sidewalk connection between Mission Street and South Van Ness Avenue on the north side of 13th Street would be improved. A new raised crosswalk would be constructed at Woodward Street and Duboce Avenue.

In addition, as described in Chapter 2, Project Description, of the Draft EIR, the two individual development projects would provide open space as follows:

- 30 Van Ness Avenue: 32,580 square feet of private and commonly accessible open space, including 3,300 square feet of privately owned public open space and 29,280 square feet of commonly accessible open space
- 98 Franklin Street: 33,940 square feet of private open space, including 22,410 square feet for residential uses and 11,530 square feet for school uses

Future development approved under the Hub Plan would be required to provide open space according to the requirements of the City's planning code.

Because of accessibility, future residents would most likely choose to use nearby onsite facilities provided as part of the two individual development projects, the various open space and public realm improvements described above, and the nearby parks listed in **Table E.12-1**, p. E.12-3, instead of more-distant park and recreational facilities. Existing local residents and employees who use existing parks and recreational facilities may choose to visit the new facilities that would be provided with the Hub Plan and the two individual development projects. This could reduce the rate of deterioration at parks and recreational facilities both within and near the Hub Plan area. An increase in population, and therefore an increase in the number of park users, is expected as a result of the development incentivized by the Hub Plan. However, such an increase, in and of itself, would not cause substantial physical deterioration of existing facilities or a need for new facilities to be constructed. Other factors that contribute to physical degradation of recreational resources include the availability of facilities, park design, the age of the infrastructure, how the park is used, and the level of maintenance. The Hub Plan's inclusion of open spaces as part of future development that could occur as a result of plan would reduce demand on other facilities in the project area that may otherwise experience deterioration. Overall, existing and future residents would have more opportunities to engage in recreational activity in their neighborhood as a result of the range of open spaces that would be developed as part of the Hub Plan.

Given the variety of nearby public parks, plazas, and recreational facilities, the increased usage of any one park would not be substantial. In addition, the provision of adequate onsite open space under the Hub Plan, including street improvements; and the two individual development projects; the anticipated increase in demand for recreational facilities generated by subsequent development projects incentivized under the Hub Plan as well as the two individual development projects would not increase the use of adjacent or nearby recreational facilities such that substantial physical deterioration of existing facilities would occur or be accelerated.

Any potentially adverse effects from the provision of open space under the Hub Plan and the two individual development projects would be associated with construction of these open spaces, such as noise, archaeological, or air quality impacts (e.g., emissions of dust and other pollutants, including diesel exhaust). Other effects include temporary street closures and vehicular traffic obstructions. These potential impacts are addressed in the Draft EIR as part of the analysis of construction impacts for the project as a whole, with mitigation measures provided as needed. In general, construction would be required to comply with the City's Clean Construction Ordinance and the Noise Ordinance. Overall, any physical effect on the environment would be associated with construction of recreational facilities. No long-term physical operational effects are anticipated. Construction of open spaces under subsequent development projects under the Hub Plan and the two individual development projects would not result in additional significant impacts that are not disclosed elsewhere in the Draft EIR; therefore, physical environmental impacts resulting from construction of open spaces under subsequent development projects under the Hub Plan and the two individual development projects would be considered ***less than significant***. As discussed above, impacts related to the use of existing parks and recreational facilities would also be ***less than significant***.

**Mitigation**: None required.

**Impact C-RE-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, or reasonably foreseeable projects, would not result in a considerable contribution to cumulative impacts on recreational resources. (Less than Significant)**

The cumulative geographic context for recreational facilities with development of the Hub Plan, the proposed streetscape and street network changes, and the two individual development projects, considers growth projections for the Hub Plan area and the city, in addition to all existing and potential new open spaces available to and accessible by the daytime and permanent population within the Hub Plan area.

As discussed above, additional recreational facilities in the Hub Plan area are being developed or in the planning stages. The Hub Plan would further this effort by providing its own network of open spaces. As stated above under Impact RE-1, the Hub Plan would not immediately physically degrade any recreational resources, would not result in significant effects related to the construction of new open spaces, and would not increase demand for and use of either neighborhood parks or recreational facilities that would result in substantial physical deterioration. As noted previously, other planning efforts, both specific to nearby neighborhoods and citywide, are under way in San Francisco to address existing and future open space needs. Therefore, given these efforts, and given that the Hub Plan would increase open space within the Hub Plan area, Hub Plan–related growth from development incentivized

under the Hub Plan and growth related to the two individual development projects, would have a ***less-than-significant*** impact related to recreation and would not contribute to any cumulative impacts.

**Mitigation**: None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **13. UTILITIES AND SERVICE SYSTEMS. Would the project:** | | | | | |
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? | ☐ | ☐ | ☒ | ☐ | ☐ |
| c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ | ☐ |
| d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ | ☐ |

# SETTING

The Hub Plan area is within an urban area that is served by existing public, private, and investor-owned utility service systems, with facilities for water, wastewater and stormwater collection and treatment, electrical power, natural gas, telecommunications, and solid waste collection and disposal. The Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD would add new residents and daytime and nighttime users to the area that would increase the demand for utilities and service systems in the area. Descriptions of the city's water supply system, combined sewer system, and solid waste collection and disposal operations are provided below.

## WATER

### BACKGROUND ON HETCH HETCHY REGIONAL WATER SYSTEM

San Francisco's Hetch Hetchy regional water system, operated by the San Francisco Public Utilities Commission (SFPUC), supplies water to approximately 2.7 million people. The system supplies both retail customers, primarily in San Francisco, and 27 wholesale customers in Alameda, Santa Clara, and San Mateo counties. An average of 85 percent of the water supply is from the Tuolumne River watershed; this water is stored in Hetch Hetchy Reservoir in Yosemite National Park. The remaining 15 percent is from local surface waters in the Alameda and Peninsula watersheds. The split between these resources varies from year to year, depending on

hydrological conditions and operational circumstances. Separate from the regional water system, the SFPUC owns and operates an in-city distribution system that serves retail customers in San Francisco. Approximately 97 percent of the San Francisco retail water supply is from the regional system; the remainder comprises local groundwater and recycled water.

#### WATER SUPPLY RELIABILITY AND DROUGHT PLANNING

In 2008, the SFPUC adopted the phased Water System Improvement Program (WSIP) to ensure the ability of the regional water system to meet certain level-of-service goals for water quality, seismic reliability, delivery reliability, and water supply through 2018.[104] The SFPUC's level-of-service goals for regional water supply are (1) to meet customer water needs in non-drought and drought periods and (2) meet dry-year delivery needs while limiting rationing to a maximum of 20 percent system-wide. In approving the WSIP, the SFPUC established a supply limitation of 265 million gallons per day (mgd) from its water supply resources in the Tuolumne, Alameda and Peninsula watersheds in years with normal (average) precipitation.[105] The SFPUC's water supply agreement with its wholesale customers ensures that approximately two-thirds of the total (up to 184 mgd) is available to wholesale purchasers, and the remaining one-third (up to 81 mgd) is available to retail customers. The total amount of water the SFPUC can deliver to retail and wholesale customers in any one year depends on several factors, including the amount of water that is available from natural runoff, the amount of water in reservoir storage, and the amount of that water that must be released from the system for purposes other than customer deliveries (e.g., required instream flow releases below reservoirs). The term "normal year" refers to hydrological conditions that allow the reservoirs to be filled by rainfall and snowmelt, thereby allowing full deliveries to customers; similarly, the terms "wet year" and "dry year" refer to hydrological conditions with above and below "normal" rainfall and snowmelt, respectively.

For planning purposes, the SFPUC uses a hypothetical drought that is more severe than what has historically been experienced. This drought sequence is referred to as the "design drought" and serves as the basis for planning and modeling future scenarios. The design drought sequence used by the SFPUC for water supply reliability planning uses an 8.5-year period that combines the following elements to represent a drought sequence under conditions that would be more severe than historical conditions:

- Historical Hydrology: A six-year sequence of hydrology from the historical drought that occurred from July 1986 to June 1992.

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[104] On December 11, 2018, the SFPUC extended the timing of the WSIP water supply decision through 2028 in its Resolution No. 18-0212.

[105] SFPUC Resolution No. 08-200, *Adoption of the Water System Improvement Program Phased WSIP Variant*, October 30, 2008.

- Prospective Drought: A 2.5-year period that includes hydrology from the 1976–1977 drought.
- System Recovery Period: The last six months of the design drought are the beginning of the system recovery period. Precipitation begins in the fall, and by approximately December, inflow to reservoirs exceeds customer demands, and SFPUC system storage begins to recover.

Although the most recent drought (2012 through 2016) included some of the driest years on record for SFPUC watersheds, the design drought still represents a more severe drought with respect to duration and overall water supply deficit.

Based on historical records of hydrology and reservoir inflow from 1920 to 2017 and current delivery and flow obligations, with fully implemented infrastructure under the WSIP, normal or wet years occurred in 85 out of 97 years. This translates into roughly nine normal or wet years out of every 10 years. Conversely, system-wide rationing is required roughly one out of every 10 years. However, the frequency of dry years is expected to increase as climate change intensifies.

### 2015 URBAN WATER MANAGEMENT PLAN

The California Urban Water Management Planning Act[106] requires urban water supply agencies to prepare *urban water management plans* to plan for the long-term reliability, conservation, and efficient use of California's water supplies to meet existing and future demands. The act requires water suppliers to update their plans every five years based on projected growth for at least the next 20 years.

Accordingly, the current urban water management plan for the City and County of San Francisco is the 2015 Urban Water Management Plan update.[107] The 2015 plan update presents information on the SFPUC's retail and wholesale service areas, the regional water supply system and other water supply systems operated by the SFPUC, system supplies and demands, water supply reliability, Water Conservation Act of 2009 compliance, water shortage contingency planning, and water demand management.

The water demand projections in the 2015 plan reflect anticipated population and employment growth, socioeconomic factors, and the latest conservation forecasts. For San Francisco, housing and employment growth projections are based on the San Francisco Planning Department's Land Use Allocation 2012 (see 2015 Urban Water Management Plan, Appendix E, Table 5, p. 21), which in turn is based on the Association of Bay Area Governments (ABAG) growth

[106] California Water Code, division 6, part 2.6, sections 10610 through 10656, as last amended in 2015.

[107] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016. This document is available at *https://sfwater.org/index.aspx?page=75*

projections through 2040.[108] The 2015 plan presents water demand projections in five-year increments over a 25-year planning horizon through 2040. The Hub Plan was not specifically contemplated at the time that the department prepared Land Use Allocation 2012. However, the Hub Plan would serve to accommodate a portion of the Association of Bay Area Governments (ABAG) population and employment growth projections for San Francisco that formed the basis for the department's Land Use Allocation 2012 and the water demand projections contained in the 2015 Urban Water Management Plan. As further discussed in Section E.3, Population and Housing, the purpose of the Hub Plan is to concentrate a portion of projected growth in San Francisco within the plan area from other areas of the city that are less well served by transit. This redistribution of anticipated growth would not change the projections, analysis, or conclusions in the 2015 Urban Water Management Plan. The SFPUC will prepare the next update – the 2020 Urban Water Management Plan update – for adoption in 2021. The 2020 update will consider updated population and employment projections and anticipated water supply and demand through 2045.

The 2015 plan compares anticipated water supplies to projected demand through 2040 for normal, single-dry, and multiple-dry water years. Retail water supplies are comprised of regional water system supply, groundwater, recycled water, and non-potable water. Under normal hydrologic conditions, the total retail supply is projected to increase from 70.1 mgd in 2015 to 89.9 mgd in 2040. According to the plan, available and anticipated future water supplies would fully meet projected demand in San Francisco through 2040 during normal years.

On December 11, 2018, by Resolution No. 18-0212, the SFPUC amended its 2009 Water Supply Agreement between the SFPUC and its wholesale customers. That amendment revised the Tier 1 allocation in the Water Supply Allocation Plan to require a minimum reduction of 5 percent of the regional water system supply for San Francisco retail customers whenever system-wide reductions are required due to dry-year supply shortages.[109] When accounting for the requirements of this recently amended agreement, existing and planned supplies would meet projected retail water system demands in all years except for an approximately 3.6 to 6.1 mgd or 5.0 to 6.8 percent shortfall during dry years through the year 2040. This relatively small shortfall is primarily due to implementation of the amended 2009 water supply agreement. In such an event, the SFPUC would implement the SFPUC's Retail Water Shortage Allocation Plan and could manage this relatively small shortfall by prohibiting certain discretionary outdoor water uses and/or calling for voluntary rationing among all retail customers. Based on experience in past droughts, retail customers could reduce water

[108] Association of Bay Area Governments, *Jobs-Housing Connection Strategy,* May 2012, accessed July 10, 2019.

[109] SFPUC, Resolution No. 18-0212, December 11, 2018.

use to meet this projected level of shortfall. The required level of rationing is well below the SFPUC's regional water supply level of service goal of limiting rationing to no more than 20 percent on a system-wide basis.

Based on the 2015 Urban Water Management Plan, as modified by the 2018 amendment to the 2009 Water Supply Agreement, sufficient retail water supplies would be available to serve projected growth in San Francisco through 2040. While concluding supply is sufficient, the 2015 Urban Water Management Plan also identifies projects that are underway or planned to augment local supply. Projects that are underway or recently completed include the San Francisco Groundwater Supply Project and the Westside Recycled Water Project. A more current list of potential regional and local water supply projects that the SFPUC is considering is provided below under Additional Water Supplies.

In addition, the plan describes the SFPUC's ongoing efforts to improve dry-year water supplies, including participation in Bay Area regional efforts to improve water supply reliability through projects such as interagency interties, groundwater management and recharge, potable reuse, desalination, and water transfers. While no specific capacity or supply has been identified, this program may result in future supplies that would benefit SFPUC customers.

#### 2018 BAY-DELTA PLAN AMENDMENT

In December 2018, the State Water Resources Control Board adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, which establishes water quality objectives to maintain the health of the rivers and the Bay-Delta ecosystem.[110] Among the goals of the adopted Bay-Delta Plan Amendment is to increase salmonid populations in the San Joaquin River, its tributaries (including the Tuolumne River), and the Bay-Delta. Specifically, the plan amendment requires increasing flows in the Stanislaus, Tuolumne, and Merced rivers to 40 percent of unimpaired flow[111] from February through June every year, whether it is wet or dry. During dry years, this would result in a substantial reduction in the SFPUC's water supplies from the Tuolumne River watershed.

If this plan amendment is implemented, the SFPUC would be able to meet the projected retail water demands presented in the 2015 Urban Water Management Plan in normal years but would experience supply shortages in single dry years and multiple dry years. Implementation of the Bay-Delta Plan Amendment would result in substantial dry-year water supply shortfalls

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[110] State Water Resources Control Board Resolution No. 2018-0059, *Adoption of Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Final Substitute Environmental Document*, December 12, 2018, available at *https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf*, accessed July 10, 2019.

[111] "Unimpaired flow" represents the water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds.

throughout the SFPUC's regional water system service area, including San Francisco. The 2015 Urban Water Management Plan assumes limited rationing for retail customers may be needed in multiple dry years to address an anticipated supply shortage by 2040; the 2018 amendment to the 2009 Water Supply Agreement with wholesale customers would slightly increase rationing levels indicated in the 2015 plan. By comparison, implementation of the Bay-Delta Plan Amendment would result in supply shortfalls in all single dry years and multiple dry years and rationing to a greater degree than previously anticipated to address supply shortages not accounted for in the 2015 Urban Water Management Plan or as a result of the 2018 amendment to the Water Supply Agreement.

The state water board has stated that it intends to implement the plan amendment by the year 2022, assuming all required approvals are obtained by that time. However, at this time, the implementation of the Bay-Delta Plan Amendment is uncertain for several reasons, as described below.

First, under the federal Clean Water Act, the United States Environmental Protection Agency (U.S. EPA) must approve the water quality standards identified in the plan amendment within 90 days from the date the approval request is received. By letter dated June 11, 2019, the U.S. EPA rejected the state water board's two-page submittal as inadequate under the requirements of the Clean Water Act. Pursuant to the U.S. EPA's letter, the state water board has 90 days to respond with a submittal that complies with the law. At this point, the U.S. EPA has neither approved, nor disapproved, any of the revised water quality objectives. It is uncertain what determination the U.S. EPA will make regarding the water quality standards in the future and its decision could result in litigation.

Second, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in state and federal court, challenging the water board's adoption of the plan amendment, including legal challenges filed by the federal government at the request of the U.S. Bureau of Reclamation. That litigation is in the early stages, and there have been no dispositive court rulings as of this date.

Third, the Bay-Delta Plan Amendment is not self-executing and does not allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the plan amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, the Clean Water Act, section 401 certification process in the Federal Energy Regulatory Commission's relicensing proceeding for Don Pedro Dam. The license amendment process is currently expected to be completed in the 2022-2023 timeframe. This process and other regulatory and/or adjudicatory proceeding would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility for the Tuolumne River than currently exists (and therefore a different water supply effect on the SFPUC).

Fourth, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the water board directed its staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the [water board] as early as possible after December 1, 2019." In accordance with the water board's instruction, on March 1, 2019, the SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary agreement with the state water board that would serve as an alternative path to implementing the Bay-Delta Plan's objectives. On March 26, 2019, the SFPUC adopted Resolution No. 19-0057 to support its participation in the voluntary agreement negotiation process. To date, those negotiations are ongoing.

For these reasons, whether, when, and the form in which the Bay-Delta Plan Amendment will be implemented, and how those amendments will affect the SFPUC's water supply, is currently unknown.

#### ADDITIONAL WATER SUPPLIES

In light of the adoption of the Bay-Delta Plan Amendment and the resulting potential limitation to the SFPUC's regional water system supply during dry years, the SFPUC is expanding and accelerating its efforts to develop additional water supplies and explore other projects that would improve overall water supply resilience. Developing these supplies would reduce water supply shortfalls and reduce rationing associated with such shortfalls. The SFPUC has taken action to fund the study of additional water supply projects, which are listed below:

- Daly City Recycled Water Expansion
- Alameda County Water District Transfer Partnership
- Brackish Water Desalination in Contra Costa County
- Alameda County Water District-Union Sanitary District Purified Water Partnership
- Crystal Springs Purified Water
- Eastside Purified Water
- San Francisco Eastside Satellite Recycled Water Facility
- Additional Storage Capacity in Los Vaqueros Reservoir from Expansion
- Calaveras Reservoir Expansion

The capital projects that are under consideration would be costly and are still in the early feasibility or conceptual planning stages. These projects would take 10 to 30 or more years to implement and would require environmental permitting negotiations, which may reduce the amount of water that can be developed. The yield from these projects is unknown and not currently incorporated into SFPUC's supply projections.

In addition to capital projects, the SFPUC is also considering developing related water demand management policies and ordinances, such as funding for innovative water supply and efficiency technologies and requiring potable water offsets for new developments.

## WASTEWATER/STORMWATER COLLECTION AND TREATMENT

The San Francisco Public Utilities Commission provides wastewater services to San Francisco County and a portion of northern San Mateo County.[112] San Francisco's wastewater collection, treatment, and disposal system consists of a combined sewer system, which collects both sewage and stormwater; three wastewater treatment plants; and effluent outfalls to the Bay and the Pacific Ocean.[113] The system's approximately 1,000 miles of underground pipes serve most of San Francisco. The San Francisco Public Utilities Commission maintains and operates three wastewater treatment facilities for the city: the Oceanside Water Pollution Control Plant, the Southeast Treatment Plant (SEP), and the North Point Wet-Weather Facility (NPF). These facilities combined can treat up to 575 mgd of wastewater and stormwater runoff.[114]

The Hub Plan area is served by the Southeast Treatment Plant (SEP), which treated an average dry-weather flow of 51.4 mgd in 2017.[115,116] During a storm event, the SEP can treat up to 250 mgd.[117] In 2017, the SEP treated a total of 25.409 billion gallons of combined sanitary, industrial, and stormwater flows in 2017.[118] The Hub Plan area is also served by the North Point Facility (NPF) during wet weather, which operates when the SEP approaches capacity. The NPF has the capacity to treat 150 mgd when it rains.[119] During wet weather, the capacity at the SEP is also supplemented by a series of storage/transport boxes located around the perimeter of the city. If wet-weather flows exceed the capacity of the overall system, the excess (primarily stormwater) is discharged from one of the 36 combined sewer overflow structures along the waterfront.

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[112] San Francisco Public Utilities Commission, *Serving 2.7 Million Residential, Commercial, and Industrial Customers*, 2018, *https://sfwater.org/index.aspx?page=355,* accessed: February 12, 2018.

[113] San Francisco Public Utilities Commission, *Wastewater Collection System*, 2018, *https://sfwater.org/index.aspx?page=399,* accessed: February 12, 2018.

[114] San Francisco Public Utilities Commission, *San Francisco's Wastewater Treatment Facilities*, 2014, *http://www.sfwater.org/modules/showdocument.aspx?documentid=5799*, accessed: February 12, 2018.

[115] This number was calculated using flows from three consecutive dry-weather months (July, August, and September).

[116] Ahmad, Meei-Lih, Engineer, Engineering Division, San Francisco Public Utilities Commission, email to Caroline Vurlumis, ICF, May 18, 2018.

[117] Ibid.

[118] Ibid.

[119] San Francisco Public Utilities Commission, *Sewer System Improvement Program*, 2014, *http://sfwater.org/modules/showdocument.aspx?documentid=5801,* accessed: February 12, 2018.

### SOLID WASTE

San Francisco uses a three-cart collection program that requires, under the City's Mandatory Recycling and Composting Ordinance (ordinance 100-09), residents and businesses to sort solid waste into recyclables; compostable items, such as food scraps and yard trimmings; and garbage. Recology (formerly Norcal Waste Systems, Inc.) provides solid waste collection, recycling, and disposal services for residential and commercial customers in San Francisco through its subsidiaries, San Francisco Recycling and Disposal, Golden Gate Disposal and Recycling, and Sunset Scavenger.[120] Materials are collected and hauled to the Recology Transfer Station/recycling center on Tunnel Avenue, near the southeastern city limit, for sorting and subsequent transport to other facilities. Recyclable materials are sent to Recology's Recycle Central facility, at Pier 96, where they are separated and sold to manufacturers that turn the materials into new products.[121] Compostable items and garbage are taken to the Recology Transfer Station.[122] The total demand on Recycle Central is approximately 1,000 tons per day, and the total demand on the Recology Transfer Station is approximately 2,000 tons per day.[123]

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on utilities and service systems could result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van

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[120] Mandatory Recycling and Composting, *File No. 081404, Ordinance No. 100-09*, 2009, *https://sfenvironment.org/sites/default/files/policy/sfe_zw_sf_mandatory_recycling_composting_ord_100-09.pdf*, accessed: February 12, 2018.

[121] Stewart, Ken, Operations Manager, Recology Transfer Station, phone conversation with Jessica Viramontes, ICF, February 25, 2016.

[122] Ibid.

[123] Ibid.

Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect utilities and service systems; therefore, they are analyzed on a project-specific level.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be an overlay on zoning maps and an internal city process, no impacts would result from implementation of the HSD, and this project component is not discussed further.

The associated population growth from implementation of the zoning changes under the Hub Plan, including the two individual development projects, would result in increased demand on utilities and service systems.

The analysis of water supply capacity is based on review of SFPUC data on water supply (principally the commission's current 2015 Urban Water Management Plan); demand is calculated largely based on SFPUC demand factors (furnished by SFPUC's Non-potable Water Calculator). This EIR analyzes the Hub Plan's water demand as well as project-specific demand that would be generated by the 30 Van Ness Avenue and 98 Franklin Street projects. The approach for each is described below.

## HUB PLAN

The Hub Plan is considered a regulatory program that would change current zoning controls in the Hub Plan area to meet plan objectives; this EIR analyzes the potential physical secondary environmental effects of rezoning the 18 parcels associated with the Hub. Pursuant to CEQA Guidelines section 15146, an EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow. As a regulatory program, the Hub Plan does not require an individual water supply assessment. With the exception of projects that qualify for ministerial approval under the Hub's HSD, subsequent development projects in the Hub Plan would be subject to CEQA Guidelines section 15155 at the time individual specific projects are proposed. However, to inform the environmental analysis, the department estimated water demand for the subsequent development projects

anticipated under the Hub Plan[124]. Using SFPUC's District Scale Non-Potable Water Calculator, the department calculated the water demand that would result from development anticipated under the Hub Plan. These calculations estimate: (1) *total* water demand; (2) the portion of total demand that would be met by the SFPUC's water supply system; and (3) the portion of total demand that would be met by non-potable sources as required under San Francisco's non-potable ordinance. The SFPUC reviewed and concurred with the assumptions and inputs used to estimate the Hub Plan's water demand.[125]

As previously described, the Hub Plan EIR evaluates two individual development projects as well as streetscape and street network improvements at a project-specific level. The approaches to analysis for the two development projects are described in detail below. The streetscape and street network improvements projects are not considered water demand projects, and as such, require no further analysis related to water demand.

## 30 VAN NESS AVENUE

The 30 Van Ness Avenue Project is evaluated at the project-specific level in the Hub Plan EIR. As a residential development with 610 dwelling units, the project meets the definition of a water demand project under CEQA and requires a water supply assessment. The project-specific analysis of impacts on water supply facilities is provided below.

## 98 FRANKLIN STREET PROJECT

The 98 Franklin Street Project does not qualify as a water-demand project as defined by CEQA Guidelines section 15155(a)(1) because it would consist of 345 residential units, 81,000 square feet of institutional use for International High School, and 3,100 square feet of retail space. Together, these uses would not demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project (CEQA Guidelines section 15155(a)(1)(G)). No water supply assessment was prepared for this project, however, a project-specific analysis of impacts on water supply facilities is provided below.

[124] As a point of clarification, the total Hub Plan water demand estimate includes the water demand from the two individual development projects analyzed in the EIR.

[125] Fan Lau, "Re: Hub-Water Calculations Revised (Possible to review by May 28?)," E-mail message to Elizabeth White (SF Planning Department), May 30, 2019.

# IMPACTS AND MITIGATION MEASURES

**Impact UT-1: Sufficient water supplies are available to serve the Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and reasonably foreseeable future development in normal, dry, and multiple dry years unless the Bay Delta Plan Amendment is implemented; in that event the SFPUC may develop new or expanded water supply facilities to address shortfalls in single and multiple dry years but this would occur with or without implementation of the Hub Plan. Impacts related to new or expanded water supply facilities cannot be identified at this time or implemented in the near term; instead, the SFPUC would address supply shortfalls through increased rationing, which could result in significant cumulative effects, but the Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not make a considerable contribution to impacts from increased rationing. (Less than Significant)**

## WATER DEMAND ESTIMATES

### HUB PLAN

As part of the Utilities and Service Systems analysis in this initial study, the planning department estimated the water demand associated with the Hub Plan. This estimate is based on growth projections associated with the 18 sites proposed for upzoning under the Hub Plan and includes the project-specific development at 30 Van Ness Avenue and 98 Franklin Street.

Some Hub sites would be subject to San Francisco's Non-potable Water Ordinance (article 12C of the San Francisco Health Code). The Non-potable Water Ordinance requires new commercial, mixed-use, and multi-family residential development projects with 250,000 square feet or more of gross floor area to install and operate an onsite non-potable water system.[126]

The department estimated both potable and non-potable demands for the Hub Plan using the SFPUC's Non-potable Water Calculator. Based on the proposed land uses and development program, the department anticipates that six of the 18 sites would be subject to the requirements of the Non-potable Water Ordinance: 33 Gough Street-City College, 30 Otis Street, 99 South Van Ness Avenue, 1695 Mission Street, 1 South Van Ness, and 30 Van Ness Avenue. For the purpose of calculating Hub Plan water demand, the department assumed that the Non-potable Water Ordinance would not apply to the remaining Hub Plan sites.

[126] Such projects must meet their toilet and urinal flushing and irrigation demands through the collection, treatment, and use of available graywater, rainwater, and foundation drainage.

Given these assumptions, the Hub Plan's total water demand would be 0.80 mgd, (of which 0.06 mgd could be met by non-potable water). Accordingly, 8 percent of the Hub Plan's total water demand would be met by non-potable water.

The Hub Plan's anticipated potable water demand of 0.74 mgd would contribute 0.82 percent to the projected total retail demand of 89.9 mgd in 2040. The project's total water demand of 0.80 mgd, which does not account for the 0.06 mgd savings anticipated through compliance with the non-potable water ordinance, would represent 0.89 percent of 2040 total retail demand. Thus, the Hub Plan represents a small fraction of the total projected water demand in San Francisco through 2040.

Future retail (citywide) water demand through 2040 is estimated based on the population and employment growth projections contained in the planning department's Land Use Allocation 2012. As discussed above and in Section E.3, Population and Housing of this EIR, the Hub Plan, as well as the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, represent a portion of the planned growth accounted for in Land Use Allocation 2012. Therefore, the Hub Plan's demand is incorporated in the 2015 Urban Water Management Plan.

Due to the 2018 Bay Delta Plan Amendments, Hub Plan water demand estimates are considered under three water supply scenarios. The following scenarios evaluate the ability of the water supply system to meet the demand of the Hub Plan, in combination with both existing development and projected growth in San Francisco.

- Scenario 1: Current Water Supply
- Scenario 2: Bay-Delta Plan Voluntary Agreement
- Scenario 3: 2018 Bay-Delta Plan Amendment

As discussed below, water supplies would be available to meet the demand of the Hub Plan in combination with both existing development and projected growth in San Francisco through 2040 under each of these water supply scenarios with varying levels of rationing during dry years.

### Scenario 1 – Current Water Supply

Scenario 1 assumes no change to the way in which water is supplied, and that neither the Bay-Delta Plan Amendment nor a Bay-Delta Plan Voluntary Agreement would be implemented. Thus, the water supply and demand assumptions contained in the 2015 Urban Water Management Plan and the 2009 Water Supply Agreement as amended would remain applicable for the Hub. As stated above, the Hub Plan is accounted for in the demand projections in the 2015 Urban Water Management Plan.

Under Scenario 1, water supplies would be available to meet the demand of the project in combination with existing development and projected growth in all years, except for an approximately 3.6 to 6.1 mgd or 5.0- to 6.8-percent shortfall during dry years through the year

2040. This relatively small shortfall is primarily due to implementation of the amended 2009 Water Supply Agreement. To manage a small shortfall such as this, the SFPUC may prohibit certain discretionary outdoor water uses and/or call for voluntary rationing by its retail customers. During a prolonged drought at the end of the 20-year planning horizon, the project could be subject to voluntary rationing in response to a 6.8-percent supply shortfall, when the 2018 amendments to the 2009 Water Supply Agreement are taken into account. This level of rationing is well within the SFPUC's regional water system supply level of service goal of limiting rationing to no more than 20 percent on a system-wide basis (i.e., an average throughout the regional water system).

Scenario 2 – Bay-Delta Plan Voluntary Agreement

Under Scenario 2, a voluntary agreement would be implemented as an alternative to the adopted Bay-Delta Plan Amendment. The March 1, 2019, proposed voluntary agreement submitted to the state water board has yet to be accepted, and the shortages that would occur with its implementation are not known. The voluntary agreement proposal contains a combination of flow and non-flow measures that are designed to benefit fisheries at a lower water cost, particularly during multiple dry years, than would occur under the Bay-Delta Plan Amendment. The resulting regional water system supply shortfalls during dry years would be less than those under the Bay-Delta Plan Amendment and would require rationing of a lesser degree and closer in alignment to the SFPUC's adopted level of service goal for the regional water system of rationing of no more than 20 percent system-wide during dry years. The SFPUC Resolution No. 19-0057, which authorized the SFPUC staff to participate in voluntary agreement negotiations, stated its intention that any final voluntary agreement allow the SFPUC to maintain both the water supply and sustainability level of service goals and objectives adopted by the SFPUC when it approved the WSIP. Accordingly, it is reasonable to conclude that if the SFPUC enters into a voluntary agreement, the supply shortfall under such an agreement would be of a similar magnitude to those that would occur under Scenario 1. In any event, the rationing that would be required under Scenario 2 would be of a lesser degree than under the Bay-Delta Plan Amendment as adopted.

Scenario 3 – Bay-Delta Plan Amendment

Under Scenario 3, the 2018 Bay-Delta Plan Amendment would be implemented as it was adopted by the state water board without modification. As discussed above, there is considerable uncertainty whether, when, and in what form the plan amendment will be implemented. However, because implementation of the plan amendment cannot be ruled out at this time, an analysis of the cumulative impact of projected growth on water supply resources under this scenario is included in this document to provide a worst-case impact analysis.

Under this scenario, which is assumed to be implemented after 2022, water supplies would be available to meet projected demands through 2040 in wet and normal years with no shortfalls. However, under Scenario 3 the entire regional water system—including both the wholesale and retail service areas—would experience significant shortfalls in single dry and multiple dry years, which over the past 97 years occur on average just over once every 10 years. Significant dry-year shortfalls would occur in San Francisco, regardless of whether the Hub Plan is approved. Except for the currently anticipated shortfall to retail customers of about 6.1 mgd (6.8 percent) that is expected to occur under Scenario 1 during years seven and eight of the 8.5-year design drought based on 2040 demand levels, these shortfalls to retail customers would exclusively result from supply reductions resulting from implementation of the Bay-Delta Plan Amendment. The retail supply shortfalls under Scenario 3 would not be attributed to the incremental demand associated with the Hub Plan, because this demand is incorporated already in the growth and water demand/supply projections contained in the 2015 Urban Water Management Plan.

Under the Bay-Delta Plan Amendment, existing and planned dry-year supplies would be insufficient for the SFPUC to satisfy its regional water system supply level of service goal of no more than 20 percent rationing system-wide. The Water Shortage Allocation Plan does not specify allocations to retail supply during system-wide shortages above 20 percent. However, the plan indicates that if a system-wide shortage greater than 20 percent were to occur, regional water system supply would be allocated between retail and wholesale customers per the rules corresponding to a 16- to 20-percent system-wide reduction, subject to consultation and negotiation between the SFPUC and its wholesale customers to modify the allocation rules. These allocation rules result in shortfalls of 15.6 to 49.8 percent across the retail service area as a whole under Scenario 3. Total shortfalls under Scenario 3 would range from 12.3 mgd (15.6 percent) in a single dry year to 36.1 mgd (45.7 percent) in years seven and eight of the 8.5-year design drought based on 2025 demand levels and from 21 mgd (23.4 percent) in a single dry year to 44.8 mgd (49.8 percent) in years seven and eight of the 8.5-year design drought based on 2040 demand.[127]

[127] Technical Memorandum from Steven Ritchie, SFPUC Water Enterprise to Lisa Gibson, San Francisco Planning Department, May 31, 2019, Table 3, p. 10.

### 30 VAN NESS AVENUE

Under sections 10910 through 10915 of the California Water Code, urban water suppliers like the SFPUC must prepare water supply assessments for certain large projects, as defined in CEQA Guidelines section 15155.[128] Water supply assessments rely on information contained in the water supplier's urban water management plan and on the estimated water demand of both the proposed project and projected growth within the relevant portion of the water supplier's service area. Because the proposed 30 Van Ness Avenue Project is a residential development with 610 dwelling units, it meets the definition of a water demand project under CEQA. Accordingly, the SFPUC adopted a water supply assessment for the proposed project on June 11, 2019.[129]

The water supply assessment for the proposed project identifies the project's total water demand, including a breakdown of potable and non-potable water demands. The proposed project is subject to San Francisco's Non-potable Water Ordinance (article 12C of the San Francisco Health Code). The Non-potable Water Ordinance requires new commercial, mixed-use, and multi-family residential development projects with 250,000 square feet or more of gross floor area to install and operate an onsite non-potable water system. Such projects must meet their toilet and urinal flushing and irrigation demands through the collection, treatment, and use of available graywater, rainwater, and foundation drainage. Although not required, projects may use treated blackwater or stormwater if desired. Furthermore, projects may choose to apply non-potable water to other non-potable water uses, such as cooling tower blowdown and industrial processes, but are not required to do so under the ordinance. The proposed project would meet the requirements of the Non-potable Water Ordinance by using graywater and rainwater for toilet and urinal flushing and irrigation.

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[128] Pursuant to CEQA Guidelines section 15155(1), "a water-demand project" means:

(A) A residential development of more than 500 dwelling units.

(B) A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

(C) A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor area.

(D) A hotel or motel, or both, having more than 500 rooms, (e) an industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

(F) A mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section.

(G) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

[129] SFPUC, *Water Supply Assessment for 30 Van Ness Avenue Project*, June 11, 2019.

Both potable and non-potable demands for the project were estimated using the SFPUC's Non-potable Water Calculator and supplemented with additional calculations for commercial laundry demands. According to the demand estimates, the project's total water demand would be 0.066 mgd, which would be comprised of 0.055 mgd of potable water and 0.011 mgd of non-potable water. Accordingly, 15.9 percent of the project's total water demand would be met by non-potable water.

The water supply assessment estimates future retail (citywide) water demand through 2040 based on the population and employment growth projections contained in the planning department's Land Use Allocation 2012. The department has determined that the proposed project represents a portion of the planned growth accounted for in Land Use Allocation 2012. Therefore, the project's demand is incorporated in the 2015 Urban Water Management Plan.

The water supply assessment determined that the project's potable water demand of 0.055 mgd would contribute 0.06 percent to the projected total retail demand of 89.9 mgd in 2040. The project's total water demand of 0.066 mgd, which does not account for the 0.011 mgd savings anticipated through compliance with the non-potable water ordinance, would represent 0.07 percent of 2040 total retail demand. Thus, the proposed project represents a small fraction of the total projected water demand in San Francisco through 2040. As discussed on pages E.13-13 through E.13-15, the 30 Van Ness Avenue water supply assessment also considers demand estimates under three water supply scenarios due to the recent 2018 Bay Delta Plan Amendments.

Under Scenario 1 (Current Water Supply), the existing water supplies would be available to meet the demand of the 30 Van Ness Avenue Project in combination with existing development and projected growth in all years, except for an approximately 3.6 to 6.1 mgd or 5.0- to 6.8-percent shortfall during dry years through the year 2040.

Under Scenario 2 (Bay Delta Voluntary Agreement), the supply shortfall of water supplies would be of a similar magnitude to those that would occur under Scenario 1.

Under Scenario 3 (Bay-Delta Plan Amendment), total shortfalls of water supplies under Scenario 3 would range from 12.3 mgd (15.6 percent) in a single dry year to 36.1 mgd (45.7 percent) in years seven and eight of the 8.5-year design drought based on 2025 demand levels and from 21 mgd (23.4 percent) in a single dry year to 44.8 mgd (49.8 percent) in years seven and eight of the 8.5-year design drought based on 2040 demand.

#### 98 FRANKLIN STREET

The proposed 98 Franklin Street Project does not qualify as a "water-demand" project as defined by CEQA Guidelines section 15155(a)(1); therefore, a water supply assessment has not been prepared for this project. Based on guidance from the California Department of Water Resources and a citywide demand analysis, the SFPUC has established that projects with a

water demand of less than 50,000 gallons per day do not meet the definition of a "water-demand project" as provided in CEQA Guidelines section 15155(a)(1).[130] The 98 Franklin Street Project would result in the construction of 345 residential units, 81,000 square feet of educational use, and 3,100 square feet of retail use. The development proposed by the project would represent 69 percent of the 500-unit limit and 17 percent of the 500,000 square feet of commercial space[131] provided in section 15155(1)(A) and (B), respectively.

## WATER SUPPLY IMPACT ANALYSIS

As described above, the supply capacity of the Hetch Hetchy regional water system that provides the majority of the city's drinking water far exceeds the potential demand of any single development project in San Francisco. No single development project alone in San Francisco would require the development of new or expanded water supply facilities or require the SFPUC to take other actions, such as imposing a higher level of rationing across the city in the event of a supply shortage in dry years. Therefore, a separate plan-only analysis is not provided for this topic. The following analysis instead considers whether the Hub Plan, as well as the project specific development at 30 Van Ness Avenue and 98 Franklin Street, in combination with both existing development and other projected growth through 2040 would require new or expanded water supply facilities, the construction or relocation of which could have significant cumulative impacts on the environment. It also considers whether a high level of rationing would be required that could have significant cumulative impacts. It is only under this cumulative context that development in San Francisco could have the potential to require new or expanded water supply facilities or require the SFPUC to take other actions, which in turn could result in significant physical environmental impacts related to water supply. If significant cumulative impacts could result, then the analysis considers whether the project would make a considerable contribution to the cumulative impact.

### IMPACTS RELATED TO NEW OR EXPANDED WATER SUPPLY FACILITIES

The SFPUC's adopted water supply level of service goal for the regional water system is to meet customer water needs in non-drought and drought periods. The system performance objective for drought periods is to meet dry-year delivery needs while limiting rationing to a maximum of 20 percent system-wide reduction in regional water service during extended droughts. As the SFPUC has designed its system to meet this goal, it is reasonable to assume that to the extent the SFPUC can achieve its service goals, sufficient supplies would be available to serve existing

[130] Memorandum, from Steven R. Ritchie, Assistant General Manager, Water Enterprise, San Francisco Public Utilities Commission to Lisa Gibson, Environmental Review Officer, San Francisco Planning Department – Environmental Planning, May 31, 2019.

[131] For the purpose of the 98 Franklin Street Project, the educational and retail uses were combined to represent the percentage of commercial use.

development and planned growth accounted for in the 2015 Urban Water Management Plan (which includes the Hub Plan, as well as the project specific development at 30 Van Ness Avenue and 98 Franklin Street) and that new or expanded water supply facilities are not needed to meet system-wide demand. While the focus of this analysis is on the SFPUC's retail service area and not the regional water system as a whole, this cumulative analysis considers the SFPUC's regional water supply level of service goal of rationing of not more than 20 percent in evaluating whether new or expanded water supply facilities would be required to meet the demands of existing development and projected growth in the retail area through 2040. If a shortfall would require rationing more than 20 percent to meet system-wide dry-year demand, the analysis evaluates whether as a result, the SFPUC would develop new or expanded water supply facilities that result in significant physical environmental impacts. It also considers whether such a shortfall would result in a level of rationing that could cause significant physical environmental impacts. If the analysis determines that there would be a significant cumulative impact, then per CEQA Guidelines section 15130, the analysis considers whether the project's incremental contribution to any such effect is "cumulatively considerable".

With the implementation of the Hub Plan, as well as the 30 Van Ness Avenue and 98 Franklin Street projects, existing and planned dry-year supplies would meet projected retail demands through 2040 under Scenario 1 within the SFPUC's regional water system adopted water supply reliability level of service goal. Therefore, the SFPUC could meet the water supply needs for the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects, in combination with existing development and other projected growth in San Francisco through 2040 from the SFPUC's existing system. The SFPUC would not be expected to develop new or expanded water supply facilities for retail customers under Scenario 1 and there would be no significant cumulative environmental impact.

The effect of Scenario 2 cannot be quantified at this time, but as explained previously, if it can be designed to achieve the SFPUC's level of service goals and is adopted, it would be expected to have effects similar to Scenario 1. Given the SFPUC's stated goal of maintaining its level of service goals under Scenario 2, it is expected that Scenario 2 effects would be more similar to Scenario 1 than to Scenario 3. In any event, any shortfall effects under Scenario 2 that exceed the SFPUC's service goals would be expected to be less than those under Scenario 3. Therefore, the analysis of Scenario 3 would encompass any effects that would occur under Scenario 2 if it were to trigger the need for increased water supply or rationing in excess of the SFPUC's regional water system level of service goals.

Under Scenario 3, the SFPUC's existing and anticipated water supplies would be sufficient to meet the demands of existing development and projected growth in San Francisco, including the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects, through 2040 in wet and normal years, which have historically occurred in approximately nine out of 10 years on average. During dry and multiple dry years, retail supply shortfalls of 15.6 to 49.8 percent could occur.

As a result of the adoption of the Bay-Delta Plan Amendment and the resulting potential limitations on supply to the regional water system during dry years, the SFPUC is increasing and accelerating its efforts to develop additional water supplies and explore other projects that would increase overall water supply resilience. The SFPUC is beginning to study water supply options, but it has not determined the feasibility of the possible projects, has not made any decision to pursue any particular supply projects, and has determined that the identified potential projects would take anywhere from 10 to 30 years or more to implement.

There is also a substantial degree of uncertainty associated with the implementation of the Bay-Delta Plan Amendment and its ultimate outcome; and therefore, there is substantial uncertainty in the amount of additional water supply that may be needed, if any. Moreover, there is uncertainty and lack of knowledge as to the feasibility and parameters of the possible water supply projects the SFPUC is beginning to explore. Consequently, the physical environmental impacts that could result from future supply projects is quite speculative at this time and would not be expected to be reasonably determined for a period of time ranging from 10 to 30 years. Although it is not possible at this time to identify the specific environmental impacts that could result, this analysis assumes that if new or expanded water supply facilities, such as those listed above under "Additional Water Supplies," were developed, the construction and/or operation of such facilities could result in significant adverse environmental impacts, and that this would be a significant cumulative impact.

As discussed above, the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects would represent 0.89 percent of total demand and 0.82 percent of potable water demand in San Francisco in 2040, whereas implementation of the Bay Delta Plan Amendment would result in a retail supply shortfall of up to 49.8 percent.

Thus, new or expanded dry-year water supplies would be needed under Scenario 3 regardless of whether the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects are approved or constructed. As such, any physical environmental impacts related to the construction and/or operation of new or expanded water supplies would occur with or without the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects. Therefore, neither the Hub Plan nor the 30 Van Ness Avenue and 98 Franklin Street projects would have a considerable contribution to any significant cumulative impacts that could result from the construction or operation of new or expanded water supply facilities developed in response to the Bay-Delta Plan Amendment.

#### IMPACTS RELATED TO RATIONING

Given the long lead times associated with developing additional water supplies, in the event the Bay-Delta Plan Amendment were to take effect sometime after 2022 and result in a dry-year shortfall, the expected action of the SFPUC for the next 10 to 30 years (or more) would be limited to requiring increased rationing. The remaining analysis therefore focuses on whether

rationing at the levels that might be required under the Bay-Delta Plan Amendment could result in any cumulative impacts, and if so, whether the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects would make a considerable contribution to these impacts.

The SFPUC has established a process through its Retail Water Shortage Allocation Plan for actions it would take under circumstances requiring rationing. Rationing at the level that might be required under the Bay-Delta Plan Amendment would require changes to how businesses operate, changes to water use behaviors (e.g., shorter and/or less-frequent showers), and restrictions on irrigation and other outdoor water uses (e.g., car washing), all of which could lead to undesirable socioeconomic effects. Any such effects would not constitute physical environmental impacts under CEQA.

High levels of rationing could however lead to adverse physical environmental effects, such as the loss of vegetation cover resulting from prolonged restrictions on irrigation. Prolonged high levels of rationing within the city could also make San Francisco a less desirable location for residential and commercial development compared to other areas of the state not subject to such substantial levels of rationing, which, depending on location, could lead in turn to increased urban sprawl. Sprawl development is associated with numerous environmental impacts, including, for example, increased greenhouse gas emissions and air pollution from longer commutes and lower density development, higher energy use, loss of farmland, and increased water use from less water-efficient suburban development.[132] In contrast, as discussed in the transportation section of the EIR, the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects are located in an area where VMT per capita is well below the regional average; development projects in San Francisco are required to comply with numerous regulations that would reduce greenhouse gas emissions, as discussed in the greenhouse gas section of this initial study, and San Francisco's per capita water use is among the lowest in the state. Thus, the higher levels of rationing on a citywide basis that could be required under the Bay-Delta Plan Amendment could lead directly or indirectly to significant cumulative impacts. The question, then, is whether the project would make a considerable contribution to impacts that may be expected to occur in the event of high levels of rationing.

While the levels of rationing described above apply to the retail service area as a whole (i.e., 5.0 to 6.8 percent under Scenario 1, 15.6 to 49.8 percent under Scenario 3), the SFPUC may allocate different levels of rationing to individual retail customers based on customer type (e.g., dedicated irrigation, single-family residential, multi-family residential, commercial, etc.) to achieve the required level of retail (citywide) rationing. Allocation methods and processes that have been considered in the past and may be used in future droughts are described in the

[132] Pursuant to the SFPUC 2015 Urban Water Management Plan, San Francisco's per capita water use is among the lowest in the state.

SFPUC's current Retail Water Shortage Allocation Plan.[133] However, additional allocation methods that reflect existing drought-related rules and regulations adopted by the SFPUC during the recent drought are more pertinent to current and foreseeable development and water use in San Francisco and may be included in the SFPUC's update to its Retail Water Shortage Allocation Plan.[134] The Retail Water Shortage Allocation Plan will be updated as part of the 2020 Urban Water Management Plan update in 2021. The SFPUC anticipates that the updated Retail Water Shortage Allocation Plan would include a tiered allocation approach that imposes lower levels of rationing on customers who use less water than other customers in the same customer class and would require higher levels of rationing by customers who use more water. This approach aligns with the state water board's statewide emergency conservation mandate imposed during the recent drought, in which urban water suppliers who used less water were subject to lower reductions than those who used more water. Imposing lower rationing requirements on customers who already conserve more water is also consistent with the implementation of prior rationing programs based on past water use in which more efficient customers were allocated more water.

The SFPUC anticipates that, as a worst-case scenario under Scenario 3, the multi-family mixed-use residential and institutional, commercial, and office land uses that would be developed under the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street projects could be subject to up to 38- and 30--percent rationing respectively during a severe drought. [135] In accordance with the Retail Water Shortage Allocation Plan, the level of rationing that would be imposed on individual development projects/customers would be determined at the time of a drought or other water shortage and cannot be established with certainty prior to the shortage event. However, newly-constructed buildings, such as those that would be constructed as part of the Hub Plan, have water-efficient fixtures and non-potable water systems that comply with the latest regulations. Thus, if development projects under the Hub Plan demonstrate below-average water use, they would likely be subject to a lower level of rationing than other retail customers that meet or exceed the average water use for the same customer class.

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[133] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for the City and County of San Francisco, Appendix L – Retail Water Shortage Allocation Plan,* June 2016. This document is available at *https://sfwater.org/index.aspx?page=75*, accessed July 10, 2019.

[134] SFPUC, *2015-2016 Drought Program*, adopted by Resolution 15-0119, May 26, 2015, accessed July 10, 2019.

[135] This worst-case rationing levels for various customer classes in San Francisco were estimated for the purpose of preparing comments on the Draft Substitute Environmental Document in Support of Potential Changes to the Bay-Delta Plan (SED), dated March 16, 2017. See comment letter Attachment 1, Appendix 3, Page 5, Table 3. The comment letter and attachments are available at: *https://www.waterboards.ca.gov/public_notices/comments/2016_baydelta_plan_amendment/docs/dennis_herrera.pdf*, accessed July 10, 2019.

While any substantial reduction in water use in a new, water efficient building likely would require behavioral changes by building occupants that are inconvenient, temporary rationing during a drought is expected to be achievable through actions that would not cause or contribute to significant environmental effects. The effect of such temporary rationing would likely cause occupants to change behaviors but would not cause the substantial loss of vegetation because vegetation on these urban infill sites would be limited to ornamental landscaping, and non-potable water supplies would remain available for landscape irrigation in dry years. Development under the Hub Plan would primarily consist of multi-family residential uses along with some institutional, commercial, and office use, and it is not anticipated to include uses that would be forced to relocate because of temporary water restrictions, such as businesses that rely on significant volumes of water for operations. While high levels of rationing that would occur under Scenario 3 could result in future development locating elsewhere, existing residents, office workers, and businesses within the Hub Plan area would be expected to tolerate rationing for the temporary duration of a drought.

As discussed above, implementation of the Bay-Delta Plan Amendment would result in substantial system-wide water supply shortfalls in dry years. These shortfalls would occur with or without implementation of the Hub Plan. The Hub Plan's incremental increase in potable water demand (0.82 percent of total retail demand) would have a negligible effect on the levels of rationing that would be required throughout San Francisco under Scenario 3 in dry years.

As such, temporary rationing that could be imposed on development within the Hub Plan Area would not cause or contribute to significant environmental effects associated with the high levels of rationing that may be required on a city-wide basis under Scenario 3. Thus, the Hub would not make a considerable contribution to any significant cumulative impacts that may result from increased rationing that may be required with implementation of the Bay-Delta Plan Amendment, were it to occur.

#### CONCLUSION

As stated above, there is considerable uncertainty as to whether the Bay-Delta Plan Amendment will be implemented. If the plan amendment is implemented, the SFPUC will need to impose higher levels of rationing than its regional water system level of service goal of no more than 20 percent rationing during drought years by 2025 and for the next several decades. Implementation of the plan amendment would result in a shortfall beginning in years two and three of multiple dry-years in 2025 of 33.2 percent, and dry year shortfalls by 2040 ranging from 23.4 percent in a single dry year and year one of multiple dry years to up to 49.8 percent in years seven and eight of the 8.5-year design drought. While the SFPUC may seek new or expanded water supply facilities, it has not made any definitive decision to pursue particular actions and there is too much uncertainty associated with this potential future decision to identify environmental effects that would result. Such effects are therefore speculative at this time. In any case, the need to develop new or expanded water supplies in response to the Bay

Delta Plan Amendment and any related environmental impacts would occur irrespective of the water demand associated with the Hub Plan the 30 Van Ness Avenue Project, or the 98 Franklin Street Project. Given the long lead times associated with developing additional supplies, the SFPUC's expected response to implementation of the Bay-Delta Plan Amendment would be to ration in accordance with procedures in its Retail Water Shortage Allocation Plan.

Both direct and indirect environmental impacts could result from high levels of rationing. However, the Hub Plan, the 30 Van Ness Avenue Project, and the 98 Franklin Street Project would be expected to tolerate the levels of rationing imposed on them for the duration of the drought, and thus would not contribute to sprawl development caused by rationing under the Bay-Delta Plan Amendment.

Based on the proposed land use and program development, the department anticipates that six of the 18 sites in the Hub Plan would be subject to the requirements of the Non-potable Water Ordinance: 33 Gough Street-City College, 30 Otis Street, 99 South Van Ness Avenue, 1695 Mission Street, 1 South Van Ness, and 30 Van Ness Avenue. The six sites subject to the Non-potable Water Ordinance (including the 30 Van Ness Avenue Project) would not be expected to contribute to a loss of vegetation because project-generated non-potable supplies would remain available for irrigation in dry years.

For the purpose of calculating Hub Plan water demand, the department assumed that the Non-potable Water Ordinance would not apply to the 12 remaining Hub Plan sites. Although these remaining sites, including the 98 Franklin Street Project, would not be subject to the Non-potable Water Ordinance, these projects would not have a considerable contribution to any cumulative loss of vegetation that could result from high levels of rationing required under the Bay-Delta Plan Amendment because the redevelopment of these urban infill sites would not include large vegetated areas.

The small increase in potable water demand attributable to development under the Hub Plan compared to citywide demand would not substantially affect the levels of dry-year rationing that would otherwise be required throughout the city. Thus, the proposed Hub Plan, 30 Van Ness Avenue Project, and 98 Franklin Street Project would not make a considerable contribution to a cumulative environmental impact caused by implementation of the Bay-Delta Plan Amendment. Therefore, for the reasons described above, under all three scenarios, this impact would be considered less than significant.

**Mitigation**: None required.

**Impact UT-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not require or result in the relocation, expansion, or construction of new wastewater treatment, stormwater, electric power, natural gas, or telecommunication facilities, or exceed capacity of the wastewater treatment provider when combined with other commitments. (Less than Significant)**

Growth within the Hub Plan area could result in increased wastewater and stormwater flows into the combined sewer system. When increased flows exceed the combined storage and treatment capacity of the SEP, NPF, and the transport and storage boxes, excess flows are discharged to the Bay after receiving treatment equivalent to primary treatment.[136] An increase in the frequency of combined sewer discharge from the watershed could be a concern because combined sewer discharges contain pollutants for which the Bay is designated as an impaired water body pursuant to the Clean Water Act.

The Hub Plan and the two development projects could result in changes in flows to the City's combined sewer system, including 1) changes in the amount of wastewater generated and 2) changes in stormwater runoff volumes and rates. The effects on the combined sewer system and frequency of combined sewer discharges to the Bay is discussed below, along with the potential to exceed the wastewater treatment capacity of the SEP.

## WASTEWATER TREATMENT REQUIREMENTS

### CONSTRUCTION

Wastewater generation would occur periodically throughout the construction period for subsequent development projects incentivized by the Hub Plan and the two individual development projects. Construction activities could increase wastewater generation as a result of dewatering and demand from onsite construction workers. However, this demand would be temporary and nominal. Construction dewatering discharges would result in short-term increases in demand on existing wastewater or storm drainage facilities but proposed dewatering discharge methods would include options for direct discharge to the Bay under an existing National Pollutant Discharge Elimination System (NPDES) general permit. This would ensure that any discharges to the combined sewer system would be within the capacity of existing facilities and would not require the construction or expansion of existing facilities. If discharged directly to the Bay, the dewatering discharges would be subject to the permitting requirements of the RWQCB under the NPDES Volatile Organic Compound and Fuel General Permit (discussed in Section E.15, Hydrology and Water Quality), which typically involve reporting and monitoring requirements for discharges of extracted and treated groundwater.

[136] Primary treatment consists of removing materials from water that either float or settle out by gravity through a process such as screening, comminution, grit removal, and sedimentation.

Accordingly, the project sponsor or its contractors would be required to submit a notice of intent to the RWQCB, describing the proposed discharge and treatment system, and the RWQCB must issue an Authorization to Discharge once it is determined that the discharger is eligible to discharge under the permit. The treated water would most likely be discharged through a stormwater swale or an existing outfall pipe. Regular influent and effluent water quality monitoring would be conducted to demonstrate permit compliance. Therefore, project construction would result in a minimal increase in wastewater generation and would not be anticipated to have a substantial adverse impact on available wastewater treatment or conveyance capacity. Impacts during construction would be ***less than significant***.

#### OPERATION

Wastewater and stormwater associated with operation of the Hub Plan and two individual development projects would flow to the City's combined stormwater and sewer system and be treated to the standards of the City's NPDES permit for the SEP. The treated water would be discharged to the Bay. The San Francisco Bay Area RWQCB sets and regulates NPDES requirements. Subsequent development projects allowed by the Hub Plan, including the two individual development projects, would comply with RWQCB standards, as well as the City's Stormwater Management Ordinance (ordinance No. 83 -10), which would require development under the Hub Plan and the individual development projects to reduce or eliminate the existing volume and rate of stormwater runoff discharged from the Hub Plan area. To achieve this, development in the Hub Plan area would implement and install appropriate stormwater management systems to manage stormwater onsite and limit demand on both collection system and wastewater facilities resulting from stormwater discharges. Because development under the Hub Plan and the two individual development projects would result in ground disturbance of an area greater than 5,000 square feet, a stormwater control plan would be prepared for review and approval by the San Francisco Public Utilities Commission. The stormwater control plan would include a maintenance agreement that must be signed by the project sponsor to ensure proper care of the necessary stormwater controls. During operations at 98 Franklin Street and 30 Van Ness Avenue, the projects would comply with San Francisco stormwater management and non-potable water ordinances through a combination of rainwater harvesting, gray water collection, and dual plumbing. Both the Stormwater Management Ordinance and the Non-Potable Water Program requirements would apply to the two development projects. Therefore, the proposed project would not exceed the wastewater treatment requirements of the RWQCB, and impacts would be ***less than significant***.

### WASTEWATER FACILITIES

All wastewater flows from the development in the Hub Plan area, including the two individual development projects, would be treated at the SEP or the NPF (during wet weather) prior to discharge through an existing outfall or overflow structure to the Bay.

Development in the Hub Plan area, including the two individual development projects, could result in up to 8,100 additional residential units in the vicinity. The volume of wastewater flows to the combined sewer system would be directly related to the amount of water used for purposes such as washing dishes and clothes, washing hands, flushing urinals and toilets, and operating water-cooled heating and ventilation systems. The discussion above under UT-1 focuses on the increased water demand that would occur with implementation of the Hub Plan and the two individual development projects.

Growth from subsequent development projects incentivized by the Hub Plan, as well as the two individual development projects, is anticipated to discharge approximately 95 percent of the potable water supplied as wastewater into the sewer system, which is consistent with the San Francisco Public Utilities Commission's standard assumption for multi-family residential buildings.[137] It is also anticipated that approximately 100 percent of non-potable recycled water used at the sites for the two individual development project would be discharged as wastewater into the sewer system. Development projects implemented pursuant to the Hub Plan, including the two individual development projects, would be required to comply with San Francisco's Non-Potable Water Program, which requires developers of buildings of 250,000 square feet or more to use non-potable water for toilet and urinal flushing. One potential source of non-potable water for these purposes is gray water generated onsite (e.g., from bathtubs, showers, bathroom sinks, washing machines, laundry tubs, cooling units). If future developers use onsite gray water for flushing, the amount of wastewater discharged to the combined sewer would be reduced by the approximate volume of gray water used. Because the program also allows the use of other non-potable water, such as rainwater and foundation drainage, for these purposes, it is reasonable to assume that half of the non-potable water demand would be met with onsite sources of gray water, which would reduce wastewater flows. In addition, a portion of the water would be consumed onsite rather than discharged to the sewer, and water use estimates do not account for use of recycled water in conjunction with sustainable designs, including Leadership in Energy and Environmental Design (LEED) standards. Finally, the California Building Code is updated every 3 years; after each update, the City adopts most of the statewide changes into its own building code. Future code versions are likely to include more stringent water conservation and recycling requirements, which would decrease the potable water demand from future development projects, although the effects of these as-yet undefined changes on wastewater flows cannot be quantified.

[137] San Francisco Public Utilities Commission, *Wastewater Service Charge Appeal*, 2018, *http://www.sfwater.org/index.aspx?page=132* accessed: February 12, 2018.

Existing dry-weather flows to the SEP are 60 mgd, or approximately 24.5 mgd less than the permitted 84.5 mgd capacity of the plant.[138,139] For the Hub Plan, including the two individual development projects, the increase in wastewater generation due to the additional residential units that could be constructed by incentivized development would be partially offset by compliance with San Francisco's Non-Potable Water Program, LEED standards, and the California Building Code. Any additional wastewater generation would be accommodated by the City's existing wastewater infrastructure because adequate capacity (24.5 mgd) remains in the overall system. Therefore, no additional wastewater facilities would need to be built to accommodate the Hub Plan or the two individual development projects; the impact would be ***less than significant.***

**Mitigation**: None required.

## STORMWATER FACILITIES

No stormwater utility infrastructure upgrades are anticipated under the Hub Plan or the two individual development projects. In the event that stormwater utility infrastructure upgrades become necessary, compliance with stormwater quality regulations would be ensured during the planning and construction phases, in accordance with the existing San Francisco regulations described in Section E.15, Hydrology and Water Quality.

The Hub Plan area would be designed to meet the City's Stormwater Management Requirements and Design Guidelines (SMR). Development sites would be required to implement stormwater treatment measures, either at each individual site or within centralized stormwater management areas. In accordance with San Francisco's Stormwater Management Ordinance (San Francisco Public Works Code article 4.2) and SMR, individual development projects developed under the Hub Plan, including the two individual development projects would need to comply with the City's SMR. Accordingly, all projects that create or replace 5,000 square feet or more of impervious surfaces would be required to minimize the flow and volume of stormwater into the combined sewer system. The Hub Plan area, as well as most of the city, is almost entirely covered by impervious surfaces at present, and all future development projects would be located on sites that are already developed. Therefore, subsequent development projects incentivized under the Hub Plan that create or replace 5,000 square feet or more of impervious surfaces would be required to achieve a 25 percent reduction in the peak rate and total volume of stormwater runoff from the 2-year, 24-hour design storm compared with existing conditions. Smaller projects that create or replace between 2,500 and 5,000 square feet of

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[138] California Regional Water Quality Control Board, San Francisco Bay Region, *Order No. R2-2008-0007, NPDES No. CA0037664, 2008, https://www.waterboards.ca.gov/rwqcb2/board_decisions/adopted_orders/2008/R2-2008-0007.pdf,* accessed: February 12, 2018.

[139] San Francisco Public Utilities Commission, *Sewer System Improvement Program*, 2014, *http://sfwater.org/modules/showdocument.aspx?documentid=5801, a*ccessed: February 12, 2018.

impervious surfaces in separate sewer areas would need to implement at least one site design measure, as outlined in the SMR, and submit an estimate runoff reduction volume to the San Francisco Public Utilities Commission using the State Water Resources Control Board's (SWRCB's) SMARTS calculator.[140]

To achieve compliance, the sponsors for individual development projects that create or replace at least 2,500 square feet or more of impervious surfaces would be required to incorporate low-impact design techniques into the project design. Larger projects disturbing at least 5,000 square feet would also have to implement stormwater best management practices (BMPs) to reduce the flow rate and volume of stormwater entering the combined sewer system. Recommended BMPs to achieve these goals include infiltration methods, such as bio-retention areas, pervious paving, and other measures to minimize impervious surfaces. Reuse of stormwater for non-potable uses, such as irrigation or toilet and urinal flushing, in accordance with the City's Non-Potable Water Program, would also reduce the volume of stormwater discharged to the combined sewer system.

To meet open space objectives and improve the public realm, development related to the sites proposed for upzoning under the Hub Plan would incorporate open space in the design. The open space would be a mix of public and private spaces, including plazas and rooftop decks. The two individual development projects would incorporate several tens of thousands of square feet of open space: 32,580 square feet for 30 Van Ness Avenue and 33,940 square feet for 98 Franklin Street. Although the specific dimensions, designs, and amenities for the new open space are yet to be determined, some would incorporate landscape features and areas that would incrementally decrease the amount of impervious surface and thus incrementally decrease the amount of stormwater runoff into the combined sewer system. The proposed open space improvements would not result in any substantive increase in water flow to the combined sewer and would comply with the open space requirements of the Stormwater Management Ordinance. In addition, through compliance with San Francisco Green Building Ordinance requirements and the City's SMR, runoff water from the project site would not exceed the capacity of existing or planned stormwater drainage systems. Furthermore, the Hub Plan area is currently largely impervious, and subsequent development projects under the Hub Plan, including the two individual development projects, would increase the amount of pervious surfaces in the area. Therefore, subsequent development projects under the Hub Plan and the two individual development projects would not increase stormwater runoff rates and volumes. Through the increase in pervious surfaces, onsite stormwater treatment, and replacement of existing infrastructure, there would be a net reduction in stormwater flows to the SEP; thus, the capacity of the SEP would not be adversely affected. Therefore, this impact would be ***less than significant.***

[140] San Francisco Public Utilities Commission, *How Do I Comply with the Stormwater Management Requirements?* 2018, *https://sfwater.org/index.aspx?page=1006,* accessed: July 10, 2019.

## ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATION FACILITIES

Subsequent development projects under the Hub Plan, including the two individual development projects, would install new connections to the surrounding Pacific Gas & Electric electric grid and natural gas system to provide service to the proposed buildings. Subsequent development projects under the Hub Plan, including the two individual development projects, would also provide connections to communication lines along adjacent roadways. These improvements for the 30 Van Ness Avenue and 98 Franklin Street projects are described in Chapter 2 of the EIR, and the environmental impacts associated with their construction are evaluated throughout this initial study and EIR. Other than localized connections to the existing systems, subsequent development projects under the Hub Plan, including the two individual development projects, would not result in the construction of electric, natural gas, or telecommunications facilities (e.g., electric substations, telecommunication towers).

The streetscape and street network improvements may require relocation of electric, natural gas, or telecommunications facilities during construction. If this occurs, affected infrastructure would be relocated or replaced in kind. Construction and operation of the streetscape and street network improvements would not require the expansion of new electric, natural gas, or telecommunications facilities. Therefore, the Hub Plan and the two individual development projects would not result in relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities; the impact would be ***less than significant***.

**Mitigation**: None required.

**Impact UT-3: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, and comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (Less than Significant)**

In 2015, San Francisco executed a new contract with Recology to dispose of solid waste at the Hay Road Landfill in Solano County. Under the Landfill Disposal Agreement between the City and Recology, the Hay Road Landfill will serve as San Francisco's main disposal site until 5 million tons of waste has been deposited.[141] The Hay Road Landfill is permitted by Solano County and the California Department of Resources Recycling and Recovery (CalRecycle) to

[141] Raphael, Deborah O., *Approving Revised Landfill Disposal Agreement between the City and County of San Francisco with Recology San Francisco,* SF Environment memorandum to Commission on the Environment, July 22, 2015, *https://sfenvironment.org/sites/default/files/notice/attach/sfe_zw_landfill_memo_coe_7_22_15.pdf* , accessed: February 20, 2018.

accept up to 2,400 tons per day of municipal solid waste for disposal and operate up to 24 hours per day, 7 days per week. The landfill has 30,433,000 cubic yards of remaining capacity and a closure date of 2077.[142]

Recycling, composting, and waste reduction efforts are expected to divert an increasing amount of waste from the landfill, per California and local requirements. The City was required by the state's Integrated Waste Management Act (Assembly Bill 939) to divert 50 percent of its waste stream from landfills by 2000. The City met this threshold in 2003 and later increased the amount of diverted waste, reaching 69 percent in 2005 and 70 percent in 2006. Furthermore, San Francisco exceeded its goal to divert 75 percent of its waste by 2010 and will implement new strategies to meet its zero-waste goal by 2020.[143] In 2016, the target disposal rate for San Francisco residents and employees was 6.6 pounds per resident per day and 10.6 pounds per employee per day. Both of these target disposal rates were met in 2016 (the most recent year reported), with San Francisco generating about 3.7 pounds per resident per day and about 4.6 pounds per employee per day.[144]

Development incentivized under the Hub Plan as well as the two individual development projects would generate approximately 10,600 tons per year of solid waste that would necessitate disposal in a landfill.[145] As described above, the City is currently sending its solid waste to the Hay Road Landfill, which has a closure date of 2077. Therefore, there is sufficient permitted capacity in the landfill to accommodate the solid waste that would be generated by subsequent development projects under the Hub Plan and the two individual development projects. Furthermore, during operation of the buildings that would be constructed as a part of the Hub Plan, including the two individual development projects, residents and employees would be required to comply with the City's Mandatory Recycling and Composting Ordinance (Ordinance 100-09), which would further reduce the amount of solid waste that would be sent to the landfill. Given the city's progress to date on diversion and waste reduction, and given the existing future long-term capacity available at the Recology Hay Road Landfill and other area landfills, the proposed project would not generate solid waste in

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[142] California Department of Resource Recycling and Recovery, *Facility/Site Summary Details: Recology Hay Road (48-AA-0002),* 2016, *http://www.calrecycle.ca.gov/SWFacilities/Directory/48-aa-0002/Detail/*, accessed: February 26, 2016.

[143] SF Environment, *Zero Waste-Frequently Asked Questions*, 2019, *https://sfenvironment.org/zero-waste-faqs*, accessed: July 10, 2019.

[144] California Department of Resource Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Detail*, 2016, *http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=438&Year=2016,* accessed: February 21, 2018. The data do not provide separate averages for residential and non-residential generation but merely different metrics for averaging overall citywide waste generation.

[145] Calculation: 3.7 pounds/resident/day x 15,700 residents x 365 days/year = 21,202,850 pounds/year; converted into tons = 10,600 tons/year.

excess of state or local standards and would be served by regional landfills with sufficient permitted capacity to accommodate its solid waste disposal needs. Impacts would be ***less than significant.***

**Mitigation**: None required.

**Impact C-UT-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not contribute to cumulative impacts on utilities and services. (Less than Significant)**

The Hub Plan area, including the two individual development projects, and the service territories of the utility providers, serve as the geographical context for the cumulative impact analysis. Over time, growth in the Hub Plan area and San Francisco as a whole would result in increased demand for a reliable water supply, wastewater treatment, solid waste disposal, electric power, natural gas, and telecommunications. According to 2013 ABAG projections, San Francisco is expected to gain approximately 110,539 households (a 29 percent increase) and 280,465 people (a 35 percent increase) between 2010 and 2040.[146] Employment is forecast to increase by 191,000 during this period, resulting in 760,000 jobs.[147] Citywide growth would also generate increased demand for utilities.

#### WATER SUPPLY

Other development would increase demands on water supplies as well as water infrastructure and treatment facilities. However, the San Francisco Public Utilities Commission has incorporated the demand from other development projects in its future water service projections. The 30 Van Ness Avenue WSA (based on the 2015 Urban Water Management Plan) determined that, with the addition of planned retail supplies, the San Francisco Public Utilities Commission would have sufficient water supplies available to serve its retail customers, including the project, existing customers, and foreseeable future development. New or expanded water treatment facilities would not be required as a result of construction of the proposed project, and the proposed project's contribution to water demand would not adversely affect the city's water supply. Therefore, cumulative impacts on the city's water supply would be considered ***less than significant.***

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[146] Association of Bay Area Governments, *Projections 2013*, December 2013.

[147] Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy*, May 16, 2012, *https://www.planbayarea.org/sites/default/files/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf* , accessed: July 10, 2019.

### WASTEWATER

The Hub Plan and two individual development projects would accommodate new development in the Hub Plan area, which, in turn, would result in up to 8,100 additional residential units.

Citywide water demand is forecast to increase steadily through 2040. After accounting for the projected savings from conservation, retail water demand is projected to increase from 64.8 mgd in 2015 to 83.9 mgd in 2040.[148] This is an increase of 19.1 mgd, or 29 percent, compared with water use in 2015. Based on the projected citywide increase in water use, year-round citywide wastewater discharges to the combined sewer system would increase by about 18.1 mgd by 2040, assuming a 95 percent conversion factor.

The anticipated growth in the Hub Plan area is conservatively estimated to increase the amount of water used. However, the related increase in wastewater flows would be less than any increase in water demand as a result of compliance with San Francisco's Non-Potable Water Program, LEED standards, and California Building Code. Each of the cumulative projects, including both individual development projects, would also be required to implement erosion and sediment control plans, in compliance with the city's NPDES permits and RWQCB and U.S. Environmental Protection Agency regulations regarding wastewater treatment and discharge. Compliance with these regulations would minimize impacts from cumulative construction sediment and contaminants entering the combined sewer system. Although each cumulative project would result in increased wastewater flows, each large project creating or disturbing more than 5,000 square feet of impervious area would also be required to reduce stormwater flows by 25 percent compared with existing conditions. The 25 percent reduction (relative to the 2-year storm) in stormwater flows would result in an overall reduction in combined wastewater and stormwater flows. As a result, the reasonably foreseeable cumulative projects would not combine to generate a cumulative impact related to wastewater flows. Therefore, cumulative impacts on the city's wastewater would be considered ***less than significant***.

### STORMWATER

Future development in the city outside of the Hub Plan area would consist primarily of infill and redevelopment projects, which would not substantially increase the amount of impervious surfaces in the city. Existing regulations require new projects to adhere to the Stormwater Management Ordinance (No. 64-16). Development that would create or replace more than 5,000 square feet of impervious surface would be required to comply with the Construction Site Runoff Control Ordinance, which requires preparation of an Erosion and Sediment Control Plan or stormwater pollution prevention plan (SWPPP) and submittal of a Construction Site

[148] San Francisco Public Utilities Commission, *2015 Urban Water Management Plan for City and County of San Francisco,* 2016, *http://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839*, accessed: March 6, 2018.

Runoff Control Permit Application. Furthermore, various infrastructure improvements to sewers and pump stations as well as stormwater management projects in the Hub Plan area would increase treatment or conveyance capacity. Therefore, cumulative impacts on the city's stormwater drainage facilities would be considered ***less than significant.***

### LANDFILL CAPACITY

Long-range growth forecasts are considered in the City's planning for future landfill capacity, as described above. San Francisco has a goal of 75 percent landfill diversion by 2010 and 100 percent by 2020.[149] Approximately 80 percent of San Francisco's solid waste was being diverted from landfills by 2012, indicating that San Francisco was exceeding the statewide goal of a 75 percent reduction in solid waste by 2020. Therefore, the city is expected to reduce solid waste volumes in the future. Reasonably foreseeable cumulative development projects, in combination with the proposed project, would incrementally increase total waste generation from the city by increasing the number of residents as well as excavation, demolition, and remodeling activities associated with growth. However, the increasing rate of diversion citywide through recycling, composting, and other methods would result in a decreasing share of total waste that would require deposition into a landfill. As with the Hub Plan and the two individual development projects, other development would be subject to the City's Mandatory Recycling and Composting Ordinance, which requires all San Francisco residents and commercial landlords to separate their refuse into recyclables, compostables, and trash, thereby minimizing solid waste disposal and maximizing recycling. Other development would also be subject to the City's Construction and Demolition Debris Recovery Ordinance, which requires all construction and demolition debris to be transported to a registered facility that can divert a minimum of 65 percent of the material from landfills. Given the city's progress to date on diversion and waste reduction and given the future long-term capacity available at the Recology Hay Road Landfill and other area landfills, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate its solid waste disposal needs. For these reasons, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would have ***less-than-significant*** cumulative impacts related to solid waste.

### ELECTRIC POWER, NATURAL GAS, AND TELECOMMUNICATIONS

Future development in the city outside of the Hub Plan area would consist primarily of infill and redevelopment projects, which would not substantially increase the amount of electric power, natural gas, and telecommunications required. Existing regulations require new projects to adhere to energy efficiency standards. All new development in the city would be required to comply with the standards of Title 24 and the 2016 San Francisco Green Building Code, thereby

[149] San Francisco Department of the Environment, *Zero Waste FAQs*, *https://sfenvironment.org/zero-waste-faqs*, accessed: October 6, 2018.

minimizing the amount of energy used. Future development, including subsequent development projects in the Hub Plan area and the two individual development projects, would similarly need to comply with these standards. Therefore, cumulative impacts on the city's electric power, natural gas, and telecommunications facilities would be considered ***less than significant.***

**Mitigation**: None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **14. PUBLIC SERVICES. Would the project:** | | | | | |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any public services, such as fire protection, police protection, schools, parks, or other public facilities? | ☐ | ☐ | ☒ | ☐ | ☐ |

# SETTING

## SAN FRANCISCO POLICE DEPARTMENT

The San Francisco Police Department (SFPD), headquartered at 850 Bryant Street in the Hall of Justice (approximately 0.6 mile east of the Hub Plan area), provides police protection services for the city. The SFPD is mandated by City Charter to maintain a minimum of 1,971 sworn officers; in addition, the board of supervisors passed Resolution No. 248-15 in 2015, which increased the mandated minimum staffing level to 2,200 sworn officers.[150] However, despite implementation of a 6-year hiring plan, the SFPD is approximately 100 officers short of its goal of 1,971 sworn officers, but it is currently slated to hire five academy classes per year for at least the next 2 years, with 50 recruits in each class.[151]

The Hub Plan area overlaps with three police districts: Northern, Southern, and Tenderloin.[152] The Northern District is bordered by Larkin Street to the east, Steiner Street to the west, Market Street to the south, and the water's edge in the Marina District to the north. The Northern District includes the neighborhoods of Lower Haight; Ashbury; Hayes Valley; Western Addition; the Lower, Middle, and Upper Polk Communities; Japan Town; Lower Russian Hill; Pacific Heights; Cow Hollow; and the Marina.[153] The Southern police district's boundaries are Market Street to the northwest, the Bay to the northeast, Mission Creek to the southeast, and Division Street/13th Street to the southwest. The Southern District includes the neighborhoods of

[150] San Francisco Board of Supervisors, *Resolution No. 248-15, Establishing a Population Based Police Staffing Policy*, June 23, 2015, *http://sfbos.org/ftp/uploadedfiles/bdsupvrs/resolutions15/r0248-15.pdf*, accessed: July 10, 2019.

[151] San Francisco Police Department, personal communication, March 13, 2018.

[152] San Francisco Police Department, *Annual Report*, 2014, *https://sanfranciscopolice.org/annual-reports*, accessed: February 22, 2018.

[153] Ibid.

South Park, Yerba Buena, South Beach, and Rincon Hill. The Tenderloin District is bordered by Market, Larkin, Geary, and Grant streets. The Tenderloin District is the smallest of the police districts and serves the Tenderloin neighborhood.[154]

The Hub Plan area would be served by all three districts. The Northern police district, with its station at 1125 Fillmore Street, covers approximately 5.3 square miles of the city, has a population of 96,336, and has five sectors.[155] The Southern police district, with its station at 850 Bryant Street, covers approximately 2.9 square miles, has a population of 41,832, and has five sectors on the mainland and two sectors on Treasure Island.[156] The Tenderloin police district, with its station at 301 Eddy Street, covers an area of approximately 0.35 square mile, has a population of 23,941, and has six sectors.[157,158] The district is also home to the Central Market Public Safety Hub on Sixth Street, which is the office (substation) from which the Mid-Market Foot Beat operates. The purpose of the Central Market Public Safety Hub is to increase the number of beat officers for public safety services, crime stabilization, and crime prevention.[159]

The SFPD routinely increases police protection for special events. This includes assigning additional SFPD personnel (police officers and onsite command/dispatch center personnel) specifically for these events. The level of SFPD personnel required for a particular event is determined by the SFPD's Event Commander, who coordinates with the event sponsor in advance of the event, as well as the event security/operations plans. The Department of Parking and Traffic typically provides vehicular traffic control services for special events. The Southern District is also responsible for managing law enforcement services for many events each year, including, Oracle World, Dreamforce, the Google convention, and San Francisco Giants home games at AT&T Park. San Francisco Giants home games are no longer staffed by on-duty officers but are instead staffed by off-duty officers while on overtime. Other events in the vicinity, such as the St. Patrick's Day Parade and the Gay Pride Parade, are staffed by other SFPD districts.[160]

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[154] Ibid.

[155] San Francisco Police Department, personal communication, March 13, 2018.

[156] San Francisco Police Department, personal communication, March 13, 2018.

[157] San Francisco Police Department, *Annual Report*, 2014, *https://sanfranciscopolice.org/annual-reports*, accessed: February 22, 2018.

[158] San Francisco Police Department, personal communication, March 13, 2018.

[159] City of San Francisco, *Mayor Lee Celebrates Opening of SFPD Central Market Safety Hub on Sixth Street,* 2013, *http://sfmayor.org/article/mayor-lee-celebrates-opening-sfpd-central-market-safety-hub-sixth-street*, accessed: July 10, 2019.

[160] San Francisco Police Department, personal communication, March 13, 2018.

The SFPD does not have an established goal for response time. However, it strives to maintain an average response time of 4 minutes for Priority A calls, which are considered the highest priority and receive an emergency dispatch and respond to Priority B calls within 7 minutes and 50 seconds.[161] As shown in **Table E.14-1**, there were approximately 53,898 crimes in the city in 2016. The average crime rate citywide was approximately 63 crimes per 1,000 persons in 2016.[162]

**TABLE E.14-1. TOTAL NUMBER OF CRIMES IN SAN FRANCISCO**

| | Years | | | | | | | Change (2015 to 2016) | |
|---|---|---|---|---|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Total | Percent |
| Total Crimes | 38,284 | 38,421 | 44,882 | 55,615 | 52,095 | 60,068 | 53,898 | -6,169 | - 10.2% |

Source: San Francisco Police Department, Year-End Crime Statistics, 2016, *https://sanfranciscopolice.org/sites/default/files/Documents/PoliceDocuments/PressRelease/17-065%202016%20UCR%20Year%20End%20Stats.pdf*, accessed: March 12, 2018.

## SAN FRANCISCO FIRE DEPARTMENT

The San Francisco Fire Department (SFFD), headquartered at 698 Second Street (approximately 1.4 miles northeast of the Hub Plan area), provides fire suppression and emergency medical services in the city, including the Hub Plan area.[163] In addition, several privately operated ambulance companies are authorized to provide advanced life support services. The SFFD consists of three divisions, which are subdivided into 10 battalions and 45 active stations throughout the city. The Hub Plan area is within the service area of Division 3, Battalion 2, Station 36, which is at 109 Oak Street and adjacent to the Hub Plan area (cross street Franklin Street). The Hub Plan area would be served by Station 36, with supplemental fire protection and emergency medical response services provided by Stations 1, 6, and 29.

Station 36 has one fire engine.[164] Station 1, which is at 935 Folsom Street (cross streets Fifth Street and Folsom Street), has one fire engine and one fire truck.[165] Station 6, which is at 135 Sanchez Street (cross streets Henry Street and Sanchez Street), has one fire engine and one fire truck.[166] Station 29, which is at 299 Vermont Street (cross street 16th Street), has one fire engine.[167]

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[161] Ibid.

[162] As stated in Section E.3, Population and Housing, the city had a population of 850,282 in 2016.

[163] San Francisco Fire Department, *Fire Department*, 2018, *http://sf-fire.org/*, accessed: February 22, 2018.

[164] FireDepartment.net, *Fire Equipment at San Francisco Fire Department*, 2018, *https://www.firedepartment.net/directory/california/san-francisco-county/san-francisco/san-francisco-fire-department/fire-equipment*, accessed: March 12, 2018.

[165] Ibid.

[166] Ibid.

[167] Ibid.

The SFFD seeks to adhere to response time standards established by the National Fire Protection Agency (NFPA). The NFPA response time standards for fire suppression incidents are:[168]

- First-Arriving Engine Company Total Response Time: 5 minutes
- First Full-Alarm Assignment Total Response Time: 9 minutes

The NFPA response time standards for emergency medical incidents are:

- First-Responder Unit Total Response Time: 5 minutes
- Advanced Life Support Unit Total Response Time: 9 minutes

## SAN FRANCISCO UNIFIED SCHOOL DISTRICT

The San Francisco Unified School District (SFUSD) operates San Francisco's public schools. During the 2016–2017 academic year, the SFUSD managed 117 schools (75 elementary schools, 16 middle schools, 18 high schools, six alternative schools, and two continuation schools), with a total enrollment of 60,133.[169] The SFUSD currently uses a diversity index lottery system to assign students to schools, which is based on several factors, including parental choice, school capacity, and special program needs.[170] As shown in **Table E.14-2**, enrollment in SFUSD schools has been steadily increasing since 2009–2010. Projections from the 2009 SFUSD Capital Plan (FY 2010–2019) indicate that elementary enrollment will continue to grow because of the large birth cohorts of the early 2000s. High school enrollment will experience a continuous decline over the next 5 years, reflecting the declining birth trend of the 1990s.[171]

**TABLE E.14-2. ENROLLMENT IN SFUSD SCHOOLS**

| | Years | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **2009–2010** | **2010–2011** | **2011–2012** | **2012–2013** | **2013–2014** | **2014–2015** | **2015–2016** | **2016–2017** |
| Total Enrollment | 55,140 | 55,571 | 56,222 | 56,970 | 57,620 | 58,414 | 58,865 | 60,133 |

Source: California Department of Education, Educational Demographics Office, *Fiscal, Demographic, and Performance Data on California's K–12 Schools,* 2018, *https://www.ed-data.org/district/San-Francisco/San-Francisco-Unified,* accessed: February 22, 2018.

[168] National Fire Protection Agency, *List of NFPA Codes and Standards*, n.d., *http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards*, accessed: July 10, 2019.

[169] California Department of Education, Educational Demographics Office, *Fiscal, Demographic, and Performance Data on California's K–12 Schools*, 2018, *https://www.ed-data.org/district/San-Francisco/San-Francisco-Unified*, accessed: February 22, 2018.

[170] San Francisco Unified School District, *History of the Student Assignment in SFUSD*, 2011, *http://www.sfusd.edu/zh/assets/sfusd-staff/enroll/files/SFUSD-Presentation-Handouts-1-2016-09-21.pdf*, accessed: February 22, 2018.

[171] San Francisco Unified School District, *Capital Plan, FY 2010–2019,* September 2009, *http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/capital-plan-final-2010-2019.pdf*, accessed: February 22, 2018.

The existing private schools within the Hub Plan area include:

- The California Institute of Integral Studies, located at 1453 Mission Street.
- The Make School, located at 1547 Mission Street.
- LePort Montessori San Francisco Mid-Market, located at 50 Fell Street.

There are no existing public schools within the Hub Plan area. The existing public and private schools within a 0.25-mile radius of the Hub Plan area include:[172]

- Marshall Elementary School, located at 1575 15th Street.
- Bessie Carmichael Elementary School, located at 375 Seventh Street.
- Presidio Knolls School, located at 250 10th Street.
- Chinese American International School, located at 150 Oak Street (the FAIS is located within the same building).
- Sterne School, located at 245 Valencia Street.
- Millennium School, located at 380 Fulton Street.
- Minerva Schools at KGI, located at 1145 Market Street.
- San Francisco Friends School, located at 250 Valencia Street.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects.

Effects on public services could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness

[172] San Francisco Unified School District, *San Francisco Unified School District 2016–2017*, September 2014, *http://www.sfusd.edu/en/assets/sfusd-staff/enroll/files/2016-17/2016-17_schools_map.pdf*, accessed: July 10, 2019.

Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect public services; therefore, they are analyzed on a project-specific level.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

The evaluation of the effects of increased demand was based on personal communication with service providers and published information regarding the various public service agencies with jurisdiction over the Hub Plan area and their service capabilities.

## IMPACTS AND MITIGATION MEASURES

**Impact PS-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would increase the demand for police service or fire protection service but not to such an extent that construction of new or expanded facilities would be required. (Less than Significant)**

As discussed in the EIR project description, the Hub Plan and the two individual development projects, would incentivize new development that could generate approximately 15,700 residents and 275 new jobs over existing conditions.

### POLICE PROTECTION

New residential development incentivized under the Hub Plan, including the two individual development projects, could result in increased demand for police services as a result of increases in population. Operations under the Hub Plan, including the two individual development projects, could result new development that would result in approximately 15,700 new residents in the city. This analysis assumes that all of the new residents would live in the Southern, Northern, or Tenderloin Districts, which would reduce the existing SFPD service ratios in these districts only slightly. Additional SFPD sworn officers would be needed to maintain the existing service ratios within these districts. They would be housed in existing stations and in nearby areas, depending on the locations of the service calls. In addition, the

SFPD has indicated that demands associated with the Hub Plan area could place a strain on current staffing levels, requiring additional staffing because of the increase in the number of calls for service.[173] Although the SFPD is currently experiencing a deficiency in the mandated minimum number of officers citywide (i.e., about 100 sworn officers less than the mandated number of 1,971), the SFPD is on track to reach the mandated minimum through current recruiting and hiring efforts.[174] In addition, the board of supervisors has passed a resolution to increase the mandated minimum staffing level to 2,200 sworn officers. Thus, it is anticipated that the additional staffing needed as a result of the Hub Plan, including the two individual development projects, would be accommodated with the SFPD's efforts to reach its mandated minimum staffing levels and would not represent an increase that would be substantial enough to warrant the construction of a new facility or expansion of an existing station.

The proposed streetscape and street network component of the Hub Plan would not separately result in any population or employment growth and, thus, would generate no independent demand for police services.

The SFPD recognizes the need to expand some facilities as the population of the city increases. Collectively, these efforts, which are not specifically in response to the Hub Plan or the two individual development projects, are designed to respond to the needs of the city on a program-wide basis and ensure that adequate response times and distributions for police officers are achieved.

The SFPD will continue to evaluate its performance, based on response times and, when appropriate, reallocate resources to meet the need for services in specific parts of the city if and when conditions warrant. Furthermore, although new development incentivized by the Hub Plan, including the two individual development projects, would increase the resident and daytime population in the area, it would not result in unplanned population growth. As discussed in Section E.3, Population and Housing, the population and housing generated by subsequent development projects under the Hub Plan would fall within ABAG projections for the city; therefore, this growth has already been factored into SFPD forecasts, and the SFPD would increase staffing accordingly. As such, the Hub Plan, including the two individual development projects, would not result in substantial adverse environmental impacts associated with the construction or alteration of police service facilities to maintain acceptable service ratios, response times, or other performance objectives. Thus, based on the foregoing, police protection service impacts as a result of the Hub Plan and the two individual development projects, would be ***less than significant***.

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[173] Pedrini, Chris, Captain, San Francisco Police Department, Crime Analysis Unit, email correspondence with Caroline Vurlumis, environmental planner, ICF, March 13, 2018.

[174] Ibid.

## FIRE PROTECTION

New residential development incentivized under the Hub Plan, including the two individual development projects, would result in increased demand for fire protections services as a result of increases in population. However, the increase would be gradual and incremental as development incentivized under the Hub Plan is constructed. Increased congestion as a result of development incentivized under the Hub Plan, including the two individual development projects, could affect fire response times. In addition, as discussed above, the Hub Plan area would be served by four stations in and around the Hub Plan area, Stations 1, 6, 29, and 36. The SFFD conducts ongoing assessments of its service capacity and response times and would continue to do so in response to projected growth within the Hub Plan area and citywide over the lifetime of the Hub Plan. This assessment could identify the need for additional facilities as a result of growth within the Hub Plan area. Any new fire facilities necessary to serve the Hub Plan area would be located and constructed within San Francisco in the vicinity of the Hub Plan area, which is an urbanized and developed area. For the most part, any potentially adverse physical effects from new fire facilities would be similar to those anticipated by development under the Hub Plan (e.g., noise; archaeological impacts; air quality impacts, such as dust and other pollutants, including diesel exhaust; and temporary street closures or other vehicular traffic obstructions). Overall, the potential impacts of new fire facilities, should new facilities be required, would be similar to those associated with development under the Hub Plan. The potential impacts are either addressed in other sections of this initial study or are further analyzed and included in the EIR.

The two individual development projects are consistent with the development density established under the Hub Plan. Therefore, the two individual development projects would also not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered fire protection services.

The proposed streetscape and street network changes would not separately result in any population or employment growth and, thus, would generate no independent demand for fire services.

As such, the Hub Plan, including the two individual development projects, would not result in substantial adverse environmental impacts associated with the construction or alteration of fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives. Thus, based on the foregoing, fire protection service impacts as a result of the Hub Plan and the two individual development projects, would be ***less than significant***.

**Mitigation**: None required.

**Impact PS-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not directly or indirectly generate school students and increase enrollment in public schools such that new or physically altered facilities would be required. (Less than Significant)**

The Hub Plan, including the two individual development projects, would incentivize new residential development, which could generate students who would attend San Francisco public schools. The proposed streetscape and street network changes would not separately result in any population or employment growth and, thus, would generate no independent demand for school services.

To analyze project demand on schools, estimates of the number of students generated by new development incentivized by the Hub Plan were made using student generation rates for market-rate and below-market-rate housing units.[175] **Table E.14-3** identifies the number of school-aged children who would be generated by new development incentivized by the Hub Plan as a whole, including the two individual development projects, and the two individual projects individually.

**TABLE E.14-3. STUDENTS GENERATED BY THE HUB PLAN AND THE TWO INDIVIDUAL DEVELOPMENT PROJECTS**

| Type of Unit | Total Units | Student Generation Rate | Estimated Student Growth Due to Project |
|---|---|---|---|
| **Hub Plan – Onsite Units, including 30 Van Ness Avenue and 98 Franklin Street** | | | |
| Market-Rate Units | 6,075 | 0.10 | 608 |
| Below-Market-Rate[a] Units | 2,025 | 0.25 | 506 |
| | | *Total* | 1,114 |
| **30 Van Ness Avenue – Onsite Units** | | | |
| Market-Rate Units | 457 | 0.10 | 46 |
| Below-Market-Rate Units | 153 | 0.25 | 38 |
| **98 Franklin Street – Onsite Units** | | | |
| Market-Rate Units | 283 | 0.10 | 28 |
| Below-Market-Rate Units | 62 | 0.25 | 15 |

Source: Lapkoff & Gobalet Demographics Research, Inc., *Demographic Analyses and Enrollment Forecasts, San Francisco Unified School District,* February 16, 2018, *http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf*, accessed February 26, 2018.

a. The number of below-market-rate units is based on the percentage of below-market-rate units for the 30 Van Ness Avenue Project (25 percent), which is the highest of the two development projects.

[175] Lapkoff & Gobalet Demographics Research, Inc., *Demographic Analyses and Enrollment Forecasts, San Francisco Unified School District,* February 16, 2018, *http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/demographic-analyses-enrollment-forecast.pdf,* accessed: July 10, 2019.

The resulting increase in the number of students attributable to development under the 30 Van Ness Avenue Project would be 84 students and 43 students under the 98 Franklin Street Project. Overall, the Hub Plan, including for the two development projects, would add approximately 1,114 students to the Hub Plan area. It is conservatively assumed that students would be new to the district and would attend public schools, though it is likely that a portion of the students would already be enrolled within the SFUSD or would attend a private school. Under the diversity index lottery system, a student generated by subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, may attend a SFUSD school that is not his or her nearest school as long as capacity exists. Thus, it is not assumed that all students generated by subsequent development projects incentivized by the Hub Plan would attend the nearest school. The potential 1,114 additional K–12 students that could result from subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, represent an increase of approximately 1.9 percent in district enrollment compared with the 2016–2017 academic year.

The SFUSD would have adequate capacity within its existing facilities to accommodate new students generated by subsequent development projects incentivized by the Hub Plan as well as the two individual development projects. Between 2000 and 2010, overall enrollment in the SFUSD experienced a large decline. [176] Today, several schools within the SFUSD are still underutilized, with more classrooms district-wide than needed.[177] In addition, an increase in student population would occur gradually, and a portion of the new students would be expected to attend private schools. Furthermore, the Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50, authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities. These fees are intended to address increased educational demands on the school district resulting from new development. Public school districts can, however, impose higher fees than those established by the State Allocation Board, provided they meet the conditions outlined in the act. Private schools are not eligible for fees collected, pursuant to Senate Bill 50.

Local jurisdictions are precluded under state law (Senate Bill 50) from imposing enrollment-related mitigation beyond the school impact fees. The collection of the fees, therefore, fully mitigates any potential effects on schools associated with additional development that could result from implementation of the Hub Plan, including the two individual development projects. Although subsequent development projects incentivized by the Hub Plan as well as

[176] San Francisco Unified School District, *Capital Plan FY 2010–2019,* September 2009, pp. 19–20, http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/capital-plan-final-2010-2019.pdf, accessed: November 18, 2018.

[177] San Francisco Unified School District, *Capital Plan FY 2010–2019*, September 2009, pp. 19–20, http://www.sfusd.edu/en/assets/sfusd-staff/about-SFUSD/files/capital-plan-final-2010-2019.pdf, accessed: November 18, 2018.

the two individual development projects, could increase the resident population and the potential student enrollment in the SFUSD, the payment of fees mandated under Senate Bill 50 and prescribed by the statute, and the fact that there is existing capacity in the SFUSD system, would minimize potential impacts resulting from additional students. In addition, for the reasons described above, the SFUSD would have adequate capacity within its existing facilities to accommodate new students generated by subsequent development projects incentivized by the Hub Plan as well as the two individual development projects. Although it is highly unlikely that new schools would be required as a result of implementation of the Hub Plan or the two individual development projects, should a future school be required to accommodate population increases, it is likely that new school development would be sited on an in-fill site in an area of the city that is well served by transit. In addition, any potentially significant effects from the construction of such facilities would be similar to those anticipated with development under the Hub Plan, such as noise, archaeological, air quality impacts (e.g., emissions of dust and other pollutants, including diesel exhaust); temporary street closures; or other traffic obstructions. Therefore, construction of a new school facility would not result in new significant impacts that were not already analyzed and disclosed in the initial study or EIR. Moreover, the EIR identifies a number of significant impacts, including those that cannot be mitigated to a less-than-significant level, from growth in the Hub Plan area. Construction of new school facilities, should it be warranted, could contribute incrementally to such Hub Plan-level impacts. Should such facilities be constructed, they would be subject to applicable mitigation measures identified in the EIR, just as any other physical development in the Hub Plan area would be. Therefore, construction of new school facilities would not result in new significant impacts that were not already analyzed and disclosed in this initial study and EIR. The impact would be ***less than significant***.

**Mitigation**: None required.

**Impact C-PS-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, combined with past, present, and reasonably foreseeable future projects in the vicinity, would not result in a cumulatively considerable contribution to cumulative impacts on police, fire, and school district services such that new or physically altered facilities, the construction of which could cause significant environmental impacts, would be required in order to maintain acceptable levels of service. (Less than Significant)**

The cumulative geographic context for public services consists of growth projections for the Hub Plan area in addition to citywide growth projections under Plan Bay Area.

Population and employment growth associated with implementation of other development projects in the city would increase the number of service calls and could create a need for additional facilities to maintain existing SFPD service levels. On June 23, 2015, the board of supervisors passed Resolution No. 248-15, which increased the mandated minimum staffing

level to 2,200 sworn officers.[178] This increase would bring the voter-approved minimum into line with San Francisco's current population.[179] Furthermore, police boundaries are required to be analyzed every 10 years, with consideration given to workload, district boundaries, response times, and facilities, per board of supervisors legislation (Ordinance 243-06).[180] The latest analysis of police boundaries was conducted in 2015. The 2015 District Station Boundary Analysis Report addressed issues related to the impact of a significant number of residential, commercial, and transportation developments in the eastern and southern areas in the city.[181] The increase in the minimum level of sworn offices and the analysis of police boundaries were designed to respond to the needs of the city on a program-wide basis and ensure that adequate response times and distributions of police officers would be achieved. Cumulative development in the project area may incrementally increase demand for police services but not beyond levels anticipated and planned for by SFPD. For these reasons, development under the Hub Plan, including the two individual development projects, in combination with past, present, and reasonably foreseeable future projects, would not result in the need for new or physically altered police facilities. The impact would be less than significant.

Subsequent development projects incentivized by the Hub Plan, including the two individual development projects, would add to the demand for fire response and emergency medical services within Battalion 2. However, the cumulative impact of the Hub Plan and two individual development projects, combined with other development projects in the city, would not be considerable. The SFFD has not identified a citywide service gap. Furthermore, the increase in demand for fire and emergency medical services as a result of subsequent development projects incentivized by the Hub Plan and the two individual development projects, and other development projects would not be beyond the level anticipated and planned for by the SFFD. If necessary, Stations 1, 6, and 29, along with other nearby stations, could respond to calls in the event that Station 36 personnel and equipment are unavailable or require additional support. For these reasons, the contribution of the Hub Plan and the two individual development projects to cumulative demand on fire and emergency medical services citywide would not be cumulatively considerable. The proposed project, in combination with

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[178] San Francisco Board of Supervisors, *Resolution No. 248-15, Establishing a Population-Based Police Staffing Policy*, June 23, 2015, *http://sfbos.org/ftp/uploadedfiles/bdsupvrs/resolutions15/r0248-15.pdf*, accessed: March 5, 2018.

[179] Ibid.

[180] San Francisco Board of Supervisors, *Ordinance No. 243-06, Boundaries of Police Department District Station*, August 7, 2006, *http://sfbos.org/ftp/uploadedfiles/bdsupvrs/ordinances06/o0243-06.pdf*, accessed: July 10, 2019.

[181] Public Safety Strategy Group, LLC., *District Station Boundary Analysis Report*, March 3, 2015, *http://www.publicsafetystrategies.com/wp-content/uploads/2015/03/SFPD-District-Station-Boundary-Analysis-Report-March-2015.pdf*, accessed: July 10, 2019.

other development, would have a less-than-significant cumulative impact on fire and emergency services.

The SFUSD has experienced steady increases in enrollment since 2009–2010. Pursuant to Senate Bill 50, individual project applicants would be required to pay school impact fees, which were established to offset potential impacts from new development on school facilities. Under the SFUSD's diversity index lottery system, new students from the Hub Plan area may attend schools elsewhere in the city. Considering the current underutilized nature of existing educational facilities citywide, including the Hub Plan area, as well as the fact that other development projects would also be required to pay school impacts fees, development incentivized by the Hub Plan, including the two individual development projects, in combination with past, present, and reasonably foreseeable future projects, would not result in the need for new or physically altered school facilities. The impact would be less than significant.

The proposed streetscape and street network changes would not separately result in any population or employment growth and, thus, would generate no independent demand for police, fire, or school services. The proposed streetscape and street network changes would therefore not contribute to a cumulative impact.

**Mitigation**: None required.

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

The Hub Plan area is completely developed; only ornamental landscape vegetation is present. Ornamental vegetation is not a sensitive natural community, as indicated by the California Department of Fish and Wildlife (CDFW) Natural Communities List.[182] In addition, because the Hub Plan area is completely developed, federally protected wetlands and other waters of the United States are not present. The Hub Plan area is also not within the boundaries of a habitat conservation plan, natural community conservation plan, or other adopted conservation plan. Therefore, topics 15(b), 15(c), and 15(f) are not applicable to any of project's components, including the Hub Plan, the proposed streetscape and street network changes, the two individual development projects, or the Hub HSD.

[182] California Department of Fish and Wildlife, *Natural Communities List*, 2018b, *https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline*, accessed: July 10, 2019.

## SETTING

The Hub Plan area, including the two individual development project sites at 30 Van Ness Avenue and 98 Franklin Street and the Hub HSD, is fully developed and characterized by dense urban development, overhead freeways, and surface streets, interspersed by small landscaped areas and street trees. Landscape vegetation includes several non-native ornamental tree and shrub species such as London plane (*Plantanus hybrida*), ginko (*Ginko biloba*), strawberry tree (*Arbutus uendo*), olive (*Olea europaea*), red gum eucalyptus (*Eucalyptus camaldulensis*), Canary Island date palm (*Phoenix canariensis*), Indian laurel fig (*Ficus microcarpa*), purple-leaf plum (*Prunus cerasifera*), and ornamental cherry (*Prunus serrulata*) trees. Natural land cover and communities are absent from the Hub Plan area. The Hub Plan area elevation ranges from approximately 25 to 100 feet above mean sea level.[183]

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on biological resources could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect biological resources; therefore, they are analyzed on a project-specific level.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR

[183] U.S. Geological Survey, *San Francisco North 7.5-minute Quadrangle Map*, 1956.

and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

The study area for biological resources is the Hub Plan area plus a 250-foot buffer. The area for direct impacts is the environmental footprint of the Hub Plan area, including the two individual development project sites at 30 Van Ness Avenue and 98 Franklin Street. The area for indirect impacts includes the environmental footprint of the Hub Plan area plus the 250-foot buffer.

The following analysis is based on information from the following data sources:

- Background research from the California Natural Diversity Database (CNDDB)[184] species list query regarding the San Francisco North U.S. Geological Survey (USGS) 7.5-minute quadrangle
- Background research from the California Native Plant Society (CNPS)[185] species list query regarding the San Francisco North USGS 7.5-minute quadrangle
- Background research from the U.S. Fish and Wildlife Service (USFWS)[186] species list query regarding the Hub Plan area and surrounding 250 feet
- Hub Plan area photographs
- San Francisco Tree Inventory (Street Tree Map)[187]
- Identification of waters and wetlands using aerial photography and existing water/wetland inventory data (such as the National Wetland Inventory)[188]
- Aerial imagery on Google Earth[189]

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[184] California Department of Fish and Wildlife, *CNDDB RareFind Records Search of San Francisco North U.S. Geological Survey 7.5-minute Quadrangles,* RareFind Version 5, 2018, *https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data*, accessed: February 20, 2018.

[185] California Native Plant Society, *Online Inventory of Rare and Endangered Plants of California*, 2018, *http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/Html?item=checkbox_9.htm*, accessed: February 20, 2018.

[186] U.S. Fish and Wildlife Service, *List of Endangered and Threatened Species that May Occur in the Proposed Project Location and/or May Be Affected by the Proposed Project,* 2018, *https://ecos.fws.gov/ipac/*, accessed: February 20, 2018.

[187] Street Tree Map, *San Francisco Tree Inventory*, 2019, *https://data.sfgov.org/City-Infrastructure/Street-Tree-Map/337t-q2b4,* accessed: July 17, 2019.

[188] U.S. Fish and Wildlife Service, *National Wetland Inventory*, 2018, updated: February 1, 2018, *https://www.fws.gov/wetlands/*, accessed: July 10, 2019.

[189] Google Earth, *Market Street/South Van Ness Avenue, 37°46'30.26"N and 122°25'9.65"W,* 2018, accessed: July 11, 2019.

## IMPACTS AND MITIGATION MEASURES

**Impact BI-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (Less than Significant with Mitigation)**

Queries of the USFWS,[190] CDFW CNDDB,[191] and CNPS[192] regarding species with potential to occur in the region were considered in this analysis. Structures in the Hub Plan area and surrounding region could support one special-status bird species, American peregrine falcon (*Falco peregrine anatum*), a fully protected species. Other special-status bird species may forage in the Hub Plan area, but nesting activities are most likely absent because of the lack of vegetation and dominant urban character of the Hub Plan area and adjacent surroundings. Structures with cavities and openings (e.g., building vents, eaves, roof or wall openings, open windows) provide suitable habitat for special-status bat roosts, namely Townsend's big-eared bat (*Corynorhinus townsendii*), hoary bat (*Lasiurus cinereus*), and western red bat (*Lasiurus blossevillii*), all of which are California species of special concern and ranked by the Western Bat Working Group as species with "moderate" or "high" designation statuses under CEQA.[193] Other non-special-status bat species could also roost in structure cavities. Structures in the Hub Plan area and surroundings could support nesting migratory birds (e.g., cliff swallow [*Petrochelidon pyrrhonota*]) and black phoebe [*Sayornis nigricans*]), and landscape vegetation offers suitable nesting substrate for other nesting migratory birds (e.g., Lawrence's goldfinch [*Spinus lawrencei*]). Individual projects covered under the Hub Plan, including improvements to the streetscape and street network, would be required to comply with the California Fish and Game Code section 3500 et al., including sections 3503, 3503.5, 3511, and 3513, which provide that it is unlawful to take or possess any migratory nongame bird or needlessly destroy nests of birds, except as otherwise outlined in the code.

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[190] California Native Plant Society, *Online Inventory of Rare and Endangered Plants of California*, 2018, *http://cnps.site.aplus.net/cgi-bin/inv/inventory.cgi/Html?item=checkbox_9.htm*, accessed: February 20, 2018.

[191] California Department of Fish and Wildlife, *Natural Communities List*, 2018b, *https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline*, accessed: February 26, 2018.

[192] California Department of Fish and Wildlife, *CNDDB RareFind Records Search of San Francisco North U.S. Geological Survey (USGS) 7.5-minute Quadrangles,* RareFind Version 5, 2018, *https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data*, accessed: February 20, 2018.

[193] Western Bat Working Group, *Species Matrix Based on the Western Bat Working Group Workshop Held in Reno, Nevada,* February 9–13, 1998, 2018, *http://wbwg.org/matrices/species-matrix/*, accessed: July 10, 2019.

Demolition of structures and the removal of trees and shrubs, accompanied by noise and vibration from activities associated with subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, could affect protected species, if present. Although the majority of existing trees would not be immediately affected by either development projects or street improvements, it is virtually certain that some trees would be removed during the lifetime of the Hub Plan, including for streetscape and street network improvements. In addition, trees would be removed during construction of the two individual development projects. Removal of trees with active nests, as well as construction activities adjacent to such trees nesting during the bird season (March 1 through August 31), could result in nest destruction or injury or mortality for nestlings. Requirements for bird-safe building standards are discussed below under Impact BI-2.

Impacts on nesting special-status birds, American peregrine falcon nests or individuals, and special-status bat roosts could be significant. Mitigation Measures M-BI-1 and M-BI-2 would be implemented to avoid impacts on nesting special-status birds, American peregrine falcon nests or individuals, and the roosts of special-status bat species and would reduce impacts on nesting special-status birds, American peregrine falcon nests or individuals, and the roosts of special-status bat species to ***less than significant with mitigation***.

## MITIGATION MEASURES

Mitigation Measures M-BI-1 and M-BI-2 apply to subsequent development projects under the Hub Plan that would result in greater development density within the Hub Plan area compared with what is allowed under existing zoning, both due to the proposed revisions to height and bulk districts at 18 sites and proposed revisions to the zoning districts throughout the southern portion of the Hub Plan area. These mitigation measures would also apply to any of the project's components, including the streetscape and street network improvements, the two individual development projects, and any projects approved under the Hub HSD.

***M-BI-1:*** ***California Fish and Game Code Compliance to Avoid Active Nests during Construction Activities***. For any project activities that result in removal or disturbance of existing trees through adjacent construction activities, tree project applicant(s) shall avoid impacts on nesting birds though compliance with the relevant California Fish and Game Code by implementing one or more of the following:

- Undertaking tree removal during the non-breeding season (i.e., September through January 15) to avoid impacts on nesting birds or conducting preconstruction surveys for work scheduled during the breeding season (March through August).
- Conducting, by a qualified biologist, preconstruction surveys no more than 15 days prior to the start of work during the nesting season to determine if any

birds are nesting in the vegetation to be removed or in the vicinity of the construction to be undertaken.

- Avoiding any nests identified by a qualified biologist and establishing a construction-free buffer zone designated by a qualified biologist, which will be maintained until nestlings have fledged.

***M-BI-2:*** ***Avoid Impacts on Special-status Bat Roosts during Construction Activities.*** Project applicant(s) shall avoid impacts on maternity colonies or hibernating bats if identified by avoiding structural demolition between April 1 and September 15 (maternity season) and between October 30 and March 1 (hibernation) to the extent feasible. Bat roost avoidance shall be accomplished by the following steps:

- The project applicant(s) shall retain a qualified biologist to conduct a bat habitat assessment of the structures proposed for demolition. The assessment may be conducted at any time of year but should be conducted during peak bat activity periods (March 1–April 15, September 1–October 15) if possible. Qualified biologists shall have knowledge of the natural history of the species that could occur and sufficient experience related to determining bat occupancy in buildings and bat survey techniques. The biologist shall examine both the inside and outside of accessible structures for potential roosting habitat as well as routes of entry to the structures. If the biologist concludes that the building does not provide suitable bat roosting habitat, no further actions are necessary and work may commence. If the results of the survey are inconclusive or the biologist identifies potential roost sites, the following steps shall be implemented:
    - The project applicant(s) shall implement measures under the guidance of a qualified bat biologist to exclude bats from using the building as a roost site, such as sealing off entry points with one-way doors or enclosures. Installation of exclusion devices shall occur before maternity colonies establish or after they disperse, generally between March 1 and 30 or between September 15 and October 30, to preclude bats from occupying a roost site during demolition. Exclusionary devices shall be installed only by or under the supervision of an experienced bat biologist.
    - The qualified biologist shall conduct a follow-up survey to confirm that the exclusion measures have excluded bats. If follow-up surveys determine that bats are still present, the biologist shall modify the exclusion measures to effectively exclude bats from the structure. Following successful exclusion of the bats and confirmation of their absence by the biologist, demolition or structural modification shall commence.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

The implementation of Mitigation Measures M-BI-1 and M-BI-2 would comply with CEQA requirements by avoiding impacts on nesting special-status birds, American peregrine falcon nests or individuals, and the roosts of special-status bat species. Implementation of this mitigation measure would reduce impacts on nesting special-status birds, American peregrine falcon nests or individuals, and the roosts of special-status bat species to a less-than-significant level.

**Impact BI-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. (Less than Significant)**

The Hub Plan area, including the sites for project-specific development at 30 Van Ness Avenue and 98 Franklin Street, is completely developed and surrounded by dense urban development. Furthermore, the Hub Plan area is not within any known regional wildlife movement corridors or any other sensitive biological areas, as indicated by the USFWS Critical Habitat Portal or the CDFW Biogeographic Information and Observations System. The Hub Plan area is not known to contain native wildlife nursery sites or Urban Bird Refuges,[194] and it lacks features (e.g., parks located within 300 feet of water bodies) with potential to be considered Urban Bird Refuges. Refer to Impact BI-1 for a discussion of the Hub Plan's potentially significant impacts on nesting American peregrine falcons, migratory birds, and roosting bats.

San Francisco Bay, the Pacific Ocean, and adjacent salt marshes provide habitat for several bird species. The Hub Plan, including the two individual development projects, are within the Pacific Flyway, a north/south-oriented path stretching from Alaska to Patagonia, that many species of birds migrate along as they travel between breeding and overwintering locations. Bird strikes on glass windows, which are often not readily obvious to birds because of visually disorienting lights, contribute significantly to avian mortality in urban areas, estimated to be as high as 1 to 5 percent of all bird deaths annually.[195] The likelihood for bird strikes generally increases as building sizes and glass surfaces increase. Bird stikes are exacerbated by artificial nocturnal lighting emanating from large buildings, particularly for noctural migrants and

[194] San Francisco Planning Department, *Urban Bird Refuge Data Viewer*, 2011, *https://data.sfgov.org/Energy-and-Environment/Urban-Bird-Refuge/v8rh-bhzp/data*, accessed: July 10, 2019.

[195] San Francisco Planning Department, *Standards for Bird-Safe Buildings*, 2011, *http://sf-planning.org/standards-bird-safe-buildings*, accessed: July 10, 2019.

migrating songbirds.[196] This is of particular concern with the Hub Plan area's location within the Pacific Flyway and near biologically diverse features such as San Francisco Bay, the Pacific Ocean, adjacent salt marshes, and other wetlands that naturally attract migrating birds.

Larger buildings with larger windows constructed within the Hub Plan area, as well as increased levels of light pollution associated with new structures and street nework improvements, are expected to result in bird mortalities, including special-status species, above the level currently caused by existing structures. However, structure designs and lighting modifications within the Hub Plan area would be required to comply with the department's *Standards for Bird-Safe Buildings*, adopted July 14, 2011, which would reduce the potential for bird strikes. The standards include guidelines for the type and use of glass, façade treatments, wind generators and grates, and lighting treatments. Individual projects incentivized by the Hub Plan as well as the two indiviudal development projects would be subject to the standards and therefore would result in ***less-than-significant*** hazard impacts on bird species.

The standards identify location-specific hazards and building-feature hazards, which are the same hazards identified in Planning Code section 139.107; required treatments are generally as specified in section 139. Location-specific hazards apply to buildings in, or within 300 feet of, an Urban Bird Refuge or with a direct line of sight to a such a refuge, including open spaces 2 acres and larger dominated by vegetation, including vegetated landscaping, forest, meadows, grassland, or wetlands, or open water. Section 139 requires 90 percent of glazing in the "Bird Collision Zone" (60 feet above grade, plus 60 feet above an adjacent vegetated roof 2 acres or larger) to be treated (fritted, stenciled, frosted, or covered with netting, screens, grids, or bird-visible ultraviolet patterns). Lighting must also be minimized, and any wind generators must comply with department requirements, including any monitoring of wildlife impacts that the department may require.

In addition to buildings in and near an Urban Bird Refuge, section 139 applies similar standards to certain building features citywide, including free-standing glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments 24 square feet in size or larger.

For location-specific hazards involving new buildings or additions to existing buildings, the following requirements apply:

[196] Ogden, L.E., *Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds, Special Report for the World Wildlife Fund and the Fatal Light Awareness Program*, September 1996, *www.flap.org,* accessed: July 10, 2019.

- **Façade Treatments:** Bird-safe glazing treatment is required such that the Bird Collision Zone consists of no more than 10 percent untreated glazing. Building owners are encouraged to concentrate permitted transparent glazing on the ground-floor and lobby entrances to enhance visual interest for people walking.
- **Wind Generators:** Sites must not feature horizontal access windmills or vertical access wind generators that do not appear solid.
- **Lighting Design:** A minimal amount of lighting shall be used. Lighting shall be shielded. Up-lighting shall not be used, and event searchlights should not be permitted on the property.

For building-feature hazards involving new buildings and new additions to existing buildings, the entirety of the hazard must be made bird safe through treatments such as fritting, netting, permanent stencils, frosted glass, exterior screens, physical grids placed on the exterior of the glazing, or ultraviolet patterns that are visible to birds. Vertical elements of the window patterns should be at least ¼ inch wide, with a minimum spacing of 4 inches, or have horizontal elements at least ⅛ inch wide, with a maximum spacing of 2 inches, according to the standards.

The standards prescribe the use of a checklist to educate project sponsors and their future tenants on potential hazards and applicable treatments. They also prescribe treatments for designated historic buildings meet the Secretary of the Interior's Standards for Rehabilitation; however, they exempt residential buildings less than 45 feet in height with limited glass facades. The standards also recommend educational guidelines and voluntary programs.

Avian collisions are a potentially significant impact because they may affect special-status bird species. Furthermore, as more research is undertaken with respect to bird collisions, the findings raise the possibility that these collisions could be implicated in, and contributors to, declines in some bird populations, possibly below self-sustaining levels, or the substantial elimination of some bird communities in certain locales.

The existing environment is one of high ambient disturbance due to human activity and noise generated by city and roadway multi-modal traffic. Therefore, nesting by raptors, such as peregrine falcon, is not expected to be common within the Hub Plan area, but raptors may use the area for foraging purposes. However, changes in building heights and density, as well as construction of new buildings in the current prevailing architectural style, which is often characterized by large glazed expanses, could have a potentially adverse effect on raptors, as well as resident and migratory passerines, by increasing the risk for avian collisions with buildings.

Compliance with Planning Code section 139 and the adopted Standards for Bird-Safe Buildings would ensure that potential impacts related to bird hazards would be ***less than significant***.

**Mitigation**: None required.

## IMPROVEMENT MEASURES

Because no significant impacts were identified, no mitigation is required. However, the following improvement measure is identified to reduce potential effects on birds from lighting during hours of darkness within the Hub Plan area. Implementation of this measure would further reduce the impacts on resident and migratory birds, and would apply to the Hub Plan, two individual development projects, and the Hub HSD.

**I-BI-2:** ***Lighting Minimization during Hours of Darkness***. In compliance with the voluntary San Francisco Lights Out Program, the department could encourage buildings developed pursuant to the Hub Plan and the Hub HSD to implement bird-safe building operations to prevent or minimize bird-strike impacts, including, but not limited to, the following measures:

- Reduce building lighting from exterior sources by:
  - Minimizing the amount and visual impact of perimeter lighting and façade uplighting and avoiding up-lighting on rooftop antennae and other tall equipment as well as of any decorative features
  - Installing motion-sensor lighting
  - Using low-wattage fixtures to achieve required lighting levels
- Reduce building lighting from interior sources by:
  - Dimming lights in lobbies, perimeter circulation areas, and atria
  - Turning off all unnecessary lighting by 11 p.m. through sunrise, especially during peak migration periods (mid-March to early June and late August to late October)
  - Using automatic controls (motion sensors, photo-sensors, etc.) to shut off lights in the evening when no one is present
- Encouraging the use of localized task lighting to reduce the need for more extensive overhead lighting
  - Scheduling nightly maintenance to conclude by 11 p.m.
  - Educating building users about the dangers of lighting to birds during hours of darkness

Implementation of Improvement Measure I-BI-2 would further reduce the less-than-significant impacts related to bird strikes. The effect would be ***less than significant***.

**Impact BI-3: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant)**

The department, building department, and public works require compliance with San Francisco Public Works Code sections 8.02–8.11, regulating the removal of protected trees within San Francisco. Sections 8.02–8.11 of the code require disclosure and the protection of significant, landmark, and street trees (collectively referred to hereafter as "protected trees") on public and private property. Landmark trees are absent from the Hub Plan area.[197] Significant trees are defined as trees that are more than 20 feet tall with a 15-foot-wide canopy or a 12-inch trunk diameter at 4.5 feet above grade on private land within 10 feet of the public right-of-way or under the jurisdiction of the public works. A street tree is any tree within the public right-of-way.

Removal of a significant tree or street tree requires a public works tree removal permit, and the department requires a Tree Planting and Protection Checklist to be included in all permit applications for projects that could affect a protected tree. If tree relocation is impracticable, tree replacement is required, consistent with planning code. Tree removals resulting from subsquent development projects incentivized by the Hub Plan and street improvements within the Hub Plan area as well as the two individual development projects would require relocation or replacement, which would avoid a net loss of trees and maintain the urban forest resources in the Hub Plan area. By applying for tree removal permits and replacing trees in accordance with established regulations and plans, the Hub Plan's proposed streetscape and street network changes would not conflict with the City's local tree ordinance.

The development project at 30 Van Ness Avenue may remove and replace up to nine street trees; the project at 98 Franklin Street may remove three street trees but would retain two trees currently on the adjacent sidewalk and streetscape along Market Street. Both individual development projects would comply with City tree replacement requirements by planting, at a minimum, up to eight new street trees at 30 Van Ness Avenue (17 total) and 10 new street trees at 98 Franklin Street (15 total). Individual projects may plant additional trees, but the minimum number of replacement trees would be as provided above.

Because the project's components, including subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, would comply with public works permit requirements and the planning code, the impact would be ***less than significant***.

**Mitigation**: None required.

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[197] San Francisco Department of the Environment, *Landmark Trees*, 2018, *https://sfenvironment.org/landmark-trees*, accessed: July 5, 2019.

**Impact C-BI-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, or reasonably foreseeable projects, would not result in a considerable contribution to cumulative impacts on biological resources. (Less than Significant with Mitigation)**

To consider the full context of surrounding projects and actions as well as the contribution of the Hub Plan, including the individual development projects, the biological cumulative impact study area includes the greater downtown San Francisco area. The subsequent development projects incentivized by the Hub Plan would not adversely affect biological resources; however, vegetation removal and structure demolition or modification could result in potential impacts on nesting migratory and special-status birds and roosting bats. With implementation of the relevant mitigation measures described above (M-BI-1 and M-BI-2) and compliance with the City of San Francisco Standards for Bird-Safe Buildings (I-BI-1), subsequent development projects incentivized by the Hub Plan would have less-than-significant impacts on sensitive species. Tree removals would require permits through public works, and subsequent tree replacement would occur per the planning code and the Better Streets Plan. Development projects in downtown San Francisco would be required to comply with the same laws and regulations. Therefore, with implementation of mitigation measures, no significant cumulative effects on biological resources would result from development within the Hub Plan area combined with the effects of development projects in the greater downtown San Francisco area. The impact would be reduced to a ***less-than-significant*** level.

Mitigation Measures M-BI-1, California Fish and Game Code Compliance to Avoid Active Nests during Construction Activities, and M-BI-2, Avoid Impacts on Special-status Bat Roosts during Construction Activities.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **16. GEOLOGY AND SOILS. Would the project:** | | | | | |
| a) Directly or indirectly cause 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 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? | ☐ | ☐ | ☒ | ☐ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ | ☐ |
| c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☒ | ☐ | ☐ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☒ | ☐ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ | ☐ |

Under the California Supreme Court decision *California Building Industry Association v. Bay Area Air Quality Management District* (2015), impacts of the environment on the project do not constitute an impact unless the project exacerbates the environmental hazards or conditions that already exist. In the case that a project would exacerbate environmental hazards or conditions, the project's impact on the environment would drive impact analysis, not the impact of the environment on the project. This is further discussed under Approach to Analysis.

Development under the Hub Plan, development incentivized under the Hub HUD, and project-specific development at 30 Van Ness Avenue and 98 Franklin Street would connect to the combined sewer system which is the wastewater conveyance system for San Francisco and would not use septic tanks or other on-site land disposal systems for sanitary sewage. In addition, the proposed streetscape and street network changes would not produce any additional wastewater. Therefore, initial study topic 16(e) is not applicable to any of the project's components, including the Hub Plan, the proposed streetscape and street network changes, project-specific development at 30 Van Ness Avenue and 98 Franklin Street, or the Hub HSD.

## SETTING

The Hub Plan area has relatively flat topography, sloping gently to the southeast, with elevations from 70 to 10 feet San Francisco City Datum.[198,199] Because of its topography, the Hub Plan area is not subject to landslide.[200,201]

Surficial deposits throughout the Hub Plan area are artificial fill (Qaf) and dune sand (Qd), with undifferentiated surficial deposits (Qu), Franciscan mélange (fsr), and serpentinite (sp) in the vicinity of the Hub Plan area (**Figure E.16-1**).[202] The area is underlain by Quaternary-age sediments deposited in the last 1.8 million years, including (from youngest to oldest) fill, dune sand, marsh deposits, Colma formation, and Old Bay Clay.[203,204,205,206] Bedrock beneath San Francisco consists of sedimentary and volcanic rocks of the Jurassic- and Cretaceous-age (approximately 65 to 213 million years old) Franciscan formation. Based on reports prepared for planned projects, as described in this section, in the general project area, geologic units underlying the Hub Plan area are described as follows:

- **Fill (Historic)**—The fill underlying the Hub Plan area consists of 1.5 to 15 feet of loose to medium dense sand and silty sand and may locally contain construction debris such as brick and concrete fragments from the 1906 earthquake and fire.
- **Dune sand (Holocene to Pleistocene)**—The deposit underlying the fill is a fine-grained, wind-deposited, medium dense to dense sand referred to as dune sand, reaching to depths of 6.5 to 35 feet across the Hub Plan area.

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198 San Francisco City Datum is equal to 8.616 feet National Geodetic Vertical Datum or mean sea level.

199 Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California,* 2018. (Project No. SF18002.) San Francisco, CA.

200 California Geological Survey, *Earthquake Zones of Required Investigation: San Francisco North Quadrangle,* 2000, *http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf*, accessed: February 28, 2018.

201 Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California,* 2018. (Project No. SF18002.) San Francisco, CA.

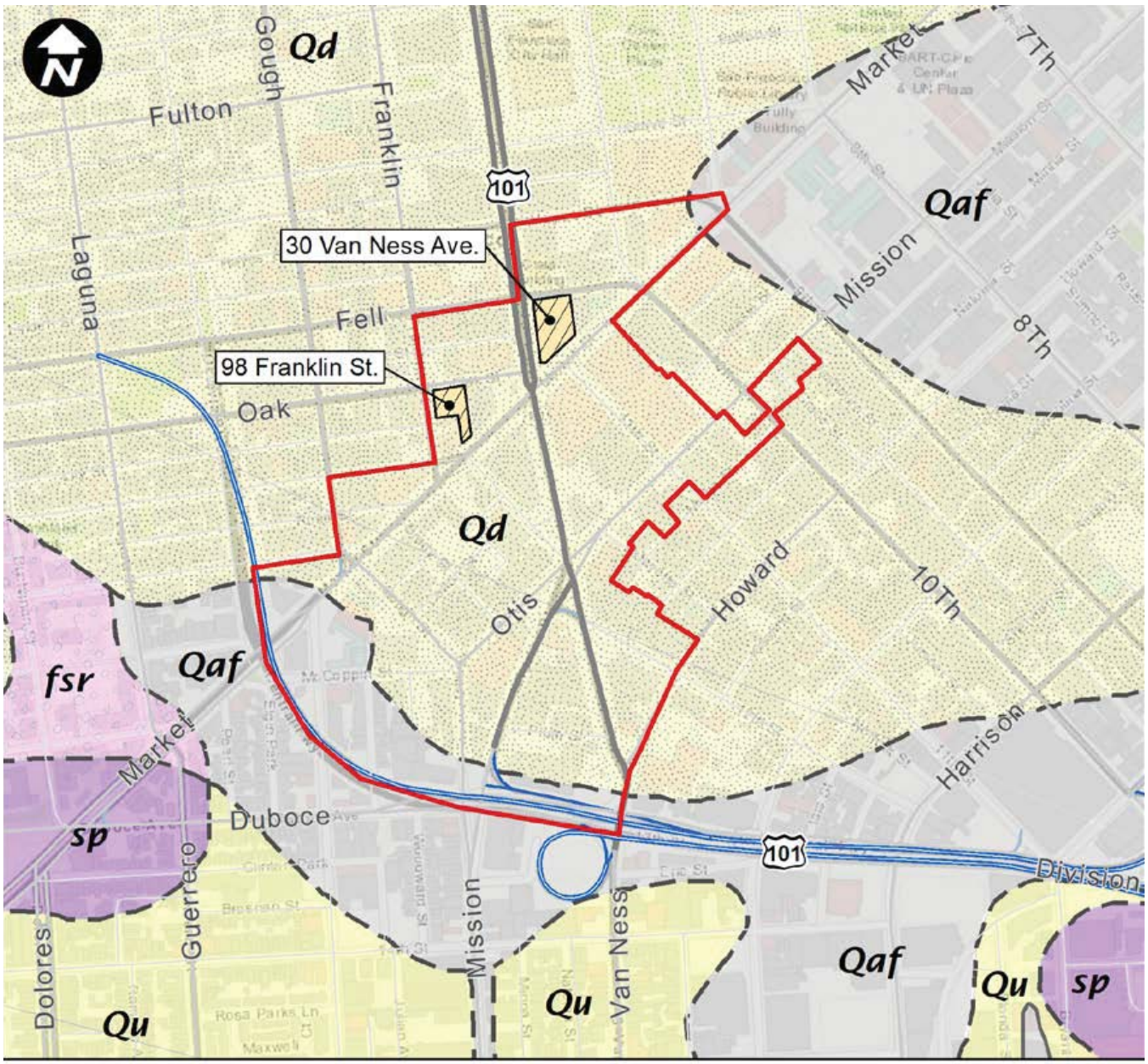
202 In Figure E.16-1, *geologic contact* refers to a known interface between geologic units. *Geologic contact, approx. located*, refers to an interface between geologic units that has been approximately mapped.

203 Ibid.

204 Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

205 Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, July 3, 2012, San Francisco, CA.

206 Schlocker, Julius, *Geology of the San Francisco North Quadrangle, California*, 1974, *https://pubs.er.usgs.gov/publication/pp782*, accessed: February 21, 2018.




Source: Geotechnical Consultants, Inc. 2018.

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The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.16-1**
**Geology in the Hub Plan Area**

- **Marsh deposits (Holocene)**—The deposit underlying the dune sand is a compressible marsh deposit, consisting of soft to hard silty clay with sand, 5 to 12 feet thick.
- **Colma Formation (Pleistocene)**—Underlying the marsh deposit is the Colma formation, consisting of dense to very dense sand with variable silt and stiff to hard clay content and clay with variable sand content. It extends to approximately 200 feet below ground surface (bgs). Old Bay Clay (Pleistocene) or bedrock (Franciscan formation of Jurassic or Cretaceous age) underlies the Colma formation.

Depth to groundwater ranges from 10 to 23 feet bgs and can be expected to vary seasonally.[207] The depths correspond to saturated conditions in the soft to loose native deposits of marsh deposits and dune sand.

Artificial fill, dune sand, and Colma formation are not expansive soils. These are sandy soils; expansive soils have a clay component. The amount and type of clay material in a soil affect the volume of expansive soils.[208] Marsh deposits have potential to be expansive; however, because they are generally below the groundwater table and thus permanently saturated, they do not undergo a shrink-swell cycle.

Major active earthquake faults in the area are the North San Andreas, San Gregorio, Hayward, and Calaveras faults, all of which are associated with a moment magnitude of 7 or greater (**Figure E.16-2**).[209,210,211,212] Of these, the North San Andreas, Hayward, and Calaveras faults all have a likelihood of 25 percent or greater of experiencing a magnitude 6.7 or greater earthquake between 2014 and 2043.[213] Overall, there is a 72 percent likelihood of an earthquake of magnitude 6.7 or greater occurring in the San Francisco Bay Area over the same period. Seismic ground shaking could lead to seismic densification of dune sand deposits underlying the Hub Plan area, potentially causing settlement of soils, including differential settlement.[214]

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[207] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

[208] Natural Resources Conservation Service, *Web Soil Survey*, 2018, *https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx*, accessed: July 11, 2019.

[209] *Mean characteristic moment magnitude* is a way of measuring the strength of a characteristic earthquake, or a rupture event that repeats regularly, on a fault in terms of energy released during the seismic event.

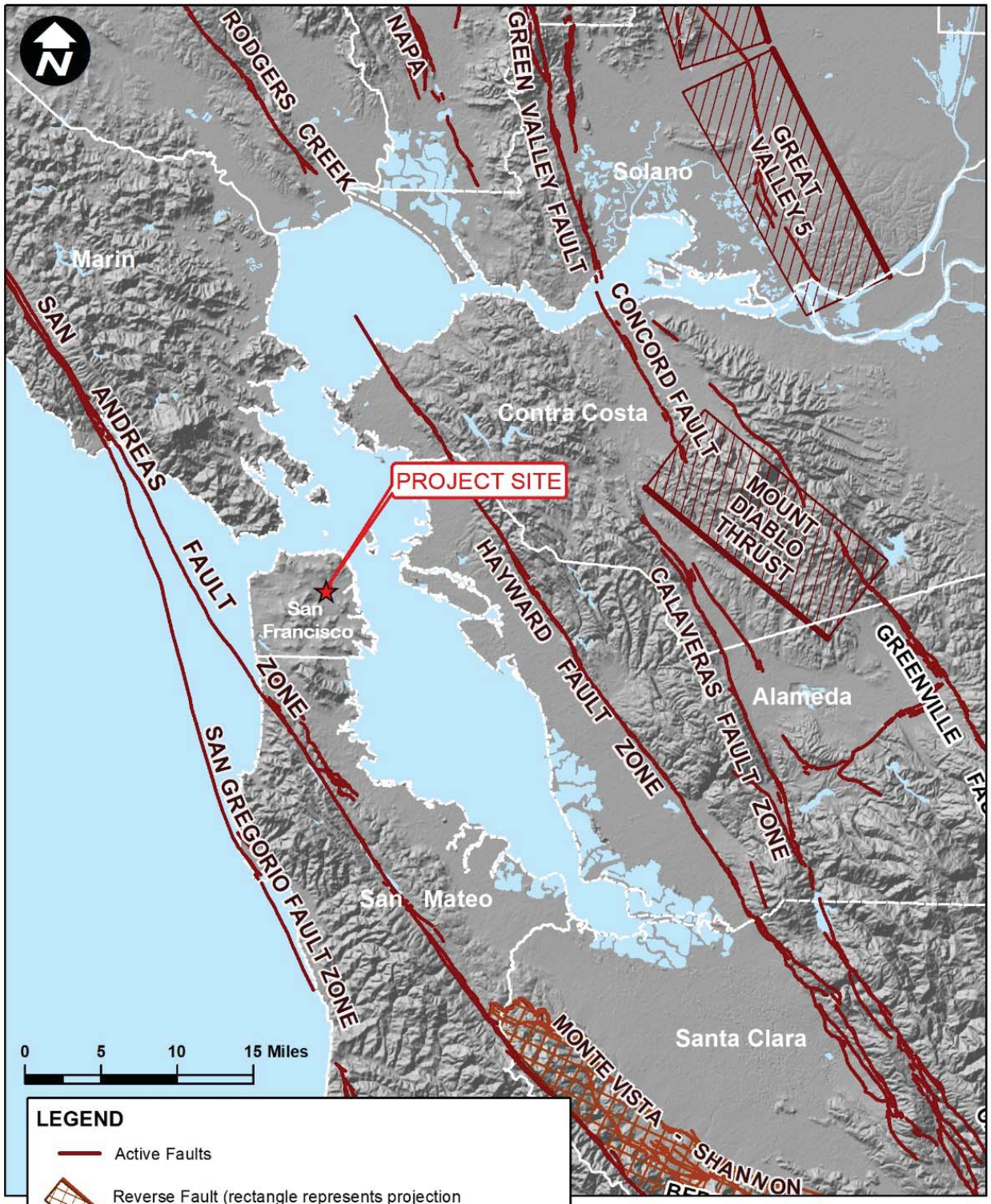
[210] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California,* 2018. (Project No. SF18002.) San Francisco, CA.

[211] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

[212] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, July 3, 2012, San Francisco, CA.

[213] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

[214] *Differential settlement* is unequal settling of soil.




Source: Geotechnical Consultants, Inc. 2018.

ICF Graphics ... 00700.17 (4-25-2019)

The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.16-2**
**Regional Faults**

As stated above, dune sand and marsh deposits underlying the Hub Plan area lie at a depth that intersects groundwater, which could make them prone to liquefaction.[215] Further, portions of the Hub Plan area are identified as being at risk of liquefaction (**Figure E.16-3**).[216] Up to several inches of liquefaction-induced settlement could occur beneath the Hub Plan area. However, one factor constrains the potential for ground failure: there is no streambank, cliff, or other free face; therefore, the risk of lateral spreading is minimal.[217]

Terrestrial sedimentary deposits underlying the Hub Plan area that are Pleistocene age or older have potential to contain significant paleontological resources. Colma formation in San Francisco is documented as having yielded vertebrate fossils, including species of mammoth and bison (*Mammuthus columbi* and *Bison latifrons*) at the southeast base of Telegraph Hill in San Francisco.[218]

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on geology, soils, seismicity, and paleontological resources could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new mixed-use housing projects to the area, the development of which could affect geology, soils, seismicity, and paleontological resources; therefore, they are analyzed on a project-specific level.

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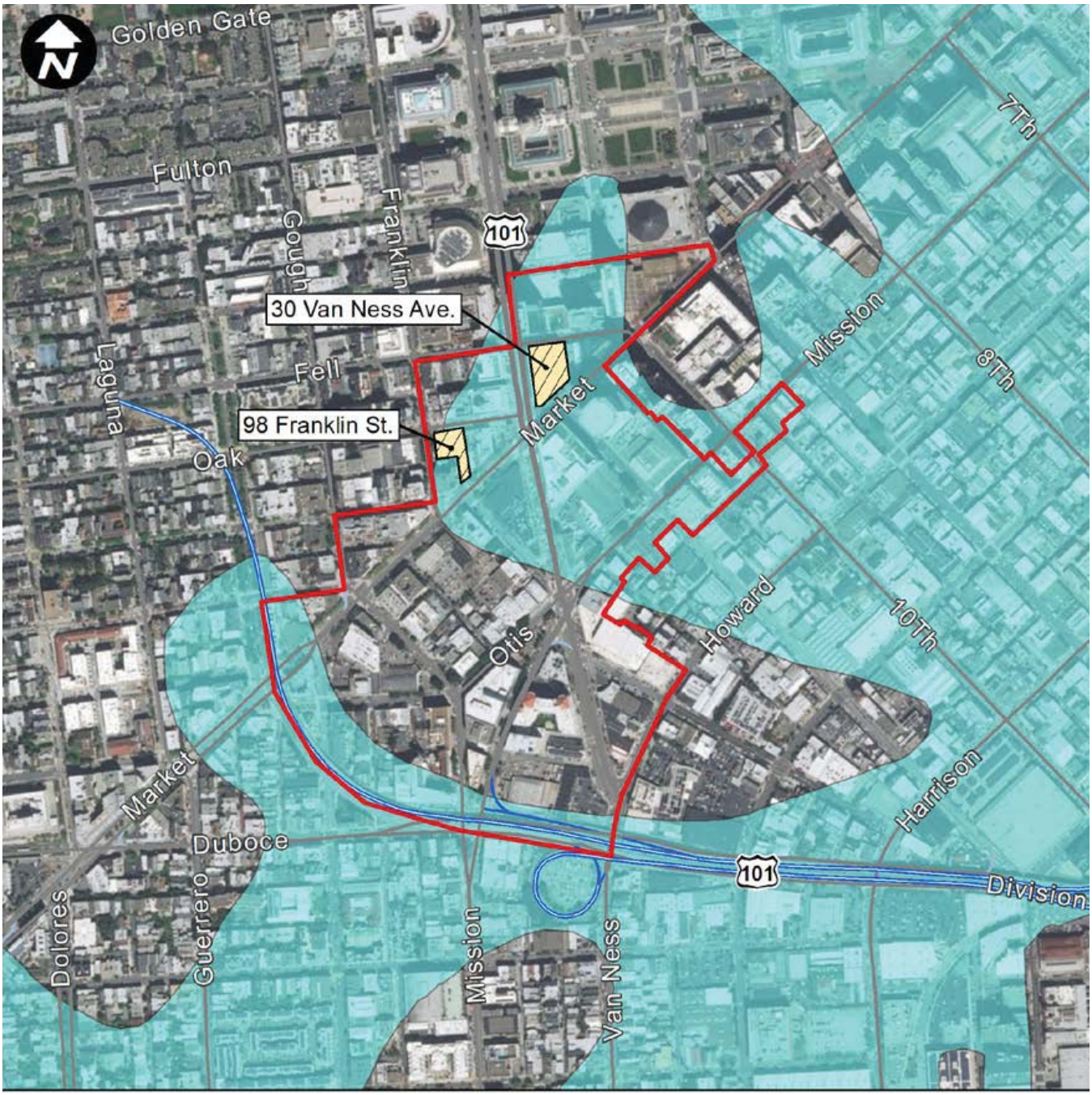
[215] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

[216] California Geological Survey, *Earthquake Zones of Required Investigation: San Francisco North Quadrangle,* 2000, *http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf*, accessed: February 28, 2018.

[217] *Lateral spreading* is a type of landslide that forms on gentle slopes and has rapid liquid-like movement. It is frequently associated with liquefaction and occurs where there is a free, unconstrained face such as a streambank or cliff past which sediments can freely move.

[218] Rodda, Peter U., and Nina Baghai, Late Pleistocene Vertebrates from Downtown San Francisco, California, *J. Paleont.* 67(g), 1993, pp. 1068–1063.




Source: California Geological Survey, 2000. GIS files of Official Maps of Seismic Hazard Zones, Seismic Hazard Zone Map of the San Francisco North Quadrangle.

Source: Geotechnical Consultants, Inc. 2018.

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The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.16-3**
**Liquefaction Hazard**

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

Given the City's initial study checklist criteria, the department considers whether a project would be located in an area that is subject to surface fault rupture of a known earthquake fault or strong seismic ground shaking, as mapped by the California Geologic Survey or presented in other substantial evidence. However, in the *California Building Industry Association v. Bay Area Air Quality Management District* case that was decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might affect a project's users or residents, except when the project would exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an area subject to surface fault rupture or seismic ground shaking are not considered impacts under CEQA, unless the project would exacerbate a seismic hazard. Although development projects on the scale proposed for the Hub Plan would not exacerbate seismic hazards, the discussion below provides information regarding exposure to increased risks associated with surface fault rupture and strong seismic ground shaking.

Construction-related impacts could include erosion, excavation instability, unbalanced and seismic loading on the adjacent underground transit lines, and destruction of paleontological resources. The primary operations-related impact is settlement from seismic densification, including differential settlement. Evaluation of these impacts was based on published geologic maps and reports and reports prepared for prior or planned projects within the Hub Plan area, as cited in this section.

To identify impacts on paleontological resources, the paleontological sensitivity of geologic units present within the Hub Plan area was identified. Paleontological sensitivity is an indicator of the likelihood of a geologic unit to yield fossils.[219]

[219] Society of Vertebrate Paleontology, *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*, 2010, *http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx*, accessed: February 21, 2018.

The fossil-yielding potential of geologic units in a particular area depends on the geologic age and origin of the units, as well as on the processes they have undergone, both geologic and anthropogenic.[220] The methods used to analyze potential impacts on paleontological resources and to develop mitigation for the identified impacts involved the following steps:

- Assess the likelihood of sediments affected by implementing the Hub Plan, the proposed streetscape and street network changes, and project-specific development at 30 Van Ness Avenue and 98 Franklin Street containing scientifically important, nonrenewable paleontological resources that could be directly affected.
- Identify the geologic units in the paleontological study area.
- Evaluate the potential of the identified geologic units to contain significant fossils (their paleontological sensitivity).
- Identify the geologic units that would be affected by implementing the Hub Plan, project-specific development at 30 Van Ness Avenue and 98 Franklin Street, and the proposed streetscape and street network changes, based on depth of excavation.
- Identify and evaluate impacts on paleontologically sensitive geologic units as a result of construction and operations that involve ground disturbance.
- Evaluate impact significance.
- According to the identified degree of sensitivity, if necessary, formulate and implement measures to mitigate potential impacts.

The potential for a project to affect paleontological resources is related to ground disturbance. Ground disturbance caused by a project would take place during construction phases; therefore, this impact analysis addresses construction impacts.

Each geologic unit at the project site was assigned a paleontological potential level, based on the Potential Fossil Yield Classification (PFYC) system for paleontological resources developed by the Bureau of Land Management.[221] Under the PFYC system, the classification of geologic units is based on the relative abundance of scientifically significant paleontological resources and their potential to yield paleontological resources. The PFYC system is intended to provide baseline guidance for predicting, assessing, and mitigating impacts on paleontological resources. The PFYC levels of potential (very low, low, moderate, high, very high, and unknown,) are defined as follows:[222]

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[220] *Anthropogenic* means caused by human activity.

[221] U.S. Department of the Interior, Bureau of Land Management, *Potential Fossil Yield Classification System*, 2016, *https://www.blm.gov/sites/blm.gov/files/uploads/IM2016-124_att1.pdf*, accessed July 11, 2019.

[222] Ibid.

- **Very Low Potential:** Assigned to geologic units that are "igneous or metamorphic, excluding air-fall and reworked volcanic ash units [and units that] are Precambrian in age." These geologic units are unlikely to "contain recognizable paleontological resources." Mitigation is not required.
- **Low Potential:** Assigned to geologic units that are "generally younger than 10,000 years before present, recent aeolian deposits, [or] sediments that exhibit significant physical and chemical changes that make fossil preservation unlikely." These geologic units are unlikely to contain paleontological resources. Mitigation is generally not required to protect fossils.
- **Moderate Potential:** Assigned to "sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence and units that are marine in origin with sporadic known occurrences of paleontological resources." These geologic units may intermittently contain paleontological resources, but the occurrence of paleontological resources is "widely scattered." Mitigation may be required to protect fossils.
- **High Potential:** Assigned to geologic units known to contain a high occurrence of paleontological resources. Significant paleontological resources have been documented but may vary in occurrence and predictability. Mitigation is required to protect fossils.
- **Very High Potential:** Assigned to "highly fossiliferous geologic units that consistently and predictably produce significant paleontological resources. Significant paleontological resources have been documented and occur consistently" in these geologic units. Mitigation is required to protect fossils.
- **Unknown Potential:** Geologic units in this category "may exhibit features or preservational conditions that suggest significant paleontological resources could be present but little information about the actual paleontological resources of the unit or area is unknown." In cases where no subsurface data already exist, paleontological potential can sometimes be assessed by subsurface site investigations.

Measures for adequate protection or salvage of significant paleontological resources are applied to areas determined to contain geologic units with high or undetermined potential to contain significant paleontological resources. In areas determined to have high or undetermined potential for significant paleontological resources, an adequate program for reducing the impact of development must include specific conditions, such as surveying; monitoring by a qualified paleontological resource monitor; salvaging, identifying, cataloging, curating, and providing repository storage; and reporting.

## IMPACTS AND MITIGATION MEASURES

**Impact GE-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not be subject to the effects of surface fault rupture. (No Impact)**

The Hub Plan area is not located within an Alquist-Priolo Earthquake Fault Zone, and no active or potentially active faults exist in the area or in the immediate vicinity.[223] The Hub Plan area, including the streetscape and street network changes, and the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, is unlikely to experience surface fault rupture. Furthermore, project components would not exacerbate existing conditions that would increase the likelihood of surface fault rupture. There would be ***no impact***.

**Impact GE-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death, involving strong seismic ground shaking. (Less than Significant)**

The intensity of the seismic shaking, or strong ground motion, in the Hub Plan area during an earthquake is dependent on the distance between the Hub Plan area and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the Hub Plan area. Earthquakes occurring on the faults closest to the Hub Plan area would most likely generate large ground motions. The intensity of earthquake-induced ground motions can be described in terms of "peak ground acceleration," which is represented as a fraction of the acceleration of gravity (g).[224] The California Geological Survey estimates that peak ground accelerations within the Hub Plan area would be approximately 0.8g for a 2 percent probability of exceedance in 50 years and 0.5g for a 10 percent probability of exceedance in 50 years.[225] This corresponds to strong ground shaking.

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[223] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

[224] Acceleration of gravity (g) = 980 centimeters per second squared. 1.0 g of acceleration is a rate of increase in speed equivalent to a vehicle traveling 328 feet from rest in 4.5 seconds.

[225] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

As stated above, the U.S. Geological Survey concluded that, overall, there is a 72 percent likelihood of an earthquake of magnitude 6.7 or greater occurring in the San Francisco Bay Area in the 30-year period between 2014 and 2043.[226] The faults nearest the Hub Plan area capable of causing strong ground shaking in the Hub Plan area are the North San Andreas, San Gregorio, Hayward, and Calaveras faults.

Although the Hub Plan area could be subject to very strong ground shaking in the event of a major earthquake, individual development projects, including those at 30 Van Ness Avenue and 98 Franklin Street, would not expose people or structures to substantial adverse effects related to ground shaking because they would be designed and constructed in accordance with the most current building code, which incorporates California Building Code requirements. The building code specifies definitions of seismic sources and the procedure used to calculate seismic forces on structures during ground shaking. In addition, the building code specifies that soils that are potentially subject to seismically induced liquefaction must be addressed during construction with appropriate mitigation measures. These can include selection of appropriate foundation type and depth, selection of appropriate structural systems to accommodate anticipated displacements and forces, and ground stabilization. For ground stabilization mitigation, potentially liquefiable sand may, for example, be removed in conjunction with excavation for the basement levels, and ground improvements may be made on soils that remain. Individual development projects would be required to comply with the building code for structural design and submit geotechnical investigations that address seismic hazards and recommend an appropriate foundation to support the proposed structure(s). During its review, the building department, in consultation with the engineer or record for each individual development project, would determine necessary engineering and design features for a structure to reduce potential damage to structures from ground shaking and to ensure compliance with all building code provisions regarding structural safety. Project construction documents would be reviewed by the building department for conformance with recommendations in the project-specific geotechnical report as well as compliance with the building code and the building department's implementing procedures.

On December 27, 2017, the building department issued information sheet S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings (interim guidelines).[227] The interim guidelines supplement and clarify the information in administrative bulletins AB-082 (Guidelines and

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[226] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

[227] San Francisco Department of Building Inspection, *Information Sheet No. S-18, Interim Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for New Tall Buildings,* published December 27, 2017, *http://sfdbi.org/sites/default/files/IS%20S-18.pdf*, accessed: July 11, 2019.

Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review)[228] and AB-083 (Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures).[229,230] Tall buildings are defined as those 240 feet or taller in the interim guidelines and in AB-082. However, AB-083 specifies the requirements and guidelines for the non-prescriptive design of new tall buildings that are more than 160 feet high to ensure that the design meets the standards of the building code. In the event of an earthquake, buildings designed to the requirements and guidelines of AB-083 would demonstrate a seismic performance at least equivalent to that of a building designed according to the code-prescriptive seismic standards of the building code. **Table E.16-1** shows the locations of proposed tall buildings, current building height limitations in feet, and proposed building height limitations under the Hub Plan.

**TABLE E.16-1. PROPOSED TALL BUILDING LIMITS IN THE HUB PLAN AREA (240 FEET OR TALLER)**

| Address | Current Building Height Limit (feet) | Proposed Building Height Limit (feet) |
|---|---|---|
| 30 Van Ness Avenue | 400 | 520 |
| 1500–1540 Market Street | 400 | 450 |
| 98 Franklin Street | 85 | 365 |
| 1 South Van Ness Avenue | 400 | 650 |
| 10 South Van Ness Avenue | 400 | 590 |
| 30 Otis Street | 250 | 320 |
| 99 South Van Ness Avenue | 120 | 250 |
| 33 Gough Street | 85 | 250 |

[228] San Francisco Department of Building Inspection, *Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review, Administrative Bulletin 082,* November 21, 2018, *http://sfdbi.org/sites/default/files/AB-082.pdf,* accessed: July 11, 2019.

[229] San Francisco Department of Building Inspection, *Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures,* March 25, 2008 (updated January 1, 2014, for code references), Administrative Bulletin 083, *http://docs.ppsmixeduse.com/ppp/DEIR_References/2014_0101_sfdbi_ab_083.pdf,* accessed: July 11, 2019.

[230] As stated in IS-18, SEAONC experts are reviewing the information and procedures in Administrative Bulletin 082 and Administrative Bulletin 083 and may recommend to the director of the building department and the building inspection commission the adoption of modified guidelines for future tall building safety in San Francisco.

The interim guidelines specify requirements for the scope of geotechnical and structural review conducted by qualified geotechnical reviewers as part of a Geotechnical Engineering Design Review Team (review team).[231]

A project sponsor's engineer of record for a project would work with the two-member geotechnical review team to resolve all comments related to the foundation design in order to achieve consensus on the adequacy of the building's foundation and structural design. A report of the findings from the geotechnical review team shall be provided to the building department director. The report would provide findings and address the following issues: the foundation type (shallow or deep), foundation design, interpretation of geotechnical and geological investigations, soil-foundation-structure interaction under static and seismic loading conditions, effects of dewatering and construction-related activities on the site and in the vicinity, and foundation or building settlement. The interim guidance also requires, prior to completion of a proposed project, the project sponsor to contract qualified monitoring surveyors and instrumentation engineers to monitor the effects of settlement on the building and foundations of the project for a period of 10 years after the issuance of the certificate of final completion and occupancy. The findings from the post-occupancy surveys shall be provided to the building department annually within this 10-year period.

Incorporation of appropriate engineering and design features into individual development projects, in accordance with the building code, and recommendations identified through the review processes specified by AB-082 and AB-083, as supplemented and clarified in S-18, would ensure that minimum life safety standards are met. New structures incentivized by the Hub Plan in the Hub Plan area, including the two individual development projects, would be required to meet standards set by the building code or provided in recommendations made through structural, geotechnical, or seismic hazard engineering design review pursuant to procedures in AB-082 or AB-083.

The proposed streetscape and street network changes would include construction of sidewalk improvements and other at-grade improvements as well as signalized mid-block crosswalks with new vehicular traffic signals. Although the at-grade improvements, such as sidewalks and plazas, could be damaged in the event of strong ground shaking, such damage would not result in a hazard to life or health and would not be likely to cause damage at adjacent properties. Above-ground improvements, such as streetlights, could be damaged, and such failure could affect human health and safety or damage property. However, development within the City right-of-way would be subject to public works permitting requirements, including applicable health and safety requirements of article 2.4 of the San Francisco Public Works Code,

[231] A qualified geotechnical reviewer for engineering design review teams shall be a geotechnical engineer (G.E.) registered in California or a civil engineer (C.E.) registered in California with substantially demonstrated geotechnical experience.

Excavation in the Public Right-of-Way. As with the development of new buildings, these improvements would be designed to resist seismic and geologic hazards, in compliance with applicable codes and design standards, which take into account the expected seismic conditions in the project vicinity. In addition, the design would be subject to review by public works as part of the permitting process. Furthermore, the subsequent development projects incentivized by Hub Plan, the proposed streetscape and street network improvements, and project-specific development at 30 Van Ness Avenue and 98 Franklin Street, would not exacerbate any condition that would increase the intensity of ground shaking. The impact would be ***less than significant***.

**Impact GE-3: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not directly or indirectly cause seismically induced ground failure, including liquefaction, earthquake-induced settlement, or landslides. (Less than Significant)**

## LIQUEFACTION, LATERAL SPREADING, AND EARTHQUAKE-INDUCED SETTLEMENT

Liquefaction is a phenomenon in which saturated granular sediments such as sand and silt temporarily lose their shear strength during periods of earthquake-induced strong ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude of earthquakes likely to affect the site. Saturated, unconsolidated silts, sands, silty sands, and gravels within 50 feet of the ground surface are most susceptible to liquefaction. The primary liquefaction-related phenomena are lateral spreading and soil settlement, including differential settlement. In addition, differential settlement can result from seismic densification, as discussed in the Setting section, above. Because there is no free face within the Hub Plan area, the risk of lateral spreading is low and is not discussed further. Soil settlement can damage foundations, particularly under differential settlement.

As shown in **Figure E.16-3**, p. E.16-7, large portions of the Hub Plan area are within a liquefaction hazard zone.[232] In addition, dune sands underlying the area could be subject to seismic densification.[233] Therefore, individual development projects implemented pursuant to the Hub Plan could be subject to both liquefaction and earthquake-induced settlement. However, buildings constructed pursuant to the Hub Plan would be supported on foundations determined appropriate by site-specific geotechnical investigations and designed in accordance

[232] California Geological Survey. 2000. *Earthquake Zones of Required Investigation: San Francisco North Quadrangle.* Available: *http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf*. Accessed: February 28, 2018.

[233] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

with the building code. Individual development sites may require soil improvement, based on site conditions. Construction documents specifying the structural design, including the type of foundation, would be reviewed by the building department during review of the building permits. Soils that could liquefy or experience earthquake-induced settlement would be removed during construction and/or soil improvement techniques would be implemented in conjunction with development of the structural foundation design. Removal of potentially liquefiable materials and/or implementation of soil improvement techniques, along with appropriate foundation designs, would reduce the potential for settlement within building footprints. However, adjacent streets and unimproved properties may experience settlement, which could affect utilities and surface improvements such as sidewalks.

Both of the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would be located on soils that have been identified as subject to liquefaction hazards and soil settlement as a result of seismic densification, as described in the *Setting* section, above. The individual development projects at 30 Van Ness Avenue[234] and 98 Franklin Street[235] have been designed in accordance with existing preliminary geotechnical studies. The 30 Van Ness Avenue Project proposes a concrete mat foundation supported by deep auger cast piles. There is potential for several inches of settlement as a result of seismic densification,[236] most likely resulting in differential settlement.[237] The 98 Franklin Street Project proposes a mat slab foundation. There is potential for 1 to 2 inches of settlement as a result of seismic densification, possibly resulting in differential settlement, which could affect utilities and surface improvements.[238] Potentially liquefiable sand may be removed in conjunction with excavation for the basement levels, and ground improvements may be made on soils that remain.

To address the potential for liquefaction and earthquake-induced settlement throughout the Hub Plan area, including the sites for the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, the building department would, in its review of building permit applications, refer to sources such as maps of special geologic study areas and known liquefaction areas in San Francisco. If a subsequently proposed development project is located

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[234] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

[235] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, July 3, 2012, San Francisco, CA.

[236] *Seismic densification* is the process of rearranging soil particles into a tighter configuration as a result of seismic ground shaking. The result of seismic densification is vertical settlement. Because soils are not uniformly dense, seismic densification often results in differential settlement.

[237] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

[238] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, July 3, 2012, San Francisco, CA.

in an area of potential liquefaction, the building department would require the project sponsor to prepare a geotechnical report pursuant to the State Seismic Hazards Mapping Act. The report would assess the nature and severity of the hazard on the site and recommend project design and construction features that would reduce the hazards. The building department would review the building plans and geotechnical report to ensure that the recommended engineering and design features are included in the project. The design of any proposed buildings more than 160 feet tall, such as the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, could also be subject to compliance with AB-083 for non-prescriptive design and peer review. In addition, local building code requirements, including AB-082 and the interim guidelines specified in information sheet S-18 regarding structural design review for tall buildings, would require peer review of the project's site conditions and design by a two-member engineering design review team, along with monitoring for settlement during the 10-year period after the certificate of completion and occupancy is issued. Therefore, impacts of subsequent development projects in the Hub Plan area, including the two individual development projects, related to exacerbation of liquefaction and earthquake-induced settlement would be ***less than significant***.

The proposed streetscape and street network changes would include street widening and reconfiguration, reconfiguration of vehicular parking, the addition of improvements for people walking and bicycling, construction of sidewalk improvements and other at-grade improvements, construction and realignment of medians, and landscaping. As with development of new buildings, these improvements would be designed to resist seismic and geologic hazards, in compliance with applicable codes and design standards that take into account the expected seismic conditions. In addition, the design would be subject to review by public works as part of the permitting process. Furthermore, these structures are unlikely to exacerbate liquefaction or settlement. Therefore, impacts related to liquefaction, earthquake-induced settlement, and lateral spreading are considered ***less than significant*** for the proposed streetscape and street network changes.

### EARTHQUAKE-INDUCED LANDSLIDES

The Hub Plan area is relatively flat and does not include any areas of mapped earthquake-induced landslide susceptibility.[239] Therefore, impacts related to exacerbation of earthquake-induced landslides on subsequent development projects approved pursuant to the Hub Plan, the proposed streetscape and street network improvements, and the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would be ***less than significant***.

[239] California Geological Survey, *Earthquake Zones of Required Investigation: San Francisco North Quadrangle*, 2000, *http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf*, accessed: February 28, 2018.

**Mitigation:** None required.

**Impact GE-4: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not result in substantial erosion or loss of topsoil. (Less than Significant)**

The Hub Plan area is primarily built out and covered with impervious surfaces, including buildings, streets, and sidewalks; previous construction would have removed topsoil (i.e., a fertile soil horizon that typically contains a seed base). Therefore, there would be no impact related to loss of topsoil.

Soil movement for foundation excavation could create the potential for wind- and water-borne soil erosion. However, the Hub Plan area is relatively flat; therefore, substantial erosion and loss of soil would not be expected to occur during site preparation and construction of subsequent development projects approved pursuant to the Hub Plan, and project-specific development at 30 Van Ness Avenue and 98 Franklin Street. Furthermore, all construction sites in San Francisco must implement best management practices for sediment and erosion control. In addition, sponsors of subsequent development projects approved pursuant to the Hub Plan that disturb between 5,000 square feet and 1 acre of ground surface, as well as project-specific development at 30 Van Ness Avenue and 98 Franklin Street, would be required, at a minimum, to implement an erosion and sediment control plan for construction activities, in accordance with article 4.1 of the San Francisco Public Works Code, and, depending on the site size, a SWPPP (discussed in E.15, Hydrology and Water Quality) to reduce the impact of runoff from each construction site. The San Francisco Public Utilities Commission must review and approve erosion and sediment control plans prior to implementation and would conduct periodic inspections to ensure compliance with each plan.[240]

The proposed streetscape and street network changes would occur within the public right-of-way and involve only minimal ground disturbance in a previously developed area with no existing topsoil horizon. Where the proposed streetscape and street network changes would require soil excavation, they would also be subject to the erosion control measures of article 4.1 of the San Francisco Public Works Code. Therefore, impacts related to soil erosion and the loss of topsoil would be ***less than significant***.

**Mitigation:** None required.

[240] San Francisco Public Utilities Commission, *Construction Site Runoff Control Program*, *https://sfwater.org/index.aspx?page=235*, accessed July 11, 2019.

**Impact GE-5: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not be located on a geologic unit or soil that is unstable or that could become unstable as a result of the project. (Less than Significant)**

Construction of subsequent development projects approved pursuant to the Hub Plan and project-specific development at 30 Van Ness Avenue and 98 Franklin Street could induce ground settlement as a result of excavation for construction of subsurface vehicular parking or basement levels, construction dewatering, heave during installation of piles, and long-term dewatering.

The building department would require a site-specific geotechnical report for each subsequent development project approved pursuant to the Hub Plan. The geotechnical report would be reviewed by the building department to ensure that it contains the required information specified in building code section 1803.6. These requirements include a record of the soil profile; the elevation of the water table, if encountered during the investigation; recommendations for the foundation type as well as the design criteria for the proposal, including, but not limited to, the bearing capacity of natural or compacted soil; provisions for mitigating the effects of expansive soils; mitigation for the effects of liquefaction, differential settlement, and varying degrees of soil strength; and a determination of the effects of adjacent loads. In addition, the geotechnical report would specify expected total and differential settlement. (The required site-specific geotechnical reports have been prepared for the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street.) If a monitoring survey is recommended, the building department would require the project sponsor to retain a special inspector to perform the monitoring. If appropriate and recommended, the building department may require that the geotechnical report include a dewatering plan.

These potential effects are described below.

#### EXCAVATION

Subsequent development projects approved pursuant to the Hub Plan could require excavation to currently unknown depths for construction of basement levels and potential below-ground vehicular parking. Project-specific development would require excavation up to 48 feet for 30 Van Ness Avenue and 39 feet for 98 Franklin Street. During excavation, the artificial fill, dune sand, marsh deposit, and Colma formation (described above), could become unstable, potentially causing settlement of adjacent structures, including buildings, sidewalks, streets, and utilities. In accordance with the California Building Code and the local building code, shoring would be required to prevent this soil from becoming unstable. The engineer of record would be responsible for monitoring during excavation. The final building plans would be reviewed by the building department for conformance with recommendations in the site-specific geotechnical report.

The proposed streetscape and street network changes would occur within the public right-of-way and involve only minimal ground disturbance. No deep excavation or pile driving that could induce settlement would be conducted during construction of the streetscape and street network changes.

With implementation of the recommendations in the project-specific detailed geotechnical studies for individual development projects approved under the Hub Plan, as well as the two individual development projects, subject to review and approval by the building department, impacts related to the potential for settlement and subsidence due to excavation in soil that is unstable, or could become unstable as a result of such construction, would be ***less than significant***.

#### DEWATERING

As stated above, groundwater in most of the Hub Plan area is relatively shallow (encountered at a depth of 10 to 23 feet bgs). Therefore, it is expected that most development-related excavation under the Hub Plan deeper than 10 feet below the ground surface,[241] including the two individual development projects at 30 Van Ness Avenue[242] and 98 Franklin Street,[243] would encounter groundwater. Dewatering would most likely be implemented to avoid substantial water inflow to the excavation during construction. In addition, during project operation, groundwater could exert hydrostatic pressure on subsurface vehicular parking or basement levels constructed as part of subsequent development projects under the Hub Plan and the two individual development projects. Permanent dewatering could be required to relieve this pressure.

It is expected that most excavations deeper than 10 feet would encounter groundwater and would require dewatering to maintain a dry work environment and a firm subgrade for preparation of foundation construction.[244] A water-tight shoring system could be used during excavation for structures, and dewatering excavation for the installation of utilities or the compaction of soil is expected to be required. For each subsequent development project in the Hub Plan area as well as the two individual development projects, the building department may specify that the geotechnical report include a dewatering plan during its review of the building plans.

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[241] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018. (Project No. SF18002.) San Francisco, CA.

[242] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

[243] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, July 3, 2012, San Francisco, CA.

[244] Geotechnical Consultants, Inc., *Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, 2018, Project No. SF18002, San Francisco, CA.

Any groundwater encountered during construction of subsequent development projects under the Hub Plan, as well as the two individual development projects, would be subject to requirements of the City's Sewer Use Ordinance (article 4.1 of San Francisco Public Works Code; added by ordinance No. 19-92, amended by ordinance No. 116-97), as supplemented by San Francisco Public Works Order No. 158170, requiring a permit from the Wastewater Enterprise Collection System Division of the San Francisco Public Utilities Commission. A permit may be issued only if an effective pretreatment system is maintained and operated. Each permit for such discharge would contain specified water quality standards and may require the project sponsor to install and maintain meters to measure the volume of the discharge to the combined sewer system. In addition, if a subsequent project-specific geotechnical investigation determines that dewatering wells would be needed to draw the groundwater down below the planned depths of excavation, those dewatering wells would be subject to the requirements of the City's Soil Boring and Well Regulation Ordinance (Health Code article 12B, added by ordinance No. 113-05), requiring a project sponsor to obtain a permit from the San Francisco Department of Public Health (public health department) prior to constructing a dewatering well. A permit may be issued only if the project sponsors use construction practices that would prevent the contamination or pollution of groundwater during the construction or modification of the well or soil boring.

The proposed streetscape and street network changes would occur within the public right-of-way and involve only minimal ground disturbance. No deep dewatering that could induce settlement would be conducted for construction of these changes.

With implementation of the recommendations provided in the project-specific detailed geotechnical studies for the individual development projects approved under the Hub Plan, as well as the two individual development projects, subject to review and approval by the building department, and compliance with the City's Sewer Use Ordinance and the requirements of the City's Soil Boring and Well Regulation Ordinance, impacts related to potential settlement and subsidence due to dewatering in soil that is unstable, or could become unstable as a result of such construction, would be ***less than significant***.

#### SPECIAL CONSIDERATIONS FOR CONSTRUCTION IN OR NEAR THE BART ZONE OF INFLUENCE

Subway transit facilities for BART and Muni operate below Market Street and along an alignment that turns toward Mission Street after Civic Center Station. Both facilities are owned by BART. Proposed structures constructed within the zone of influence (ZOI) must take into account special considerations in order to avoid destabilizing nearby transit structures. BART's Real Estate and Property Development Department coordinates permits and plan review for any construction on, or adjacent to, the BART right-of-way. If it is determined that inspection or

monitoring will be needed for a project, then a construction permit from BART is required.[245] Regardless, the general guidelines for design and construction over or adjacent to BART's subway structures would need to be adhered to.[246] The building department will not issue a building permit for proposals over or adjacent to these facilities without receiving confirmation from BART that the sponsor has complied with the guidelines. For example, construction of piles must be isolated from the tunnel ZOI using a double-casing scheme to avoid destabilization of the tunnel facilities, as discussed below.

Subsequent development projects that abut Market Street above the BART ZOI, including the 98 Franklin Street Project and the 30 Van Ness Avenue Project, as well as projects above the BART facility, which is used for San Francisco Muni service from South Van Ness Avenue, across 12th Street, to Brady Street,[247] need to demonstrate that the new construction would not adversely affect BART structures under temporary or permanent conditions. This would require geotechnical as well as structural analysis. BART would most likely require structural drawings and calculations, shoring plans, and calculations, along with geotechnical plan review letters, for its review.[248]

With implementation of the recommendations provided in project-specific detailed geotechnical studies for individual development projects approved under the Hub Plan, as well as the two individual development projects, subject to review and approval by the building department as well as review and approval by BART for the project-specific structural design and calculations regarding conformance with BART construction guidelines, if applicable, based on the site location, impacts related to the potential for soil settlement or subsidence would be ***less than significant.***

**Mitigation:** None required.

**Impact GE-6: The Hub Plan, as well as or individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not create substantial risks to life or property as a result of location on expansive soils. (Less than Significant)**

As discussed under *Setting*, the artificial fill and dune sand beneath the Hub Plan area are sandy and not expansive. The marsh deposits beneath the Hub Plan area have potentially expansive

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[245] Bay Area Rapid Transit, *Construction Permits, 2019, https://www.bart.gov/about/business/permits/repermits*, accessed July 11, 2019.

[246] Bay Area Rapid Transit, *General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures*, July 23, 2003, *https://www.bart.gov/sites/default/files/docs/Gen_Guide_Subway_062012.pdf*, accessed July 11, 2019.

[247] Bay Area Rapid Transit. 1977. Record Maps of Right of Way, Bay Area Rapid Transit District, City & County of San Francisco. January 31, 1977.

[248] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

properties. However, these sediments are generally below the groundwater table and thus are permanently saturated. Therefore, none of the soils in the Hub Plan area are expected to exert expansive forces on building foundations or proposed streetscape and street network improvements. Therefore, impacts related to expansive soils would be ***less than significant*** for subsequent development projects approved pursuant to the Hub Plan, the proposed streetscape and street network changes, and project-specific development at 30 Van Ness Avenue and 98 Franklin Street.

**Mitigation:** None required.

**Impact GE-7: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, could directly or indirectly destroy a unique paleontological resource or site or geological feature. (Less than Significant with Mitigation)**

A unique geologic or physical feature embodies distinctive characteristics of regional or local geologic principles, provides a key piece of information important to geologic history, contains minerals not known to occur elsewhere in the county, and/or is used as a teaching tool. No unique geologic features exist at the project site; therefore, no impacts on unique geological features would occur. Although portions of the Hub Plan area would be excavated and terraced, the general topography of the area would remain the same. With respect to unique geologic features and topography, there would be no impact; no mitigation measures are necessary. This topic is not discussed further.

As stated under Approach to Analysis, terrestrial sedimentary deposits of middle Holocene age or older have the potential to contain significant fossils. Within the Hub Plan area, marsh deposits and Colma formation meet this criterion. Within the Hub Plan area, marsh deposits are found between approximately 6.5 and 35 feet bgs, and the Colma formation is found at approximately 12 to 27 feet bgs, extending to 200 feet bgs. Marsh deposits and the Colma formation are found at typical depths at 30 Van Ness Avenue and 98 Franklin Street. Of these, marsh deposits are not known to contain fossils and therefore fall under the PFYC category for unknown potential with respect to containing significant paleontological resources. However, the Colma formation has yielded vertebrate fossils[249] and is considered to have moderate potential with respect to containing significant fossils. Subsequent development projects under the Hub Plan and the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street would have the potential to disturb significant paleontological resources because excavations would extend as deep as the Colma formation, which can be found at 12 to

[249] Rodda, Peter U., and Nina Baghai, Late Pleistocene Vertebrates from Downtown San Francisco, California, *J. Paleont.* 67(g), 1993, pp. 1068–1063.

27 bgs.[250] Excavation for the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street would most likely reach the Colma formation (up to 48 feet deep for 30 Van Ness Avenue and 39 feet deep for 98 Franklin Street).

The proposed streetscape and street network changes would disturb surficial deposits, consisting of artificial fill to a depth of 5 to 20 feet near U.S. 101 and dune sand throughout the remainder of the area (**Figure E.16-1**, p. E.16-3), reaching to depths of 15 to 30 feet. Artificial fill falls under the PFYC category for low potential to yield significant fossils. Even if fossils occasionally occur in artificial fill, they have been removed from their place of origin, and thus their scientific value has been lost.

Dune sand has unknown potential. Although it is a terrestrial sedimentary formation in origin and Holocene to Pleistocene in age, there are no records of this unit yielding significant fossils. It is considered to have low potential with respect to containing fossils. Therefore, excavation in areas with dune sand has low potential with respect to disturbing significant paleontological resources.

Because subsequent development projects under the Hub Plan and the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street could extend into the Colma formation, impacts on significant fossils would be significant. Implementation of Mitigation Measure M-GE-1, which would require that the project applicant(s) educate construction workers, monitor for discovery of paleontological resources, evaluate found resources, and prepare and follow a recovery plan for found resources, would reduce the likelihood that significant, or unique, paleontological resources would be destroyed or lost. With implementation of this mitigation measure, the impact would be ***less than significant***.

## MITIGATION MEASURES

Mitigation Measure M-GE-1 applies to any of the project's components, including subsequent development projects under the Hub Plan and Hub HSD, the streetscape and street network improvements, and the two individual development projects, where the potential exists for excavation to encounter the Colma formation. Streetscape and street network improvements constructed on artificial fill or dune sand with excavation depths of less than 15 feet would not require this mitigation measure.

***M-GE-1:*** ***Inadvertent Discovery of Paleontological Resources.*** Before the start of any excavation activities, the project applicant(s) shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, who is experienced in teaching non-specialists. The qualified paleontologist shall train

[250] Langan, *Preliminary Geotechnical Study 30 Van Ness Avenue San Francisco, California*, July 7, 2017. (Langan Project No.: 731667902.) San Francisco, CA.

all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, the proper notification procedures should fossils be encountered, and the laws and regulations protecting paleontological resources. The qualified paleontologist shall also make periodic visits during earthmoving at high sensitivity sites to verify that workers are following the established procedures. If potential vertebrate fossils are discovered by construction crews, all earthwork or other types of ground disturbance within 25 feet of the find shall stop immediately, and the monitor shall notify the project sponsor, the qualified paleontologist, and the Environmental Review Officer.

The fossil shall be protected by an "exclusion zone" (an area approximately 5 feet around the discovery that is marked with caution tape to prevent damage to the fossil). Work in the affected area shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius, based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations shall be consistent with Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, as well as currently accepted scientific practice, and subject to review and approval by the Environmental Review Officer. If required, treatment for fossil remains may include preparation and recovery so they can be housed in an appropriate museum or university collection (e.g., the University of California Museum of Paleontology). This may also include preparation of a report for publication describing the finds. The department shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means. The project sponsor shall be responsible for ensuring that the paleontologist's recommendations regarding treatment and reporting are implemented, including the costs necessary to prepare and identify collected fossils and any curation fees charged for university or museum storage.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

The implementation of Mitigation Measure M-GE-1 would require that the project applicant(s) monitor for discovery of paleontological resources, evaluate found resources, and prepare and follow a recovery plan for found resources, would reduce the likelihood that significant

paleontological resources would be destroyed or lost. With implementation of this mitigation measure, the impact would be ***less than significant***.

**Impact C-GE-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to cumulative impacts related to geology, soils, seismicity, and paleontological resources. (Less than Significant)**

Geologic, soil, seismicity, and paleontological impacts are generally site specific and highly localized. Therefore, the potential for subsequent development projects under The Hub Plan, including the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, to combine with reasonably foreseeable future projects to create a cumulative impact related to geology, soils, seismicity, and paleontological resources would be low. Furthermore, with respect to geology, soils, and seismicity, all projects in the vicinity, as well as subsequent development projects under the Hub Plan, would also be subject to building department requirements for geotechnical review and required to comply with the state and local building codes. Impacts related to paleontological resources would be fully addressed by project mitigation.

The proposed streetscape and street network changes would not result in significant impacts related to seismicity or ground settlement and would not contribute to cumulative impacts related to these effects. All of the proposed streetscape and street network changes would occur within the public right-of-way and would be subject to public works permitting requirements. Therefore, these improvements would be designed to resist seismic and geologic hazards in compliance with applicable codes and design standards that take into account the expected seismic conditions. Further, the design would be subject to review by public works as part of the permitting process.

Therefore, subsequent development projects under the Hub Plan, the proposed streetscape and street network changes, and the two individual development projects would not result in a cumulatively considerable contribution to cumulative impacts related to geology, soils, seismicity, and paleontological resources, and the impact would be ***less than significant***.

**Mitigation:** None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less–than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **17. HYDROLOGY AND WATER QUALITY. Would the project:** | | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? there would be a net deficit in aquifer volume or a | ☐ | ☐ | ☒ | ☐ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would: | | | | | |
| i) Result in substantial erosion or siltation on- or offsite; | ☐ | ☐ | ☒ | ☐ | ☐ |
| ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite; | ☐ | ☐ | ☒ | ☐ | ☐ |
| iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ | ☐ |
| iv) Impede or redirect flood flows? | ☐ | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due a project inundation? | ☐ | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☒ | ☐ | ☐ |

The Hub Plan area is not subject to flooding from flood hazard, tsunami, or seiche zones. Therefore, release of pollutants from project inundation in flood hazard, tsunami, or seiche zones would not occur; topic 17(d) is not applicable to any of the project's components, including the Hub Plan, the proposed streetscape and street network changes, the two individual development projects, or the Hub HSD.

# SETTING

## SURFACE WATER HYDROLOGY

The Hub Plan area, the two individual development projects, and Hub HSD are within the Visitacion Valley-Frontal San Francisco Bay Estuaries subwatershed of the larger San Francisco Bay watershed. The Hub Plan area is approximately 2 miles southwest of San Francisco Bay. No

natural surface waters go through the area. Historically, Hayes Creek flowed north of the Hub Plan area,[251] but the area has been filled and the creek has largely been culverted beneath urban development; it ultimately drains to San Francisco Bay.

Stormwater within the Hub Plan area is collected in the City's combined sanitary sewer and stormwater sewer system. The Hub Plan area (which includes the Hub HSD), including the project sites for each of the two individual projects, is paved and generally flat or gently sloping.

## GROUNDWATER HYDROLOGY

The Hub Plan area, including the two individual development projects and Hub HSD, are within the Downtown San Francisco Groundwater Basin (Downtown Basin) (ID 2-40).[252] Groundwater recharge to the groundwater basin occurs from the infiltration of rainfall, landscape irrigation, or leakage from sewer pipes. Recharge due to leakage from municipal water and sewer pipes accounts for about half of the total recharge of groundwater in the San Francisco area.[253] Groundwater in the Downtown Basin is not currently used for water supply, nor do plans exist for this basin to be used for future water supply.

Depth to groundwater in the Hub Plan area ranges from 10 to 23 feet bgs.[254] Groundwater at the 30 Van Ness Avenue project site ranges from 15 to 25 feet bgs and fluctuates about 2 feet seasonally.[255] Similarly, groundwater at the 98 Franklin Street project site is about 15 to 20 feet bgs. Groundwater levels are expected to fluctuate seasonally a few feet.[256]

## WATER QUALITY

The quality of the stormwater runoff from the Hub Plan area and surrounding development is typical of urban watersheds where water quality is affected primarily by discharges from both point and nonpoint sources. Point-source discharges are known sources of pollutants, such as

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[251] Museum of California, *Mission Creek Watershed Map*, n.d., *http://explore.museumca.org/creeks/1640-RescMission.html#*, accessed: February 1, 2018.

[252] San Francisco Bay Regional Water Quality Control Board, *San Francisco Bay Basin (Region 2) Water Quality Control Plan*, 2007, last updated: May 4, 2017, *https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html*, accessed: February 1, 2018.

[253] California Department of Water Resources, *California's Groundwater Bulletin 118, San Francisco Hydrologic Region, Downtown San Francisco Groundwater Basin*, February 27, 2004.

[254] Geotechnical Consultants, Inc., *Draft Preliminary Geotechnical Hazard Assessment Memorandum: The Hub Plan, City of San Francisco, San Francisco, California*, n.d., Project No. SF18002.

[255] Langan Engineering and Environmental Services, Inc., *Preliminary Geotechnical Study, 30 Van Ness Avenue*, Langan Project No. 73166790, July 7, 2017.

[256] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation 98 Franklin Street, 59 Oak Street, and 1576 Market Street*, Project 750612301, July 3, 2012.

outfalls, while nonpoint source discharges generally result from diffuse sources, such as land runoff, precipitation, or seepage. Water quality in the vicinity of the Hub Plan area is directly affected by stormwater runoff from adjacent streets and properties that deliver fertilizers, pesticides, automobile and traffic pollutants (e.g., oil, grease, metals), sediment with associated pollutants from soil erosion, trash, and other pollutants. The RWQCB has listed San Francisco Bay[257] as an impaired water body for chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs) (including dioxin-like compounds), selenium, and trash.[258]

## GROUNDWATER QUALITY

Groundwater quality throughout most of the region is suitable for most urban and agricultural uses, with only local impairments. The primary constituents of concern are high total dissolved solids, nitrate, boron, and organic compounds. Although there is no published groundwater quality information available for the Downtown Basin, limited water quality data for the surrounding basins are available and show that the general character of groundwater for all basins beneath the entire San Francisco peninsula is similar. Groundwater beneath the San Francisco peninsula has a high mineral content and is considered generally "hard." High concentrations of nitrates, iron, and manganese and elevated chloride, boron, and total dissolved solids concentrations are typically found in groundwater within the Downtown Basin. Elevated concentrations of nitrate and chloride are common, especially at shallower depths.[259,260]

## FLOODING

The San Francisco Interim Floodplain maps[261] adopted by the City indicate that the Hub Plan area, including the two individual development projects, and Hub HSD, are outside of a Special Flood Hazard Area. The San Francisco Public Utilities Commission developed a series of maps

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[257] This section of the Bay is known as *Central San Francisco Bay*, as defined by the State Water Resources Control Board for the 2014/2016 Integrated Report (Clean Water Act Section 303(d) List/305(b) Report). Central San Francisco Bay extends from approximately Oakland International Airport and Hunters Point on the south to San Pablo Bay on the north.

[258] State Water Resources Control Board *2014/2016 Integrated Report* (Clean Water Act Section 303(d) List/305(b) Report), last updated: 2016, *https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml*, accessed: July 15, 2019.

[259] California Department of Water Resources, *California's Groundwater Bulletin 118, Update 2003, San Francisco Bay Hydrologic Region*, *https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Update_2003.pdf*, accessed: November 9, 2018.

[260] California Department of Water Resources, *California's Groundwater Bulletin 118, San Francisco Hydrologic Region, Downtown San Francisco Groundwater Basin,* February 27, 2004.

[261] City and County of San Francisco, San *Francisco Interim Floodplain Map, Northeast*, Final Draft, July 2008.

that identify areas of inundation along both the Bay and Pacific Ocean shorelines of San Francisco. The San Francisco Public Utilities Commission inundation maps evaluate scenarios that represent National Research Council projections of SLR in combination with the effects of storm surge.[262]

Based on the National Research Council's projected levels of SLR and consideration of a 100-year storm surge, the Hub Plan area, including the two individual development projects and Hub HSD, are not at risk of flooding by 2050 or 2100 under all scenarios analyzed.[263]

## APPROACH TO ANALYSIS

### THE HUB PLAN AND HUB HSD

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on hydrology and water quality could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. Therefore, this section evaluates hydrology and water quality impacts that could result from development proposed and approved pursuant to the

[262] Sewer System Improvement Program, *Climate Stressors and Impact: Bayside Sea-Level Rise Mapping*, Final Technical Memorandum, June 2014.

[263] The San Francisco Public Utilities Commission scenarios represent projections of SLR in combination with the effects of storm surge and permanent inundation that could occur as a result of total water-level rise, based on daily tidal fluctuations. Each scenario also addresses temporary inundation that could occur from extreme tides and 1-year, 2-year, 5-year, 25-year, 50-year, and 100-year storm surge. The following scenarios are representative of Bay water elevations that could occur by 2050 and 2100, based on projected levels of SLR and consideration of a 100-year storm surge: 12 inches above 2000 mean higher high water (MHHW) (representative of projected SLR by 2050); 36 inches above 2000 MHHW (representative of projected SLR by 2100); 52 inches above year 2000 MHHW (representative of projected SLR by 2050 in combination with a 100-year storm surge); and 77 inches above 2000 MHHW (representative of projected SLR by 2100 in combination with a 100-year storm surge). Additional scenarios represent the maximum Bay water elevations that could occur by 2100, based on the upper range of SLR and consideration of a 100-year storm surge.

proposed planning policies and controls in the Hub Plan, including impacts resulting from proposed streetscape and street network changes, the two individual development projects, or the Hub HSD.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

### INDIVIDUAL DEVELOPMENT PROJECTS

The individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and residents to the area, which could affect hydrology and water quality; therefore, they are analyzed on a project-specific level. The impact analysis for the two individual development projects evaluates whether they would affect hydrology and water quality or conflict with the applicable water resource policies of the City or the regional plans adopted for the purpose of avoiding or mitigating an environmental effect. Similar to the Hub Plan, a conflict between a proposed project and applicable water resource plans, policies, and regulations of an agency with jurisdiction over the project does not necessarily indicate a significant effect on the environment under CEQA. The analysis focuses on impacts related to hydrology and water quality for the two proposed individual development projects. All project elements were analyzed by comparing baseline conditions, as described under Setting, to conditions during construction and/or operation of the two individual development projects. The analysis focuses on issues related to surface hydrology, flood hazards, groundwater supply, and surface and groundwater quality.

# IMPACTS AND MITIGATION MEASURES

**Impact HY-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and would not conflict with or obstruct implementation of a water quality control plan. (Less than Significant)**

## CONSTRUCTION

Implementation of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would include construction activities, such as asphalt demolition, rough grading and excavation, new building construction, paving, and landscaping. Land-disturbing activities and the placement of stockpiles in proximity to storm drain inlets or nearby surface waters may result in a temporary increase in sediment loads in San Francisco Bay. Pollutants, such as nutrients, trace metals, and hydrocarbons attached to sediment, can be transported with sediment to downstream locations and degrade water quality. The delivery, handling, and storage of construction materials and wastes (e.g., concrete debris), as well as the use of heavy construction equipment, could also result in stormwater contamination, thereby affecting water quality. Construction activities may involve the use of chemicals and operation of heavy equipment, which could result in accidental spills of hazardous materials (e.g., fuel and oil) during construction activities. Such spills could enter the groundwater aquifer or nearby surface water bodies from runoff or storm drains. Constituents in fuel, oil, and grease can be acutely toxic to aquatic organisms and/or bioaccumulate in the environment.

All project construction activities resulting from implementation of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be subject to existing regulatory requirements. Because the area of land disturbance for subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be more than 1 acre, construction activites would be required to comply with the Construction Site Runoff Control Ordinance. Further, an erosion and sediment control plan or SWPPP would be prepared, and a Construction Site Runoff Control Permit Application would be submitted to the San Francisco Public Utilities Commission. Standard erosion and sediment control measures and other housekeeping BMPs, such as vehicle and equipment maintenance, material delivery and storage, and solid waste management, would be identified in the SWPPP. The SWPPP would also identify pollution control practices that would be implemented, such as covering materials while entering and leaving the project site and using diversion berms to prevent pollutants from reaching stormwater runoff. Each subsequent individual development project approved under the Hub Plan that disturbs more than 1 acre would require a project-specific SWPPP and associated BMPs. Project-specific SWPPPs would

include erosion control and sedimentation measures. A separate erosion and sediment control plan may be required for approval of building, grading, or other assoicated permits. However, subsequent development projects that disturb less than 5,000 square feet would not need to apply for a Construction Site Runoff Control Permit and would not be subject to a SWPPP. Common best management practices, such as erosion and sediment controls, would be implemented to prevent pollution from leaving the construction site, regardless of any project-SWPPP requirements. These measures would be implemented during construction to reduce contamination and sedimentation in waterways. As a performance standard, BMPs included in the SWPPP would represent the best available technology that is economically achievable and the best conventional pollutant control technology to reduce pollutants. Commonly practiced BMPs consist of a wide variety of measures that can be implemented to reduce pollutants in stormwater and other nonpoint-source runoff. Permittees would also have to comply with the appropriate water quality objectives for the region. Other measures in the SWPPP would include a range of stormwater control BMPs (e.g., installing silt fences, staked straw wattles, or geofabric to prevent silt runoff to storm drains or waterways). Topsoil and backfill would be stockpiled, protected, and replaced at the conclusion of construction activities. Disturbed soil would be revegetated as soon as possible with the appropriate selection and schedule for turf, plants, and other landscape vegetation.

Stormwater within the Hub Plan area is collected in the City's combined sewer system. The federal Clean Water Act prohibits discharges of stormwater from construction projects unless the discharge is in compliance with a NPDES permit. Accordingly, construction stormwater discharges to the City's combined sewer system would be subject to the requirements of article 4.1 of the San Francisco Public Works Code (supplemented by San Francisco Public Works Order No. 158170). Provisions of article 4.1, referred to as the Sewer Use Ordinance, specify pollutant limitations for the discharge of wastewater into the City's sewerage collection system on a temporary basis. Such temporary, or "batch," discharges may result from dewatering construction sites, drilling wells to investigate or mitigate a contaminated site, using water for cleaning or hydrostatic testing of pipes or tanks, or conducting any other activity that generates wastewater, other than routine commercial or industrial processes. If the dewatered water is discharged to the City's combined sewer system, a batch wastewater discharges permit will need to be obtained. Article 4.1 also incorporates and implements the City's NPDES permit for the Southeast Plant, North Point Wet-Weather Facility, and all of the Bayside wet-weather facilities. This permit also incorporates the requirements of the federal Combined Sewer Overflow (CSO) Control Policy. At a minimum, the City requires project sponsors to develop and implement an erosion and sediment control plan to reduce the impact of runoff from a construction site. The plan must be reviewed and approved by the City prior to implementation. The City conducts periodic inspections to ensure compliance with the plan. Any stormwater drainage during construction that flows to the City's combined sewer system would receive treatment at the Southeast plant or other wet-weather facilities and be discharged

through an existing outfall or overflow structure, in compliance with the City's existing NPDES permit. Where proposed streetscape and street network changes would require excavation, erosion control measures would also be required, in accordance with article 4.1 of the San Francisco Public Works Code.

#### CONSTRUCTION DEWATERING

Construction dewatering in areas with shallow groundwater may be required during excavation activities for subsequent development projects that would be constructed under the Hub Plan and the two individual development projects which could result in exposure to pollutants from spills or other activities that may contaminate groundwater. Compliance with waste discharge requirements (WDRs) requires confirmation that discharges would not necessitate the construction or expansion of existing facilities. WDRs also include regulations specific to dewatering activities. If it is found that the groundwater does not meet water quality standards, it must either be treated, as necessary, prior to discharge so that all applicable water quality objectives (as designated in the Basin Plan) are met or hauled offsite for treatment and disposal at an appropriate waste treatment facility that is permitted to receive such water. If wells are to be used for groundwater dewatering during construction, the project would be required to comply with San Francisco's Soil Boring and Well Regulation Ordinance, adopted as article 12B of the San Francisco Health Code. Compliance with WDRs and other dewatering and groundwater regulations will ensure no violations of any water quality standards or WDRs. Dewatering would be required during construction at 30 Van Ness Avenue and may be required at 98 Franklin Street and during other construction activities occurring under subsequent development projects incentivized by the Hub Plan.

#### GROUNDWATER

Construction activities of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects could result in short-term surface and groundwater quality impacts associated with the input of sediment loads that exceed water quality objectives or chemical spills into storm drains or groundwater aquifers if proper minimization measures are not implemented. However, subsequent development projects incentivized by the Hub Plan as well the two individual development projects would be required to comply with local stormwater and construction site runoff ordinances. These requirements involve development and implementation of a SWPPP, erosion and sediment control plan, and stormwater control plan specific to each project site to minimize water quality impacts related to spills or other activities that could contaminate groundwater. The plans would be developed according to the guidance provided in documents, such as the San

Francisco Public Utilities Commission's SMR and *Construction BMP Handbook*.[264] In addition, subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be required to comply with hazardous material requirements, such as the San Francisco Maher Ordinance for soil and groundwater contamination and Spill Response and Countermeasure Plan (SPCC) requirements, as necessary.

If any groundwater produced during construction dewatering requires discharge to the combined sewer system, the discharge would be conducted in accordance with article 4.1 of the San Francisco Public Works Code, as supplemented by Order No. 158170, which regulates the quantity and quality of discharges to the combined sewer system. The discharge permit would contain appropriate discharge standards and may require installation of meters to measure the volume of the discharge. Although the groundwater could contain contaminants related to past site activities, as discussed in Section E.18, Hazards and Hazardous Materials, as well as sediment and suspended solids, the groundwater would be treated as necessary to meet permit requirements prior to discharge.

Compliance with WDRs and dewatering regulations will ensure that dewatering activities are monitored and treated as required and that no violations of any water quality standards or waste discharge requirements occur. Because subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be required to comply with the regulatory controls described above, potential water quality impacts associated with construction activities and degradation of water quality due to discharge of groundwater during construction would be reduced. In addition, during project operation, groundwater could exert hydrostatic pressure on subsurface vehicular parking or basement levels constructed as part of subsequent development projects under the Hub Plan and the two individual development projects. Permanent dewatering could be required to relieve this pressure.

The proposed streetscape and street network changes would very likely require only shallow excavation and thus would not extend to the groundwater table. In the event that groundwater dewatering would be required, the amount of dewatering would be minimal, and the groundwater would be discharged to the combined sewer system in accordance with article 4.1 of the San Francisco Public Works Code, supplemented by Order No. 158170, as discussed above.

There are no ponds or wetlands within the Hub Plan area. Because surface water features do not exist onsite, construction would not involve work within water features, and dredge and fill activities would not be necessary. Compliance with the local and state regulations would

[264] California Stormwater Quality Association, *Construction BMP Handbook*, 2015, *https://www.casqa.org/resources/bmp-handbooks/construction*, accessed: February 9, 2018.

ensure that water quality standards, as defined by the Basin Plan, would be met; therefore, discharges would not violate any waste discharge requirements or otherwise substantially degrade water quality and would not conflict with or obstruct implementation of a water quality control plan.

As part the site permit process for projects resulting from the Hub Plan and the two individual development projects, an erosion control plan would be prepared. This would typically include strategies such as stabilized construction entrances, fiber rolls, silt fences, and inlet protection. Erosion control measure such as swaddles and storm catch basins would be used in compliance with an approved San Francisco Public Utilities Commission Construction Site Runoff Control permit. In addition, the contractor would follow plans provided by the civil engineer for erosion control.

During construction, the developer would be required to comply with stormwater management requirements of regulatory agencies, such as the RWQCB. Dust control measures would include watering down the site, washing off truck tires, and tarping truck loads. Final measures would be pre-approved in the required Site Mitigation Plan and Dust Monitoring Plan. Measures would be included in the specifications to control dust and spillage that would follow local, state, and federal laws to ensure that the project would not violate any water quality standards or waste discharge requirements.

Stormwater at the 30 Van Ness Avenue project site would be managed differently during different phases of construction. During excavation, runoff is anticipated to be filtered. Groundwater dewatering would also be required, which could produce a large quantity of water that would need to be properly disposed of. At the 98 Franklin Street project site, groundwater testing would be done prior to applying for the project's batch discharge permit. After analyzing the groundwater samples, the San Francisco Public Utilities Commission would determine whether approval of groundwater discharges from the dewatering system would be appropriate. A permit would be obtained from the San Francisco Public Utilities Commission prior to any groundwater discharge. If contamination is detected in the groundwater at levels greater than those established by the San Francisco Public Utilities Commission, groundwater would be properly treated prior to disposal by the contractor.[265]

#### CONCLUSION

Construction activities resulting from subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be required to comply with the regulatory controls described above and would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater

[265] Treadwell & Rollo, A Langan Company, *Environmental Site Characterization, 98 Franklin Street, San Francisco, California*, Project No. 750612301, August 17, 2012.

quality and would not conflict with or obstruct implementation of a water quality control plan. Therefore, potential water quality impacts related to a violation of water quality standards, the degradation of water quality or stormwater runoff, or conflict with or obstruct implementation of a water quality control plan during construction of subsequent development projects and streetscape and street network improvements under the Hub Plan and the two individual development projects, would be ***less than significant***.

**Mitigation:** None required.

## OPERATION

Subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would involve operation and maintenance of residential uses, office and retail uses, and active public spaces, along with associated structured vehicular parking, open space, and landscaping. These land uses and operational activities could increase existing or generate new levels of potential pollutants of concern within the project area, such as trash, sediments, pesticides, bacteria, nutrients, metals, oils, and other toxins. These pollutants could reach surface waters in the vicinity through storm drains and ultimately discharge into San Francisco Bay.

Operation and maintenance activities associated with projects resulting from the Hub Plan and the two individual development projects would generate pollutants of concern from landscape maintenance, building maintenance, the storage of materials and substances, and vehicle use. In addition, restaurant uses can result in additional pollutants, such as organic materials (food waste) and oil and grease. However, good housekeeping practices, such as regular trash collection and sweeping, would continue to be implemented onsite.

Runoff from impervious surfaces could contain nonpoint pollution sources that are typical of urban settings. These are normally associated with automobiles, trash, cleaning solutions, and landscaped areas. Stormwater would be drained by new and exisiting pipes, drainage inlets, and other storm drain facilities, which would be connected to the existing combined sewer system that serves the Hub Plan area. All flows from the Hub Plan area would be treated at one of San Francisco's three wastewater treatment facilities, such as the Southeast plant or other wet-weather facility, prior to discharge through an existing outfall or overflow structure to the Bay.

The Hub Plan would include streetscape improvements and create public spaces. Stormwater management measures would rely on low-impact development (LID) techniques, such as green roofs, pervious pavement, rain gardens, or bio-retention areas, to reduce pollutant discharges. Stormwater management measures would be designed according to the SMR and comply with the SMR sizing criteria. The subsequent development projects incentivized by the Hub Plan, including the streetscape and street network improvements as well as the two individual development projects, would comply with the SMR for the management of stormwater prior to

discharge to the combined sewer system maintained by the San Francisco Public Utilities Commission. The Hub Plan and the two individual development projects would be designed to achieve compliance with San Francisco Public Utilities Commission SMR performance requirements, based on the capacity of the combined sewer system available in the Hub Plan area.

Compliance with the SMR would ensure that the Hub Plan and the two individual development projects would be in compliance with the stormwater requirements established by the San Francisco Public Utilities Commission. During operation at 30 Van Ness Avenue and 98 Franklin Street, the projects would comply with San Francisco stormwater management and non-potable water ordinances through a combination of landscaped areas, green roofs, rainwater harvesting, gray water collection, and dual plumbing. Both the Stormwater Management Ordinance and the Non-Potable Water Program requirements would apply to these projects. Furthermore, operation of the two indivual development projects would conform to the stormwater management requirements of the San Francisco Public Utilities Commission and any other regulatory agencies, such as the RWQCB. Therefore, potential surface water quality impacts from operation of the subsequent development projects incentivized by the Hub Plan and the two individual development projects, would be ***less than significant***.

**Mitigation:** None required.

**Impact HY-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a sustainable groundwater management plan. (Less than Significant)**

## CONSTRUCTION

Groundwater beneath the Hub Plan area ranges from approximately 10 to 23 feet bgs, with the potential for areas of shallow or perched groundwater from rainwater infiltration and/or landscaping irrigation (or other near-surface sources) throughout the area. Within the Hub Plan area, shallow groundwater within a USGS groundwater well was present at a depth of approximately 4 to 7 feet in the vicinity of Market and Oak streets.[266] Although groundwater is present in the Hub Plan area, there is no sustainable groundwater management plan for this groundwater basin.

[266] Cornerstone Earth Group, *Preliminary Geotechnical Investigation, Market & Oak Street Residential Development Project*, Number 206-15-2, January 23, 2013.

The maximum excavation depth may vary across the Hub Plan area, depending on project design and features, such as underground vehicular parking or basements. Construction dewatering in areas of shallow groundwater may be required during excavation activities, which could result in a temporary reduction in groundwater volumes. In the event that groundwater is encountered during construction, dewatering would be conducted on a one-time or temporary basis during the construction phase but would not result in a loss of water that would substantially decrease groundwater supplies or conflict with or obstruct implementation of a sustainable groundwater management plan. If wells are to be used for groundwater dewatering during construction, projects would be required to comply with San Francisco's Soil Boring and Well Regulation Ordinance. Approval from the Department of Toxic Substances Control must be obtained prior to excavation or other soil-disturbing activities to reduce impacts on groundwater sources. In addition, dewatering would not decrease groundwater resources because the Downtown Basin is not used for water supply, and there are no plans for development of this basin for groundwater production. The water supply for construction (e.g., concrete mixing, material washing) would most likely come from nearby hydrants and/or be trucked to the site. San Francisco Public Works Code article 21 restricts the use of potable water for soil compaction and dust control activities undertaken in conjunction with any construction or demolition project occurring within the boundaries of the city, unless permission is obtained from the San Francisco Public Utilities Commission. Non-potable water must be used for soil compaction and dust control activities during project construction or demolition. Recycled water is available from the San Francisco Public Utilities Commission for dust control on roads and streets. The San Francisco Public Utilities Commission operates a recycled water truck-fill station at the Southeast Water Pollution Control Plant that provides recycled water for these activities. However, per state regulations, recycled water cannot be used for demolition, pressure washing, or dust control through aerial spraying.

Repaving, construction of wider sidewalks and sidewalk bulb-outs, and the installation of mid-block crosswalks would be included in the proposed streetscape and street network changes. However, the proposed streetscape and street network changes would not include construction of new structures that would extend below the groundwater table or increase the amount of impervious surfaces.

Groundwater at the 30 Van Ness Avenue project site is anticipated to be approximately 20 feet bgs but could range from 15 to 25 feet bgs; therefore, excavation may extend to groundwater. Dewatering will most likely be required. The presence of the BART/Muni tunnels and Van Ness Station south of the site would affect the selection of foundation, shoring, and dewatering systems for the proposed development at 30 Van Ness Avenue. BART restricts groundwater lowering to no more than 2 feet at its facilities; therefore, a cutoff wall would be used for shoring if this condition occurs. To reduce the drawdown of groundwater outside the 30 Van Ness Avenue site (i.e., along Market Street, next to BART), a relatively impervious shoring wall

would be used, extending at least 25 feet below the bottom of excavation. The actual depth would be determined during the final geotechnical investigation.[267] Currently, the 30 Van Ness Avenue project site is 100 percent impervious, and there is no potential for ground recharge. However, groundwater recharge could be improved with the implementation of new pervious surfaces at the 30 Van Ness Avenue project site.

The depth of groundwater at the 98 Franklin Street project site ranges from 15 to 20 feet bgs; dewatering may be required during construction. Similar to the 30 Van Ness Avenue Project, the BART/Muni tunnels southeast of the site may affect the selection of foundation, shoring, and dewatering systems for the proposed development. Dewatering would be monitored to detect changes in the groundwater level. If the existing groundwater level is expected to drop by more than 2 feet, a recharge program would be required.[268] Currently, the 98 Franklin Street project site is 100 percent impervious; there is no potential for groundwater recharge. The proposed project at 98 Franklin Street would result in a similar amount of impervious surfaces on the site after removing the existing surface vehicular parking lot and developing the site with a building that would not include any permeable surfaces, resulting in no change to groundwater recharge.

#### CONCLUSION

During construction activities for subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be required to comply with the regulatory controls described above. They would not substantially decrease groundwater supplies, interfere substantially with groundwater recharge, or conflict with or obstruct implementation of a sustainable groundwater management plan. Potential groundwater impacts associated with construction activities and degradation of the groundwater supply would be ***less than significant***.

**Mitigation:** None required.

### OPERATION

Natural groundwater recharge in the Downtown Basin occurs primarily from the infiltration of rainfall, landscape irrigation, or leakage from sewer pipes. New impervious areas can reduce infiltration capacities so that more precipitation runs off into storm sewers or nearby surface waters instead of infiltrating and recharging the underlying aquifer. However, implementation of the Hub Plan and the two individual development projects would not interfere with

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[267] Langan Engineering and Environmental Services, Inc., *Preliminary Geotechnical Study 30 Van Ness Avenue*. Langan Project No. 73166790, July 7, 2017.

[268] Treadwell & Rollo, A Langan Company, *Preliminary Geotechnical Evaluation, 98 Franklin Street, 59 Oak Street, and 1576 Market Street, Project 750612301*, July 3, 2012.

groundwater recharge because, under existing conditions, the Hub Plan area is almost completely covered with impervious surfaces. Projects constructed pursuant to the Hub Plan, as well as the two individual development projects, would not increase impervious surface coverage or otherwise reduce infiltration or the size of groundwater recharge areas.

During project operation, groundwater could exert hydrostatic pressure on subsurface vehicular parking or basement levels constructed as part of subsequent development projects under the Hub Plan or the two individual development projects. Permanent dewatering could be required to relieve this pressure.

The Hub Plan area, including the streetscape and street network improvements, and the two individual development projects would include public open spaces. Stormwater controls implemented pursuant to article 4.2 of the San Francisco Public Works Code and the SMR could include stormwater BMPs to promote the infiltration of stormwater, such as decreasing the amount of existing impervious surfaces, which may increase recharge to the groundwater basin. The proposed individual developments at 30 Van Ness Avenue and 98 Franklin Street would include 32,580 and 33,940 square feet, respectively, of new open space. Open space would include courtyards, plazas, roof decks, balconies, and public mews with features such as plantings and landscaped plazas. New open space would allow for an increase in groundwater recharge potential, depending on the type of open space and design feature. Stormwater treatment areas, such as on-grade stormwater planters, permeable pavers, and other landscape features, would also be included, allowing for increased groundwater infiltration. Operation of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not use groundwater supplies or increase groundwater demand; therefore, operations would not substantially decrease groundwater supplies or conflict with or obstruct implementation of a sustainable groundwater management plan. The impact of the subsequent development projects incentivized by the Hub Plan and the two individual development projects, on groundwater supplies and recharge would be ***less than significant***.

**Mitigation:** None required.

**Impact HY-3: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation onsite or offsite. (Less than Significant)**

## CONSTRUCTION

Construction activities from subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would include implementation of BMPs, as described in the respective project's SWPPP, to minimize the potential for erosion and

sedimentation in nearby storm drains and temporary changes in drainage during construction. For example, exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways would be enclosed and covered. Efforts would be made by the contractor to conduct the majority of land-disturbing work outside of the typical wet season and minimize the potential for large rain events to mobilize loose sediment during construction.

Where possible, soil excavated onsite would be stockpiled onsite for reuse where required. However, soil import and export would be necessary during demolition, grading, and building phases. For projects that disturb more than 5,000 square feet, an erosion and sediment control plan must be submitted, further reducing the potential for substantial erosion or siltation onsite/offsite because the erosion and sediment control plan would comprise a site-specific plan that would detail the use, location, and placement of sediment and erosion control devices. All subsequent development projects incentivized in the Hub Plan area as well as the sites for the two individual development projects would be required to comply with existing requirements and the City's Construction Site Runoff Control Ordinance. The NPDES permit requires stormwater discharges not to contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards, including designated beneficial uses of surface waters. The monitoring requirements for San Francisco Public Works Code (article 4.1) and other city inspections would help determine whether the installed and maintained BMPs would prevent pollutants that may cause or contribute to an exceedance of water quality standards from being discharged from the site. There are no streams or rivers within the Hub Plan area; therefore, subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not alter the course of an existing stream or river.

Repaving, construction of wider sidewalks and sidewalk bulb-outs, and the installation of mid-block crosswalks would be conducted as part of the Hub Plan's proposed streetscape and street network changes. However, the proposed streetscape and street network changes would not include construction of any facilities that would increase the amount of impervious surfaces or change stormwater flows to the combined sewer system. Therefore, construction impacts under the Hub Plan and the two individual development projects, related to the alteration of drainage patterns in a manner that would result in erosion or siltation would be ***less than significant***.

**Mitigation:** None required.

## OPERATION

Currently, the Hub Plan area is almost entirely paved or otherwise covered with impervious surfaces. Although drainage patterns in the Hub Plan area would be altered, drainage would ultimately be improved. Replacement of impervious surfaces as part of development projects

that could be proposed and approved pursuant to the Hub Plan would not increase the rate, duration, or quantity of stormwater because these projects would implement stormwater control measures required by article 4.2 of the San Francisco Public Works Code and the SMR. In addition, the Hub Plan and the two individual development projects would incorporate new open spaces. As noted previously, the proposed individual development projects at 30 Van Ness Avenue and 98 Franklin Street would include 32,580 and 33,940 square feet, respectively, of new open space. The conversion of existing, largely impervious areas to additional new open space would allow for an increase in pervious surfaces within the Hub Plan area. Additionally, stormwater treatment areas, such as bio-retention areas, on-grade stormwater planters, and other landscape features, would provide additional pervious surfaces and minimize runoff, erosion, and siltation.

Operation of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would also require soil stabilization (e.g., vegetation or other protective cover, stabilized slopes and fills) in accordance with San Francisco stormwater requirements. With implementation of LID features, such as bio-retention areas, permeable pavers, and additional open space, the potential for erosion and siltation under the Hub Plan and at the two individual development projects would be reduced. In addition, operations under the Hub Plan and the two individual development projects would not alter the course of an existing stream or river because these features do not exist onsite. Therefore, impacts related to substantial erosion or siltation onsite or offsite from project alterations to existing drainage patterns would be ***less than significant***.

**Mitigation:** None required.

**Impact HY-4: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, or substantially increase the rate or amount of surface runoff in manner that would result in flooding onsite or offsite. (Less than Significant)**

## CONSTRUCTION

Project construction activities under subsequent development projects incentivized by the Hub Plan as well as the two individual development projects may alter existing drainage patterns and result in temporary increases in the rate or amount of local surface runoff (onsite) and temporary flooding. Stormwater would be conveyed to the existing combined stormwater system that serves the Hub Plan area and the individual project sites. In the event of a storm, an overland release, the combined stormwater system, or street grading would convey stormwater runoff.

Repaving, construction of wider sidewalks and sidewalk bulb-outs, and the installation of mid-block crosswalks would be conducted as part of the Hub Plan's proposed streetscape and street network changes. However, the proposed streetscape and street network changes would not include construction of any facilities that would increase the amount of impervious surfaces or change stormwater flows to the combined sewer system.

Although drainage patterns within the Hub Plan area and on the individual project sites would be altered, drainage would ultimately be improved because implementation of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would result in new drainage infrastructure and connections to the existing combined stormwater system that serves the area. Preparation and implementation of the project SWPPP would reduce the potential for flooding onsite and offsite as a result of altering existing drainage patterns or substantially increasing the rate or amount of runoff. As part of the SWPPP, erosion and sediment control measures, such as silt fences and straw wattles to prevent sediment from entering storm drains and surface waters, would be implemented during construction. Construction within the Hub Plan area and at the two individual development project sites would be required to comply with existing NPDES permit requirements and the City's Construction Site Runoff Control Ordinance. In addition, the SWPPP is required to include a description of all post-construction BMPs. Preparation and implementation of the grading plan and the SWPPP would reduce the potential for a substantial increase in the rate or amount of runoff as well as the potential for flooding onsite or offsite. Each subsqeuent individual development project approved under the Hub Plan, including the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would be required to comply with local and regional stormwater management requirements to effectively manage stormwater, including addressing the full suite of storm events, consideration of water quality, overbank flood protection, and extreme flood protection. Through compliance with these regulations, this impact would be ***less than significant***.

**Mitigation:** None required.

## OPERATION

Surface runoff within the Hub Plan area would be collected by the combined sewer system and comply with performance requirements, which would be based on existing site imperviousness. For future projects within the Hub Plan area, with existing imperviousness greater than 50 percent, the stormwater runoff rate and volume must be reduced by 25 percent relative to pre-development conditions for the 2-year, 24-hour design storm. The project design would incorporate soil stabilization measures (e.g., vegetation and other protective cover, stabilized slopes and fills) as part of stormwater management measures, in accordance with San Francisco stormwater requirements. LID techniques within the Hub Plan area, such as bio-retention areas and permeable pavers, would allow for infiltration and minimize runoff volumes as well as the potential for ponding and onsite or offsite flooding during rain events. Because subsequent

development projects incentivized by the Hub Plan as well as the two individual development projects would involve the creation and/or replacement of 5,000 square feet or more of impervious surface, the subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be subject to San Francisco's stormwater management requirements, as outlined in the the SMR, including the Combined Sewer Area Performance Requirements.

The projects at 30 Van Nees Avenue and 98 Franklin Street would be subject to regulations and design criteria to reduce potential flooding impacts associated with alterations to drainage patterns. Stormwater flows and retention would meet existing requirements. The two proposed individual development projects would also provide new plantings and street trees, in accordance with the Better Streets Plan. Because the project sites are in an area with a combined sewer system, pipe capacity is dependent on the amount of stormwater runoff from the sites that would be added to the system. This quantity would represent how much impervious area the proposed site would have and how much of the stormwater runoff would be detained or reused onsite. Capacity would need to be confirmed with the San Francisco Public Utilities Commission's Collection Systems Division. In addition, because the proposed improvements would be likely to disturb more than 5,000 square feet of impervious surface and the site uses a combined sewer system, the San Francisco Public Utilities Commission's Urban Watersheds Division would require a stormwater control plan that follows criteria similar to that for LEED Credit 6.1. This states that a stormwater management plan and design that results in a 25 percent decrease in the volume and peak flow of stormwater runoff from the 2-year, 24-hour design storm must be created. There are several different methods for accomplishing this goal, such as using landscaping and pervious paving or capturing stormwater in a tank system for treatment and non-potable reuse. Such designs are based on the proposed amount of impervious area and the proposed site layout.

The two individual development projects must prepare stormwater control plans, demonstrating project adherence to the performance measures outlined in the SMR, including a reduction in the total volume and peak flow rate of stormwater in areas with combined sewer systems. Therefore, impacts related to altering existing drainage patterns or substantially increasing the rate or amount of runoff would be ***less than significant***.

**Mitigation:** None required.

**Impact HY-5: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street and, would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)**

## CONSTRUCTION

During construction under subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, projects would be required to meet several criteria (e.g., stormwater control plan, erosion and sediment control plan, Construction Site Runoff Ordinance). To meet these criteria, projects would be designed for the 2-year, 24-hour storm event, and BMPs would be implemented to control construction site runoff and pollutants, reduce the discharge of pollution to the combined stormwater system, and ensure sufficient storm drain capacity for subsequent development projects incentivized by the Hub Plan as well as the two individual development projects. The subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not create or contribute runoff that would exceed the capacity of the existing stormwater drainage systems or provide substantial additional sources of polluted runoff. In addition, the proposed streetscape and street network changes would not include construction of any facilities that would increase the amount of impervious surfaces or change stormwater flows to the combined sewer system. Therefore, the impact associated with project construction under the Hub Plan and the two individual development projects, would be ***less than significant***.

**Mitigation:** None required.

## OPERATION

Subsequent development projects that discharge stormwater to the combined sewer system must comply with article 4.2 of the San Francisco Public Works Code. In accordance with the SMR, development projects that could be proposed and approved pursuant to the Hub Plan, including the two individual development projects, and disturb more than 5,000 square feet of land would be required to implement low-impact design stormwater control measures to achieve the standards specified in LEED® SS6.1 (Stormwater Design: Quantity Control) to minimize the flow and volume of stormwater to the combined sewer system. For sites with more than 50 percent impervious surfaces, such as the Hub Plan area and the sites for the two individual development projects, the project sponsor must implement a stormwater management plan that results in a 25 percent decrease in the volume of stormwater runoff from the 2-year, 24-hour design storm compared with conditions without a management plan. The existing Hub Plan area and the sites for the two individual development projects are covered predominantly by impervious surfaces; therefore, the amount of new impervious surfaces due to development projects under the Hub Plan and the two individual

development projects, would be minimal and would not increase stormwater runoff rates and volumes because the areas are already developed. The majority of projects would be required to achieve a 25 percent reduction in stormwater flows.[269]

Designs for subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would include stormwater management measures, such as bio-retention, on-grade stormwater planters, and additional open space, which would reduce the volume of runoff entering the storm sewer system. Subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would be designed to meet the SMR and required to implement stormwater treatment measures to meet the guidelines prior to connecting to the combined sewer system. Implementation of stormwater controls for individual projects developed pursuant to the Hub Plan and the two individual development projects, in accordance with the SMR, would reduce the quantity and rate of stormwater runoff to the City's combined sewer system and improve the water quality of those discharges. Runoff water from subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not exceed the capacity of the existing combined stormwater system and would not provide substantial additional sources of polluted runoff. This impact would be ***less than significant***.

**Mitigation:** None required.

**Impact HY-6: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not impede or redirect floodflows. (No Impact)**

The Hub Plan seeks to encourage housing through changes to current zoning controls, which would include changes to building heights for select sites to allow more housing. However, as noted under Setting, the Hub Plan area, including the two individual development project sites, are outside of a Special Flood Hazard Area, as indicated by San Francisco Interim Floodplain maps adopted by the City. Therefore, housing and structures would not be placed within a 100-year flood hazard zone and would not impede or redirect floodflows. The Hub Plan and project-specific development would not exacerbate flood impacts.

The Hub Plan area is predominantly impervious. Design features such as additional open spaces would reduce the amount of impervious area, thereby reducing floodflows. Subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not result in additional stormwater discharges or other discharges that would

[269] For sites with less than 50 percent impervious surfaces, this standard requires project sponsors to implement a stormwater management plan to prevent the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the 2-year 24-hour design storms. However, this condition would apply to few, if any, sites in the Hub Plan area.

increase the frequency or severity of flooding. Subsequent development projects incentivized by the Hub Plan would be designed in accordance with applicable regulations, including the SMR, and a stormwater control plan.

All new developments are required to ensure that flooding would not increase and floodflows would not be redirected to areas that are not currently prone to flooding. Development within the Hub Plan area would not impede flows. There would be no changes with respect to existing buildings impeding or redirecting floodflows. In addition, development within the individual project sites would not impede stormwater flows. Furthermore, as indicated on the San Francisco Public Utilities Commission inundation maps, the Hub Plan area and the sites for the two individual development projects are not at risk of flooding with mid-century SLR in addition to a 100-year storm surge or end-of-century SLR in addition to a 100-year storm surge.[270] Therefore, subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would not place housing or structures within a 100-year flood zone, exacerbate the frequency or severity of flooding, cause flooding in areas with housing that otherwise would not be subject to flooding, or impede or redirect floodflows without the Hub Plan or the two individual development projects, and there would be ***no impact***.

**Mitigation:** None required.

**Impact C−HY−1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with past, present, and reasonably foreseeable future projects in the vicinity, would not contribute considerably to cumulative impacts on hydrology and water quality (Less than Significant).**

The geographic context for the analysis of cumulative impacts associated with surface hydrology and water quality is the Visitacion Valley-Frontal San Francisco Bay Estuaries subwatershed. The context for groundwater hydrology is the Downtown Basin of the larger San Francisco Bay Hydrologic Region. The Visitacion Valley-Frontal San Francisco Bay Estuaries subwatershed is considered already built out. Consequently, potential growth would most likely occur as redevelopment and not extensive new development on vacant land or open space. The context for cumulative hydrology and water quality impacts is geographic and a function of whether impacts could affect surface water features/watersheds, the city's storm drainage system, or groundwater, each of which has its own physical boundary. This analysis accounts for anticipated cumulative growth within the potentially affected geographic area.

[270] San Francisco Public Utilities Commission, *Climate Stressors and Impact: Bayside Sea Level Rise Mapping Final Technical Memorandum*, 2014.

Development incentivzed by the Hub Plan as well as the two individual development projects, combined with other past and future development or redevelopment within the potentially affected geographic area, could degrade stormwater quality through an increase in impervious surface area and an increase in contaminated runoff. This could ultimately violate water quality standards, affect beneficial uses, and/or further impair 303(d)-listed waters within the Visitacion Valley-Frontal San Francisco Bay Estuaries subwatershed (of the larger San Francisco Bay watershed) and the Downtown Basin. The quality of stormwater runoff varies with surrounding land uses, topography, and the amount of impervious cover as well as the intensity (energy) and frequency of irrigation or rainfall. Other development could affect water quality if the land use changes, the intensity changes, and/or drainage conditions are altered to facilitate the introduction of pollutants to surface or groundwater resources. During construction, runoff may contain sediments and other construction materials and wastes, resulting from activities such as site clearing and grubbing, demolition, grading and excavation, paving, building construction, and landscaping. During operation in urban areas, street surfaces are the primary source of pollutants, which may include oil, grease, and metals that accumulate in streets as well as pesticides, particulate matter, nutrients, and animal waste from landscaped areas.

Implementation of appropriate regulatory requirements would ensure that subsequent development projects incentivized by the Hub Plan as well as the two individual development projects would result in less-than-significant impacts related to erosion, stormwater discharges to the combined sewer system, alteration of drainage patterns, storm sewer system capacity, and flooding under existing conditions. The applicable regulations, which have been developed to protect water quality, as defined in the Basin Plan, require implementation of stormwater BMPs. Construction of nearby projects would be subject to the requirements of the San Francisco Public Utilities Commission's Construction Site Runoff Ordinance, which would prevent short-term (construction) impacts on water quality. Compliance with article 4.1 of the San Francisco Public Works Code and public works Order No. 158170 (including implementation of an erosion control plan) would ensure that all discharges to the combined sewer system would comply with the City's NPDES permit for the Southeast Plant, North Point Wet-Weather Facility, and Bayside wet-weather facilities and would not result in a violation of water quality standards.

Compliance with article 4.2 of the San Francisco Public Works Code and Stormwater Design Guidelines by all future development projects would also ensure that cumulative impacts related to the alteration of drainage patterns or an exceedance of storm sewer capacity would be less than significant. This is primarily because most projects would be required to reduce stormwater flows from the site by 25 percent.

Most reasonably foreseeable projects in the Downtown San Francisco groundwater basin would be redevelopment or infill projects in highly urbanized areas where recharge would not occur. Future development projects would be required to implement LID stormwater controls to improve the infiltration of stormwater, as required by the San Francisco Stormwater Design Guidelines, which may increase groundwater recharge to the groundwater basin. Furthermore, a reduction in the amount of impervious area and increased groundwater recharge would reduce floodflows.

Groundwater within the Downtown Basin is not used for water supply. Therefore, the water supply necessary for construction and operation of other development projects would not reduce the volume of groundwater within the Downtown Basin. Because of the lack of groundwater use and the presence of existing impervious surfaces in the area, impacts related to implementation of the Hub Plan and the two individual development projects would not be cumulatively considerable and would be less than significant with respect to any potential cumulative loss of groundwater recharge and supply.

Because the Hub Plana nd the two individual development projects, as well as other foreseeable projects in the vicinity, would be required to comply with regulations, cumulative impacts related to hydrology and water quality would be ***less than significant***.

**Mitigation:** None required.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **18.** | **HAZARDS AND HAZARDOUS MATERIALS. Would the project:** | | | | | |
| a) | Create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) | Create a significant hazard for 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 involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ | ☐ |
| d) | Be located on a site that 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 for 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 or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☐ | ☒ |
| f) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ | ☐ |
| g) | Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ☐ | ☐ | ☐ | ☒ |

None of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, are within an airport land use plan area, nor are they within two miles of a public airport or public use airport. In addition, the Hub Plan, the sites for the two individual development projects, and Hub HSD are surrounded by urban development. They are not mapped as being in or adjacent to a Very High Fire Hazard Severity Zone.[271] Therefore, topics 18f and 18h are not applicable to any of the project's components and will not be addressed further in the initial study.

[271] California Department of Forestry and Fire Protection, *Draft Fire Hazard Severity Zones in LRA: San Francisco County, http://frap.fire.ca.gov/webdata/maps/san_francisco/fhszl06_1_map.38.pdf, a*ccessed: March 3, 2018.

# SETTING

## CURRENT AND HISTORIC LAND USES

### THE HUB PLAN AND HUB HSD

The Hub Plan area, which includes the Hub HSD, is a large geographic area that is heavily developed with a variety of land uses with a history of hazardous materials use. This variation in land uses (particularly industrial and commercial land uses) and history of hazardous materials use can lead to hazardous materials impacts.

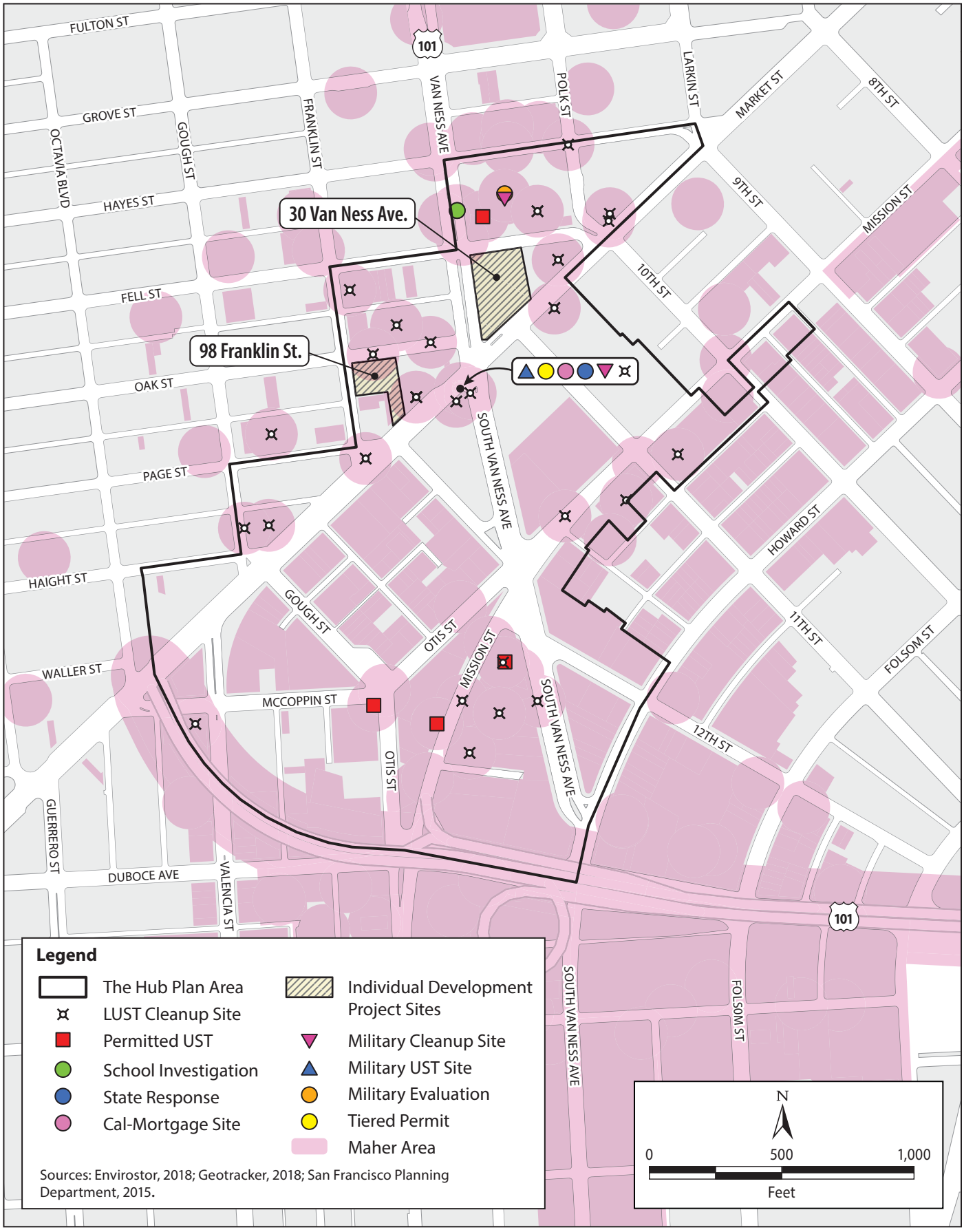
Industrial land uses (e.g., automotive repair, construction services), such as those found throughout the Hub Plan area, can encompass a wide range of business operations with the potential to result in hazardous materials impacts. Industrial facilities store hazardous materials in underground storage tanks (USTs), aboveground storage tanks, and in designated storage locations. Age and improper storage tank maintenance in the Hub Plan area have been the common causes for soil and groundwater contamination. In addition, improper handling and storage of hazardous material containers can lead to hazardous material incidents.

Commercial land uses found in the Hub Plan area include vehicle repair sites, gasoline fueling stations, and dry-cleaning facilities. Similar to industrial facilities, some commercial sites often store hazardous materials in storage tanks or designated areas within the facility. Hazardous materials spills and leaks in vehicle repair and fueling locations can lead to hydrocarbon-contaminated soil and groundwater. Improper storage and use of hazardous materials in dry cleaning facilities can lead to contaminated soil and groundwater.

A review of the SWRCB's GeoTracker and the Department of Toxic Substances Control's (DTSC's) EnviroStor websites identified a total of 25 leaking underground storage tank (LUST) cleanup sites, four permitted UST sites, one School Investigation site, one Military Evaluation site, two Military Cleanup sites, one Military UST site, one Tiered Permit site, one State Response site, and one Cal-Mortgage site within the Hub Plan area. Some facilities can be found in multiple databases; therefore, the actual number of facilities can be less than the total number of sites denoted (sites identified during the database review are mapped in **Figure E.18-1**).

The database definitions are as follows:

- **LUST Cleanup Sites**: Includes all UST cleanup sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance, usually fuel hydrocarbons, and are being (or have been) cleaned up. LUST cleanup sites consist almost entirely of fuel-contaminated LUST cleanup sites (also known as leaking underground fuel tank, or LUFT, sites), which are regulated pursuant to Title 23 of the California Code of Regulations, chapter 16, article 11.
- **Permitted UST Sites**: Includes facilities at which the owner or operator has been issued a permit to operate one or more USTs by the local permitting agency.

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The Hub Plan, 30 Van Ness Avenue Project, 98 Franklin Street Project, and Hub Housing Sustainability District (HSD)

Case Nos. 2015-000940ENV, 2017-008051ENV, 2016-014802ENV

**Figure E.18-1**
**Location of Sites Identified by Hazardous Materials Database Review**

- **School Investigation Sites**: Identifies proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. School sites are further defined as Cleanup (remedial action occurred) or Evaluation (no remedial action occurred) sites, based on completed activities. All proposed school sites that will receive state funding for acquisition or construction are required to go through a rigorous environmental review and cleanup process under DTSC's oversight.
- **Military Evaluation Sites**: Identifies suspected but unconfirmed contaminated military sites that need to go through or have gone through a limited investigation and assessment process. If a site is found to have confirmed contamination, it will change from an Evaluation site to either a State Response or Voluntary Cleanup site. Sites that have no contamination at the completion of the limited investigation and/or assessment process receive a No Action Required (for phase I assessments) or No Further Action (for preliminary environmental assessments or phase II assessments) determination.
- **Military Cleanup Sites**: Includes all cleanup sites on existing military bases (or to be transferred). Military Cleanup sites include a wide range of discharges but are regulated primarily under Resource Conservation and Recovery Act (RCRA)/Comprehensive Environmental Response, Compensation, and Liability Act standards by each of the nine RWQCBs.
- **Military UST Site**: Includes all petroleum-related LUST cleanup sites on existing military bases (or to be transferred) and regulated by the SWRCB and/or one of the nine RWQCBs. Military LUST are thus regulated under Title 23 of the California Code of Regulations, chapter 16, article 11.
- **Tiered Permit Site**: Refers to a corrective action cleanup project at a hazardous waste facility that was either eligible to treat or permitted to treat waste under the Tiered Permitting System. Facilities in this category fall under the Permit by Rule tier or Conditionally Authorized or Exempt tiers.
- **State Response Site**: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority sites with high potential risk.
- **Cal-Mortgage**: Refers to properties where DTSC performs environmental assessments for the Office of Statewide Planning and Development, Cal-Mortgage Loan Insurance Division, a sister agency and part of the real estate due diligence process under a memorandum of understanding for a guaranteed loan insurance program for construction, improvement, and expansion of various health care facilities.

### 30 VAN NESS AVENUE

By 1886, the 30 Van Ness Avenue property was developed with small stores and stables. The first and second floors of the existing building at 30 Van Ness Avenue were constructed in 1908; floors three through five were constructed above the original structure in 1964. From as early as 1910, the building housed a paint and varnish company. By 1913, and most likely continuing through at least the 1930s, the building was an auto sales/repair facility and a print shop. From the 1940s to the present, the building was used primarily as retail and office space.

The phase I environmental site assessment (ESA) prepared for the 30 Van Ness Avenue project site identified a Recognized Environmental Condition (REC) because the northwest corner of the site is within a Maher area.[272] The Maher Ordinance is discussed in more detail in the Regulatory Framework for Onsite Hazardous Materials section of HZ-2, below.

Because of the age of the building (1908, with additions in 1964), the phase I ESA[273] noted that asbestos-containing material (ACM) and lead-based paint (LBP) are likely to be present. An asbestos and lead materials assessment[274] was prepared in February 2017. During the assessment, ACMs were identified in several areas, including resilient floor tiles, floor mastic, black pipe insulation, wall and ceiling textures, wall panels, and joint compound. In addition, other materials were presumed to contain asbestos. LBP was identified in ceramic floor tiles, restroom stall dividers, hallway paint, wallboards, and concrete columns. Lead-containing paint was identified in ceramic floor tiles, wall paint (of various colors) throughout building, paint on concrete in some areas, and paint on doors throughout building.

### 98 FRANKLIN STREET

Historically, the 98 Franklin Street site was occupied by residential dwellings, stores, auto repair shops, a mattress factory, offices, and a self-service gasoline station (from approximately 1949 to 1965).

According to the phase I ESA[275] prepared for the 98 Franklin Street project site, the site is in an area with artificial fill that is known to contain various contaminants from unknown sources. The fill material (from the surface to 14 feet bgs) is composed of loose to medium-dense silty

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[272] The Maher area includes areas that are currently or were previously zoned as industrial; areas with current or previous industrial land uses; areas within 150 feet of U.S. 101, I-80, or I-280; areas of bay fill; areas within 100 feet of a known hazardous waste site; and areas within 100 feet of an underground storage tank.

[273] AllWest Environmental, Inc., *Phase I Environmental Site Assessment: The Herbst Building, 26–90 Van Ness Avenue and 1484–1496 Market Street, San Francisco, California*, March 28, 2015.

[274] AllWest Environmental, Inc., *Asbestos and Lead Materials Assessment: 30 Van Ness, San Francisco, California 94103*, February 9, 2017.

[275] Treadwell & Rollo, *Phase I Environmental Site Assessment: 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, August 16, 2012.

sand with varying amounts of brick, wood, metal, and glass fragments. The fill material underlying the project site is very likely associated with the 1906 earthquake and resulting fire. Elevated levels of metal and petroleum hydrocarbons were identified at other properties in the area with the same fill material. Therefore, the potential exists for onsite soil to contain elevated concentrations of heavy metals, diesel fuel, motor oil, and polycyclic aromatic hydrocarbons.[276]

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. The proposed rezoning would be done to allow and incentivize more housing, including below-market-rate housing, within the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on hazards and hazardous materials could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect hazards and hazardous materials; therefore, they are analyzed on a project-specific level. Therefore, this section evaluates potential hazards and hazardous materials impacts that would result from the increase in density and construction due to implementation of the Hub Plan and Hub HSD and from implementation of the two individual development projects.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural

[276] Treadwell & Rollo, *Environmental Site Characterization: 98 Franklin Street, San Francisco, California*, August 17, 2012.

change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

The following analysis is based on information from the following data sources:

- The aforementioned reports prepared for the two individual project sites
- SWRCB's GeoTracker website (for the Hub Plan area)277
- DTSC's EnviroStor website (for the Hub Plan area)[278]

## IMPACTS AND MITIGATION MEASURES

**Impact HZ-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant)**

The following discussion presents the relevant regulatory framework for evaluating the handling of hazardous materials, followed by an impact discussion.

### REGULATORY FRAMEWORK FOR HAZARDOUS MATERIALS HANDLING

The following regulations and articles from the San Francisco Health Code, implemented by the public health department, apply to the handling and storage of hazardous materials:

- **SWPPP** – See definition of SWPPP in Section E.17, Hydrology and Water Quality.
- **Article 21** – Provides for safe handling of hazardous materials in the city. It requires any person or business who handles, sells, stores, or otherwise uses specified quantities of hazardous materials to keep a current certificate of registration and implement a hazardous materials business plan. A special permit is required for USTs. This article also incorporates state regulations controlling underground storage tanks.
- **Article 21A** – Provides for safe handling of federally regulated hazardous, toxic, and flammable substances in the city, requiring businesses that use these substances to register with the public health department and prepare a risk management plan that includes an assessment of the effects of an accidental release and programs for preventing and responding to an accidental release.

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277 State Water Resources Control Board, *GeoTracke*r, 2015, *https://geotracker.waterboards.ca.gov/*, accessed: July 15, 2019.

278 Department of Toxic Substances Control, *EnviroStor*, 2018a, *http://www.envirostor.dtsc.ca.gov/public/*, accessed: July 15, 2019.

- **Article 22** – Provides for safe handling of hazardous wastes in the city. It authorizes the public health department to implement state hazardous waste regulations. It gives the public health department the authority to conduct inspections and document compliance.

## CONSTRUCTION

Construction activities associated with subsequent development projects incentivized by the Hub Plan as well as the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street would involve the routine transport, use, and disposal of hazardous materials such as fuel, solvents, paints, oils, grease, and caulking. Construction activities associated with implementation of streetscape improvements would involve the routine transport, use, and disposal of hazardous materials such as fuel and paving materials. Such transport, use, and disposal must be compliant with applicable regulations, such as the RCRA, U.S. Department of Transportation (DOT) hazardous materials regulations, and California Occupational Safety and Health Administration (Cal/OSHA) regulations. The solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during the construction phase; these materials are typically used in construction projects and would not represent the transport, use, or disposal of acutely hazardous materials. In addition, a SWPPP must be prepared and implemented during project construction for projects disturbing more than 5,000 square feet of soil, in accordance with SWRCB requirements. As discussed in Section E.15, Hydrology and Water Quality, and in the Regulatory Framework for Hazardous Materials Handling discussion, above, the SWPPP requires implementation of BMPs related to hazardous materials storage and soil stockpiles, inspections, maintenance, employee training, and the containment of releases to prevent runoff into existing stormwater collection systems or waterways. Because compliance with existing regulations is mandatory and involves containment activities to minimize the effects of an accidental release of hazardous materials, accidental hazardous materials releases during construction and operation would have a less-than-significant impact on human health and/or the environment. Hazards associated with the disturbance of existing soil and groundwater contamination are discussed further below.

Because compliance with existing regulations is mandatory, construction activities associated with subsequent development projects incentivized by the Hub Plan, the streetscape and street network improvements, and the two individual development projects, are not expected to create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. The impacts would be ***less than significant***.

## OPERATION

None of the allowable land uses under the Hub Plan or the proposed uses under the two individual development projects would be major industrial activities. However, most of the new land uses under the Hub Plan and the two individual development projects would involve handling common types of hazardous materials related to cleaning and building maintenance,

such as cleansers, disinfectants, and chemical agents for sanitation. These commercial products are labeled to inform users of potential risks and appropriate handling procedures. These commercial products would be used in small amounts. Any release would be localized and cleaned up as it occurs. Moreover, these commercial products are typically consumed during use. Therefore, site operations at subsequent development projects under the Hub Plan and the two individual development projects would not result in the production of significant quantities of hazardous waste.

San Francisco Health Code article 21 requires any business that handles or stores hazardous materials or petroleum products above threshold quantities (i.e., 500 pounds, 55 gallons, or 200 cubic feet for compressed gasses) to comply with the requirements of the City's hazardous material handling requirements. In the event that hazardous materials use would exceed these thresholds for subsequent development projects under the Hub Plan and the two individual development projects, adherence to these requirements would be necessary. Accordingly, subject land uses would be required to obtain a certificate of registration from the public health department and implement a hazardous materials business plan that includes inventories, a program for reducing the use of hazardous materials and the generation of hazardous wastes, site layouts, a program and implementation plan for training new employees as well as annual training for all employees, and emergency response procedures and plans.

Facilities that store petroleum products in USTs would be required to obtain a permit for the UST in compliance with San Francisco Health Code article 21 and comply with the regulatory requirements for inspection, monitoring, and secondary containment of USTs. Facilities that store petroleum products in aboveground storage tanks beyond a specified size would be required to submit a storage statement to the SWRCB and prepare a Spill Prevention Control and Countermeasure Plan. In the unlikely event of a leak or tank rupture involving a UST or aboveground storage tank, the spill would most likely be contained within the secondary containment system for the tank. In addition, the public health department implements the Risk Management and Prevention Program specified in San Francisco Health Code article 21A and requires businesses that handle regulated substances to prepare a risk management plan. Similarly, any new businesses that handle hazardous waste must comply with the City's hazardous waste handling requirements, as specified in San Francisco Health Code article 22.

Compliance with the San Francisco Health Code, which incorporates state and federal requirements, would minimize potential exposure of site personnel and the public to any accidental releases of hazardous materials or waste and protect against potential environmental contamination. In addition, the transport of hazardous materials is well regulated by the California Highway Patrol and the California Department of Transportation.

Because compliance with existing regulations is mandatory, operational activities related to implementation of the Hub Plan and the two individual development projects would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. This impact would be ***less than significant***.

**Mitigation**: None required.

**Impact HZ-2: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. In addition, development under the Hub Plan, as well as the individual development projects, could occur on the site(s) identified on the list of hazardous materials sites compiled pursuant to Government Code section 65962.5 but compliance with regulations would ensure that impacts remain less than significant. (Less than Significant)**

Future development in the Hub Plan area and at the sites for the two individual development projects could occur within a hazardous materials site that has been identified on a list compiled pursuant to Government Code section 65962.5 or at an otherwise contaminated site. As a result, construction activities could encounter hazardous materials in the soil and groundwater, and future site occupants, workers, and visitors could be exposed to hazardous materials. Excavated soil could require disposal as a hazardous waste, and groundwater pumped during dewatering could require treatment before being discharged. In the event that affected soil and groundwater are encountered, specific handling/disposal procedures could be required. Furthermore, occupants and workers at new development sites could be exposed to hazardous materials if such materials are left in place.

The discussion below presents relevant regulations and evaluates these potential impacts.

## REGULATORY FRAMEWORK FOR ONSITE HAZARDOUS MATERIALS

The following regulations, ordinances, and programs apply to the handling of onsite hazardous materials:

- **Federal Toxic Substances Control Act/RCRA/Hazardous and Solid Waste Act** – The Federal Toxic Substances Control Act (1976) and the RCRA (1976) established an U.S. Environmental Protection Agency–administered program to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.
- **U.S. Department of Transportation** – DOT is responsible for regulating and ensuring the safe and secure movement of hazardous materials to industry and consumers by all modes of transportation. DOT develops regulations and standards for classifying, handling, and

packaging shipments of hazardous materials within the United States to minimize threats to life, property, or the environment due to hazardous materials–related incidents.

- **San Francisco Health Code Article 22A** – Article 22A, also known as the Maher Ordinance, amended August 2013, requires a project sponsor to conduct a site assessment to determine the potential for site contamination and the level of exposure risk associated with the project prior to issuance of a building permit. Based on that information, the project sponsor may be required to conduct additional investigations. If the results of the additional investigations reveal the presence of hazardous substances (i.e., in excess of state or federal standards), the project sponsor would be required to submit appropriate documentation to the public health department or other appropriate state or federal agencies and remediate any site contamination prior to the issuance of any building permit. For departments, boards, commissions, and agencies of the City and County of San Francisco that authorize construction or improvements on land under their jurisdiction where no building or grading permit is required, the ordinance requires protocols to be developed between the sponsor and the public health department that will achieve the environmental and public health and safety goals of article 22A.

  The limits of the Maher area within the Hub Plan area are shown in **Figure E.18-1**, p. E.18-3.

  The Maher Ordinance also requires testing of groundwater when contaminated groundwater is suspected.

- **Voluntary Remedial Action Program** – The public health department implements the Voluntary Remedial Action Program for cleanup on properties contaminated by hazardous materials in San Francisco, as authorized by California Health and Safety Code sections 101480 through 101490. This program addresses any site not covered under the Maher Ordinance that may require site investigation or remediation. These sites may include old dry cleaners, drug labs, etc., that may not be subject to a building permit but may have contamination. Under this program, the responsible party at a contaminated site may request the public health department to review phase I and II investigations and supervise the remedial action taken at a site, establish cleanup goals, and issue a letter or other document that certifies that the cleanup goals have been met. To obtain these oversight services, which streamline the site assessment and remediation process, the responsible party must enter into a remedial action agreement with the public health department. Depending on the contaminants present or the complexity of site issues, some sites may be more appropriately handled by a state agency, such as the DTSC or RWQCB.

- **Local Oversight Program** – Under the Local Oversight Program, the public health department provides oversight for sites that have experienced a release from a UST, pursuant to California Code of Regulations Title 23, chapter 16. Under this program, the SWRCB provides regulatory guidance and also reviews, comments on, and approves site

assessment reports, feasibility studies, and work plans; reviews monitoring data to evaluate the effectiveness of the remediation strategy; and, upon completion of remediation, issues a letter or other document that certifies that the cleanup goals have been met.

- **UST and Facility Closure** –San Francisco Health Code article 21 addresses issues related to the closure of USTs and hazardous materials handling facilities. To close a facility (including USTs), a closure plan must be prepared that identifies how the need for future maintenance of the facility will be eliminated, how the threat to the environmental and public health and safety will be eliminated, and how all hazardous materials in the facility will be removed and appropriately disposed of. The plan must be submitted to the City for approval prior to closure. This article also requires soil from the UST excavation, and possibly the groundwater, to be sampled. Upon completion of closure, a final report documenting UST removal activities and any residual contamination left in place must be submitted to the City. Upon approval of this report, the City issues a Certificate of Completion. If a release is indicated, the site owner is required to assess the extent of any contamination and conduct site remediation, as needed, in compliance with the public health department Local Oversight Program requirements. The public health department can approve abandonment of the UST in place if removal is not feasible.

## THE HUB PLAN

As mentioned in the Setting section, a review of the SWRCB's GeoTracker website and the DTSC's EnviroStor website identified a total of 25 LUST cleanup sites, four UST sites, one School Investigation site, one Military Evaluation site, two Military Cleanup sites, one Military UST site, one Tiered Permit site, one State Response site, and one Cal-Mortgage site within the Hub Plan area (as shown in **Figure E.18-1**, p. E.18-3**)**. Some facilities can be found in multiple databases; therefore, the actual number of facilities can be less than the total number of sites denoted. Because of the historic use of hazardous materials in the area, it is possible that activities associated with future development in the Hub Plan area could encounter existing or residual contamination during grading, excavation, dewatering, or the installation of the placement footer or other support structures for new buildings.

## 30 VAN NESS AVENUE

The 30 Van Ness Avenue project site is in the Haznet, Resource Conservation and Recovery Information System (RCRIS) Conditionally Exempt Small-Quantity Generator (CESQG), Historical Auto Stations, and Historical Cleaners databases, according to the database search in the phase I ESA prepared for the 30 Van Ness Avenue Project. The Haznet database includes information on sites that submit hazardous wastes manifests regarding offsite transport and disposal of hazardous waste. The RCRIS CESQG database includes information on sites that generate, transport, store, treat, and/or dispose of less than 220 pounds of hazardous waste or less than 2 pounds of acutely hazardous waste per month. The Historical Auto Stations

database identifies historic gas station locations, while the Historical Cleaners database identifies historic dry cleaner locations. However, the database search indicated that no current or historical conditions appear to have significantly affected the soil or groundwater onsite. In addition, the database search did not identify surrounding or adjoining sites with the potential to have significantly affected the soil or groundwater beneath the site. A supplemental search conducted in 2018 through GeoTracker and EnviroStor did not find the 30 Van Ness Avenue site in any other environmental databases.

At the time of preparation of the site-specific phase I ESA[279] for the 30 Van Ness Avenue project site, no significant quantities of hazardous materials were being used at the property, and no hazardous wastes were being generated. However, given that the site is listed in the aforementioned environmental databases, and considering historic land uses at the project site (i.e., automotive repair, paint and varnish facility, print shop), hazardous materials and wastes were most likely used and generated on the site. As such, there is potential for small (historic) releases within the site's footprint. USTs were not identified onsite, neither currently nor historically; however, given the historical occupancy by automotive repair facilities, buried sub-grade structures could be present (such as lifts, sumps, and fuel and fuel oil USTs). One REC was identified in relation to the property.

As shown in **Figure E.18-1**, p. E.18-3, the northwest corner of the site is within a Maher area. Therefore, given its location within a Maher area (and the site's prior industrial use involving paint, varnish, and printing), development activities conducted onsite would be subject to article 22A.

## 98 FRANKLIN STREET

According to the database search in the phase I ESA[280] prepared for the 98 Franklin Street project site, the site is listed in the Historical Auto Stations, Haznet, and UST regulatory databases. The site was identified in the aforementioned databases because of the gasoline station that operated on the site from approximately 1949 until 1965. Four 2,000-gallon USTs were removed from the site in October 1998. Soil samples collected near UST piping, dispenser islands, and stockpiled soil from removal of the USTs did not detect petroleum hydrocarbons at or above reporting limits. According to the tank removal report prepared for the site, two additional USTs were reported onsite. At the time of UST removal, numerous test pits were dug throughout the site, but no additional USTs were located. Case closure was granted by the public health department in January 1999, with no further investigation

[279] AllWest Environmental, Inc., *Phase I Environmental Site Assessment: The Herbst Building, 26–90 Van Ness Avenue and 1484–1496 Market Street, San Francisco, California*, March 28, 2015.

[280] Treadwell & Rollo, *Phase I Environmental Site Assessment: 98 Franklin Street, 59 Oak Street, and 1576 Market Street, San Francisco, California*, August 16, 2012.

required. According to the phase I ESA, offsite listings were not expected to pose a significant environmental risk at the 98 Franklin Street site.

According to the phase I ESA, the site is in an area of artificial fill that is known to contain various contaminants from unknown sources (historic fill material in the area could be associated with the 1906 earthquake and fire). The fill material is composed of loose to medium-dense silty sand with varying amounts of brick, wood, metal, and glass fragments. Previous investigations of properties in the area identified elevated levels of metals and petroleum hydrocarbons. The phase I ESA suggested onsite soils could contain elevated concentrations of heavy metals, diesel, motor oil, and polycyclic aromatic hydrocarbons.

Subsequent to the phase I ESA, Environmental Site Characterization (ESC) was conducted to collect samples of the fill material and underlying sand as well as groundwater. The objective of the ESC was to assess petroleum hydrocarbon and metal contamination in soil and groundwater. Because hazardous materials were detected onsite, the ESC recommended preparation of a soil management plan (SMP) and a health and safety (H&S) plan prior to construction occurring onsite. The SMP would provide measures to address safety risks caused by the presence of hazardous materials in the soil. The SMP would also contain contingency plans to be implemented during soil excavation if unanticipated hazardous materials are encountered. The H&S plan would outline proper soil handling procedures and requirements to minimize worker and public exposure to hazardous materials during construction. The ESC determined that groundwater discharge (if dewatering becomes necessary) would be subject to permit requirements set by the San Francisco Public Utilities Commission. Furthermore, development activities to be conducted onsite would be subject to article 22A. Under article 22A, the project sponsor would be required to submit the aforementioned SMP and H&S plan to the public health department and remediate site contamination prior to the issuance of any building permits.

## IMPACTS

### DEVELOPMENT ON FORMER HAZARDOUS MATERIALS HANDLING FACILITIES

Potential impacts related to residual contamination from former hazardous material handling facilities (including USTs) would be minimized through compliance with San Francisco Health Code article 21, which specifies procedures that must be followed when a hazardous materials handling facility is closed. Compliance would include preparation and implementation of a closure plan, along with implementation of any required sampling. Where a release is discovered, investigation and cleanup could be required under the oversight of the Local Oversight Program. In this case, a corrective action plan may be required. The public health department would determine the adequacy of the plan and may request state or federal agency review. The public health department findings would be published for public review. Alternatively, a UST could be abandoned in place if removal was not feasible. For subsequent development projects incentivized by the Hub Plan and the two individual development

projects, compliance with regulations would ensure that impacts related to development on the sites of former hazardous materials handling facilities would be ***less than significant***.

#### CONSTRUCTION IN AFFECTED AREAS

Because the Hub Plan covers a large geographic area, there are multiple sites with historic and/or current land uses involving hazardous materials. In addition, some sites are listed in environmental databases that identify releases within the area (i.e., LUST cleanup sites, Military Cleanup sites, State Response sites). Therefore, the potential exists to encounter soil and groundwater contamination during construction activities. Furthermore, each of the two individual project sites is either partially or entirely within a Maher area.

Without implementation of proper protections, construction personnel or the surrounding community could be exposed to hazardous materials during construction activities, including excavation, grading, and dewatering, or during site investigation and remediation. Without proper engineering controls, occupants could also be exposed to hazardous materials if such materials are left in place. Select hazardous materials produce soil vapor that could accumulate in structures, causing nuisance vapors, adverse health effects, or flammable or explosive conditions. However, implementation of the requirements of the Maher Ordinance, along with the Voluntary Remedial Action Program and Local Oversight Program, described in the Regulatory Framework for Onsite Hazardous Materials section, above, would ensure that impacts associated with construction within contaminated soil and groundwater would be ***less than significant.***

#### DISPOSAL OF AFFECTED MEDIA

Where remediation or tank removal requires offsite transport of contaminated soil or groundwater, these materials could be classified as a restricted or hazardous waste under state or federal regulations, depending on the specific characteristics of the materials. However, the generator of the hazardous wastes would be required to follow state and federal regulations (discussed under the Regulatory Framework for Onsite Hazardous Materials section above) regarding manifesting the wastes, using licensed waste haulers, and disposing the materials at a permitted disposal or recycling facility. With implementation of these regulatory requirements, the impacts of subsequent development projects incentivized by the Hub Plan as well as the two individual development projects, related to the disposal of hazardous wastes would be ***less than significant***.

According to the phase I ESAs prepared for 30 Van Ness Avenue and 98 Franklin Street, groundwater in the area is expected to be anywhere from 7 to 24 feet bgs in the Hub Plan area. Subsequent development projects incentivized by the Hub Plan would include construction of foundations and could include belowground vehicular parking garages (extending below groundwater depth). Therefore, dewatering might be necessary. If groundwater produced during construction dewatering requires discharge to the sewer system, the discharge would be conducted in compliance with article 4.1 of the San Francisco Public Works Code, as

supplemented by Order No. 158170, which specifies conditions and criteria for discharges of groundwater. This article also prohibits discharges of hazardous wastes into the combined sewer system. The discharged water would have to be sampled during dewatering to demonstrate that discharge limitations in the ordinance are met. If the groundwater does not meet discharge requirements, onsite pretreatment may be required before discharge to the sewer system. If standards cannot be met with onsite treatment, offsite disposal by a certified waste hauler would be required. Long-term dewatering could also be required to alleviate hydrostatic pressure on belowground features such as vehicular parking garages. With implementation of the regulatory requirements described above, the impacts of the Hub Plan and the two individual development projects related to the discharge of contaminated groundwater would be ***less than significant***.

**Mitigation**: None required.

**Impact HZ-3: The Hub Plan, as well as the individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not expose workers and the public to hazardous building materials, including asbestos-containing materials, lead-based paint, polychlorinated biphenyls, bis(2-ethylhexyl) phthalate, and mercury, during demolition and building removal or result in a release of these materials into the environment during construction. (Less than Significant)**

During subsequent development projects incentivized by the Hub Plan, including the individual development project at 30 Van Ness Avenue, facilities that use hazardous materials could be demolished or renovated. As a result, people in the area and the surrounding environment could be exposed to hazardous materials. The Hub Plan area is a large geographic area with buildings that were constructed at different times. These buildings may contain hazardous materials, such as ACM, LBP, and PCBs[281] in electrical equipment. The buildings could also have fluorescent light ballasts with PCBs or bis(2-ethylhexyl) phthalate[282] (DEHP) and fluorescent light tubes with mercury vapors. All of these materials were commonly employed until the second half of the 20th century. If a building is demolished or renovated as part of Hub Plan development, workers and the public could be exposed to hazardous building materials if they are not abated prior to demolition. However, there is a well-established regulatory

[281] PCBs are man-made organic chemicals, known as chlorinated hydrocarbons. They have been shown to cause cancer in animals as well as several serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system, and other health effects (U.S. Environmental Protection Agency [EPA] 2017).

[282] DEHP is a manufactured chemical that is commonly added to plastics for flexibility. The Department of Health and Human Services has determined that DEHP may reasonably be anticipated to be a human carcinogen. EPA has determined that DEHP is a probable human carcinogen (Agency for Toxic Substances and Disease Registry 2002).

framework for the abatement of ACMs, LBP, PCBs, and DEHP, as discussed under the Regulatory Framework for Hazardous Building Materials section, below.

The 98 Franklin Street project site is currently occupied by a vehicular parking lot and does not contain asbestos, lead, PCBs, DEHP, or mercury. Therefore, impacts would be ***less than significant***.

## REGULATORY FRAMEWORK FOR HAZARDOUS BUILDING MATERIALS

### ASBESTOS-CONTAINING MATERIALS

Section 19827.5 of the California Health and Safety Code requires local agencies not to issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. The BAAQMD must be notified 10 days in advance of any proposed demolition or abatement work. Notification includes the following:

- The names and addresses of operators and persons responsible
- A description and the location of the structure to be demolished/altered, including size, age, and prior use
- The approximate amount of friable asbestos that would be removed or disturbed
- The scheduled starting and completion dates of demolition or abatement
- The nature of the planned work and methods to be employed
- The procedures to be employed to meet BAAQMD requirements
- The name and location of the waste disposal site to be used

The BAAQMD randomly inspects asbestos removal operations. In addition, the BAAQMD will inspect any removal operation when a complaint has been received. The local office of Cal/OSHA must be notified when asbestos abatement is carried out. Asbestos abatement contractors must follow state regulations contained in Title 8 of the California Code of Regulations, sections 1529 and 341.6 through 341.17, where there is asbestos-related work involving 100 square feet or more of ACM. Asbestos removal contractors must be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services in Sacramento. The contractor and hauler of the material are required to file a Hazardous Waste Manifest that details the hauling of the material from the site and the disposal of it. Pursuant to California

law, the building department would not issue the required permit until the applicant has complied with the notice and abatement requirements described above.

#### LEAD-BASED PAINT

Work that could result in the disturbance of lead paint must comply with section 3425 of the building code, Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Where there is any work that may disturb or remove lead paint on the exterior of any building built prior to 1979, section 3425 requires specific notification and work standards. It also identifies prohibited work methods and penalties.

Section 3425 applies to the exterior of all buildings or steel structures constructed prior to 1979, which are assumed to have LBP on their surfaces, unless demonstrated otherwise through laboratory analysis, as well as the interior of residential buildings, hotels, and childcare centers. The ordinance contains performance standards, including the establishment of containment barriers that are at least as effective at protecting human health and the environment as those in the U.S. Department of Housing and Urban Development Guidelines, the most recent guidelines for evaluation and control of LBP hazards, and identifies prohibited practices that may not be used during disturbances or removal of LBP. Any person performing work subject to the ordinance shall, to the maximum extent possible, protect the ground from contamination during exterior work, protect floors and other horizontal surfaces from work debris during interior work, and make all reasonable efforts to prevent migration of lead paint contaminants beyond containment barriers during the course of the work. Cleanup standards require the removal of visible work debris, including the use of a high-efficiency particulate air filter (HEPA filter) vacuum following interior work. The ordinance also includes notification requirements as well as requirements regarding signs, provisions regarding inspection and sampling for building department compliance, and penalties for non-compliance with the ordinance.

The demolition or renovation of structures with materials that contain lead in their interiors could expose workers and the public to lead. However, these activities would be subject to the Cal/OSHA Lead in Construction Standard (Title 8 of the California Code of Regulations, section 1532.1). This standard requires development and implementation of a lead compliance plan when materials that contain lead could be disturbed during construction. The plan must describe activities that could emit lead, the methods that would be used to comply with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. Cal/OSHA would require 24-hour notification if more than 100 square feet of materials that contain lead would be disturbed.

#### POLYCHLORINATED BIPHENYL OR DIETHYLHEXYL PHTHALATE

Fluorescent light ballasts can contain PCBs or DEHP. PCBs have been prohibited in most uses since 1978, although some electrical transformers still in use today use oils that contain PCBs. EPA has classified DEHP as a probable human carcinogen. Switches, thermostats, and fluorescent light tubes can contain mercury, which can harm the brain, kidneys, lungs, and immune systems of people. The following regulations address abatement, removal, and disposal of these hazardous building materials:

- Federal Toxic Substances Control Act of 1976 (U.S. Code, title 15, chapter 53, and 40 Code of Federal Regulations 761) provides EPA with the authority to require reporting, record-keeping, and testing and enact restrictions related to chemical substances. The act places special attention on PCBs, asbestos, lead, and mercury. As part of the TSCA, EPA identified DEHP as a chemical that requires an action plan; DEHP is listed as a hazardous waste under federal regulations (40 Code of Federal Regulations 261.33).
- California Universal Waste Rule (22 California Code of Regulations section 66261.9) identifies fluorescent tubes and bulbs and mercury-containing equipment, including thermostats and switches, as hazardous waste and regulates their disposal (22 California Code of Regulations section 66261.50).

#### IMPACTS

As discussed, ACM, LBP, PCBs, and DEHP are likely to be present at 30 Van Ness Avenue and throughout the Hub Plan area. Therefore, demolition and renovation activities at development sites would be subject to the regulations and requirements discussed in the Regulatory Framework for Hazardous Building Materials section, above. Therefore, impacts related to asbestos, lead, PCBs, and DEHP under subsequent development projects incentivized by the Hub Plan as well as the 30 Van Ness Avenue Project would be ***less than significant***.

**Mitigation**: None required.

**Impact HZ-4: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (Less than Significant)**

The handling or emission of hazardous or acutely hazardous materials near schools must consider potential health effects on children, who are considered sensitive receptors. The existing private schools within the Hub Plan area include:

- The California Institute of Integral Studies, located at 1453 Mission Street
- The Make School, located at 1547 Mission Street
- LePort Montessori San Francisco Mid-Market, located at 50 Fell Street

There are no existing public schools within the Hub Plan area. The existing public and private schools within a 0.25-mile radius of the Hub Plan area include:

- Marshall Elementary School, located at 1575 15th Street
- Bessie Carmichael Elementary School, located at 375 Seventh Street
- Presidio Knolls School, located at 250 10th Street
- Chinese American International School, located at 150 Oak Street
- French American International School, located at 150 Oak Street
- Sterne School, located at 245 Valencia Street
- Millennium School, located at 380 Fulton Street
- Minerva Schools at KGI, located at 1145 Market Street
- San Francisco Friends School, located at 250 Valencia Street

The primary exposure pathway of concern for children at nearby schools is through the inhalation of air contaminants, such as particulate matter. Sources of hazardous emissions during project construction and operation include diesel particulate matter (DPM) from vehicle exhaust and emergency generators. However, none of the new land uses that could be developed as part of Hub Plan and the two individual development projects would be expected to involve emissions of toxic air contaminants, as identified by the air board and the BAAQMD, with the exception of DPM from operation of diesel-powered backup generators in high-rise buildings. (The effects of DPM emissions, including construction emissions, are addressed in the EIR's analysis of air quality.) With respect to DPM, BAAQMD's Regulation 2, Rule 5, New Source Review, would require a health risk analysis for any diesel generators near sensitive receptors such as schools. For any individual project with an excess cancer risk greater than 1 in 1 million, or a non-cancer hazard index greater than 0.2, the rule would require the project sponsors to implement best available control technology to reduce DPM emissions. The rule would also prohibit granting permits for generators with DPM emissions that would exceed the threshold of 10 excess cancer cases in 1 million or a non-cancer index of 1.0.

As discussed under Impact HZ-1, above, hazardous materials used during construction and operation would be managed in accordance with applicable laws and regulations, and potential impacts on nearby receptors would be less than significant. This determination would also apply to future school children.

Through compliance with these regulatory requirements, as enforced through the BAAQMD permitting process, impacts related to hazardous or acutely hazardous materials encountered during construction and operation of subsequent development projects under the Hub Plan and the two individual development projects, would be ***less than significant*** at nearby schools.

**Mitigation**: None required.

**Impact HZ-5: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)**

New occupants of proposed buildings constructed under the Hub Plan and the 30 Van Ness Avenue and 98 Franklin Street developments could increase normal day-to-day congestion in the area, potentially affecting emergency evacuation procedures in downtown. However, section 12.202(e)(1) of the San Francisco Fire Code requires all owners of high-rise buildings (i.e., more than 75 feet) to "establish or cause to be established procedures to be followed in case of fire or other emergencies. All such procedures shall be reviewed and approved by the chief of division." In addition, project construction would conform to the provisions of the building code and fire code, which require additional life-safety protections in high-rise buildings. Moreover, the City has a published Emergency Response Plan, prepared by the San Francisco Department of Emergency Management as part of the City's Emergency Management Program, which also includes plans for hazard mitigation and disaster preparedness and recovery.

The Emergency Response Plan identifies hazards to which San Francisco is particularly susceptible (e.g., earthquakes, hurricanes, tsunamis, floods, winter storms, and acts of terrorism, including the use of chemical, biological, radiological, nuclear, and explosive weapons). The Emergency Response Plan complies with several relevant state and federal directives for emergency planning, including the California Standardized Emergency Management System and the Incident Command System. The Emergency Response Plan includes sections regarding operations, including management and procedures; staffing, operations, and logistics for the City's emergency operations center; and mutual aid, which involves other agencies. The Emergency Response Plan assigns responsibilities for disaster planning; operations, including fire and rescue, law enforcement, human services, infrastructure, transportation, communications, and community support; and logistics, as well as finance and administration, to City agencies and departments. The Emergency Response Plan also identifies volunteer agencies, such as the American Red Cross, that are integral to disaster response efforts. The Emergency Response Plan contains 16 "annexes" (similar to appendices), consistent with a federally established framework, that cover topics such as firefighting, public works and engineering, mass casualty care, and earthquakes, among numerous others. The Earthquake Annex, in particular, sets forth planning assumptions for a series of earthquakes of varying magnitudes on different faults and procedures for the assessment of damage and injuries.

Development under the proposed Hub Plan and the two individual development projects would increase the population in the city that would be subject to a potential disaster, including a major earthquake and other hazards identified in the Emergency Response Plan. In particular, the Hub Plan area, as well as the two individual development project locations, would be subject to ground shaking from potentially large earthquakes occurring along the San Andreas

or Hayward faults or other faults in the region. However, subsequent development projects incentivized under the proposed Hub Plan as well as the two individual development projects would be subject to current (and more stringent) building and structural standards than most existing buildings. Therefore, new buildings would be constructed with a relatively safer design. Furthermore, development as part of the proposed Hub Plan, including 30 Van Ness Avenue, 98 Franklin Street, would not obstruct implementation of the City's Emergency Response Plan or interfere with emergency evacuation planning because none of the project components have any characteristics (e.g., permanent road closures) that would physically impair or otherwise interfere with emergency access, response, or evacuation. Adherence to the San Francisco Fire Code and building code, along with implementation of the Emergency Response Plan, would reduce potential impacts related to interference with emergency response or evacuation plans to ***less than significant***.

**Mitigation**: None required.

**Impact C-HZ-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, and reasonably foreseeable future development, would not make a considerable contribution to any cumulative impact related to hazards and hazardous materials. (Less than Significant)**

Potential hazardous materials impacts related to development under the Hub Plan and development at 30 Van Ness Avenue and 98 Franklin Street, could result from handling hazardous materials, conducting construction activities within potentially contaminated soil or groundwater, or demolishing structures that contain hazardous materials. However, potential impacts would be restricted to the Hub Plan area, the 30 Van Ness Avenue and 98 Franklin Street sites and their immediate vicinity. Therefore, the geographic scope for cumulative impacts related to hazards includes the Hub Plan area, 30 Van Ness Avenue and 98 Franklin Street and the immediate vicinity.

Implementation of subsequent development projects incentivized by the Hub Plan as well as the individual development projects would not result in any significant impacts with respect to hazards or hazardous materials that could not be reduced through compliance with regulations.

Development of related projects in affected areas would require compliance with local, state, and federal environmental regulations, thereby improving overall environmental quality. Impacts associated with other development, such as those related to hazardous building materials in structures or soil contamination, would be assessed and, as necessary, remediated on a project-by-project basis. Through compliance with regulations, the Hub Plan, along with the individual projects, would not contribute considerably to any such cumulative impacts.

**Mitigation:** None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
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| **19. MINERAL RESOURCES. Would the project:** | | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site, as delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☐ | ☒ |

The Hub Plan area, including the individual project sites at 30 Van Ness Avenue and 98 Franklin Street and the Hub HSD, is designated Mineral Resource Zone 4 by the California Geological Survey under the Surface Mining and Reclamation Act of 1975 (Public Resources Code section 2710, et seq.). Areas designated Mineral Resource Zone 4 have no known mineral occurrences or there is too little information to indicate either the presence or absence of significant mineral resources. In addition, according to the Environmental Protection Element of the general plan, mineral resources are not found in San Francisco to any appreciable extent.[283] Furthermore, the City has not delineated any portion of the Hub Plan area as a locally important mineral resource recovery site on any land use plan. Therefore, topics 19a and 19b are not applicable to any of the project's components and not addressed further in the EIR.

[283] City and County of San Francisco, *General Plan: Environmental Protection Element*, 2004, *http://generalplan.sfplanning.org/I6_Environmental_Protection.htm*, accessed: July 5, 2019.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **20. ENERGY. Would the project:** | | | | | |
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☒ | ☐ | ☐ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☒ | ☐ | ☐ |

## SETTING

Pacific Gas & Electric provides electric service and natural gas to the Hub Plan area, including the individual project sites at 30 Van Ness Avenue and 98 Franklin Street and the Hub HSD. The San Francisco Public Utilities Commission currently provides electric service to the Hub Plan area, using Pacific Gas & Electric's overhead lines. With a relatively mild Mediterranean climate and strict energy-efficiency and conservation requirements, California has lower energy consumption rates than other parts of the country. According to the Department of Energy, California's per capita energy consumption ranked 49th in the nation as of 2015.[284] California has among the lowest annual electrical consumption rates per person of any state, and its residential uses consume 31 percent less energy compared with the national average.[285]

Pacific Gas & Electric provides natural gas within an area of 70,000 square miles in northern and central California, including San Francisco and the Hub Plan area as well as the individual project sites at 30 Van Ness Avenue and 98 Franklin Street and the Hub HSD. Pacific Gas & Electric's service area extends north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. Pacific Gas & Electric purchases gas from a variety of sources, including other utility companies.

San Francisco is located in a coastal climate zone (Climate Zone 3 in the Title 24 climate zone designation mapping). In 2016, Pacific Gas & Electric delivered approximately 227 million therms of natural gas to San Francisco, with about 43 percent, or approximately 97 million therms of natural gas, sold to nonresidential customers.[286]

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[284] U.S. Department of Energy and U.S. Energy Information Administration, State Profile and Energy Estimates – California, 2017, *http://www.eia.gov/state/?sid=CA*, accessed: March 9, 2018.

[285] U.S. Energy Information Administration, Household Energy Use in California, 2009, *http://www.eia.gov/consumption/residential/reports/2009/state_briefs/pdf/CA.pdf*, accessed: March 9, 2018.

[286] California Energy Commission, Electricity Consumption by County, 2016, *http://www.ecdms.energy.ca.gov/gasbycounty.aspx,* accessed: July 11, 2019.

The San Francisco Public Utilities Commission is San Francisco's municipal power utility. The San Francisco Public Utilities Commission also provides electrical services to select local residential and business communities. The Hetch Hetchy Power System, which is owned and operated by the San Francisco Public Utilities Commission, supplies clean energy to all of San Francisco's municipal facilities, services, and customers. The Hetch Hetchy Power System is composed of three hydroelectric powerhouses, with a combined total of nearly 400 megawatts.[287] This electricity is transmitted to San Francisco along City-owned transmission lines. Within San Francisco, the San Francisco Public Utilities Commission also generates more than 10 megawatts of renewable energy from 19 solar arrays and two biogas cogeneration facilities.

## APPROACH TO ANALYSIS

Neither the Hub Plan nor Hub HSD would immediately result in new development, with the exception of the streetscape and street network improvements. The Hub Plan is a regulatory program and would result in changes to current zoning controls, including building heights (on 18 sites), reclassifications of zoning districts (largely from NCT-3 to C-3-G in the southern portion of the Hub Plan area), and expansion of the Van Ness and Market Downtown Residential SUD to encompass the southern portion of the Hub Plan area. Various streetscape and street network improvements are also proposed as part of the Hub Plan. The Hub HSD would allow for ministerial approval of projects if certain criteria are met, allowing for faster approval of qualified housing projects. Effects on energy resources could also result as subsequent development projects allowed under the Hub Plan or Hub HSD replace existing residences and businesses or increase space for housing in the Hub Plan area. In addition, the individual development projects at 30 Van Ness Avenue and 98 Franklin Street would result in new development in the Hub Plan area. Both projects would introduce new housing and population to the area, which could affect energy resources; therefore, they are analyzed on a project-specific level.

Implementation of the Hub HSD is a procedural change that may reduce the time required for approval of projects that satisfy all of the requirements of the HSD ordinance. Designation of an HSD, through adoption of an ordinance by the San Francisco Board of Supervisors, would allow the city to exercise streamlined ministerial approval of residential and mixed-use development projects meeting certain requirements within the HSD. Qualifying projects approved under the HSD would still be required to implement applicable mitigation measures identified in this EIR and comply with adopted design review standards and all existing city laws and regulations but would not require additional CEQA analysis. Because the Hub HSD would be a procedural

[287] San Francisco Public Utilities Commission, *About the Power Enterprise*, n.d., *http://sfwater.org/index.aspx?page=391*, accessed: March 9, 2018.

change that would be shown as an overlay on zoning maps, no impacts would result from implementation of the HSD beyond those identified for the Hub Plan, and this project component is not discussed further.

This analysis considers to what extent subsequent development projects under the Hub Plan, as well as development under the two individual development projects, would generate a demand for energy and water and whether such demand would be wasteful. The existing state and local regulatory environment was evaluated to determine requirements for new structures that would be built under the Hub Plan. These requirements (e.g., LEED, GreenPoint) are well established in the industry as standards for efficient building practices. Analysis then determined whether specific projects proposed under the Hub Plan included compliance with these requirements. Analysis then further evaluated whether proposed network changes would involve an increase in alternative transportation modes as a means of avoiding wasteful use of energy.

## IMPACTS AND MITIGATION MEASURES

**Impact EN-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant)**

Throughout the past 15 years, several federal, state, and citywide policies and measures have been enacted to promote energy efficiency and reduce current demands on non-renewable resources. The federal Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, pursuant to the act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. In addition, tax credits are available for the installation of qualified fuel cells, stationary micro-turbine power plants, and solar power equipment.

Senate Bill 1389, passed in 2002, requires the California Energy Commission to develop an integrated energy plan biannually for electricity, natural gas, and transportation fuels for the California Energy Report. The 2017 California Energy Report[288] calls for the state to take a leadership role in addressing climate change and GHG emissions. Much of the scope of the document supports this primary goal: to double energy efficiency savings by 2030, achieve

[288] California Energy Commission, *2017 Integrated Energy Policy Report*, 2018, *http://www.energy.ca.gov/2017_energypolicy/*, accessed: February 12, 2018.

the 50 percent renewables portfolio standard by 2030, advance electrification as a transportation alternative, address low-income barriers to clean energy, increase resiliency in the electricity sector, and explore renewable gas as a tool to reduce methane emissions.

California's Building Energy Efficiency Standards, set forth in Title 24, part 6, of the California Code of Regulations, govern all aspects of building construction. Included in part 6 of the code are standards mandating energy efficiency measures in new construction. Since its establishment in 1977, the building efficiency standards (along with standards for energy efficiency in appliances) have contributed to a reduction in electricity and natural gas usage and costs in California. The standards are updated every 3 years to incorporate new energy efficiency technologies. The latest update to the Title 24 standards became effective on January 2, 2017, and reflect the California Building Standards Commission–approved 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings.[289] The standards regulate energy consumed in buildings for heating, cooling, ventilation, water heating, and lighting. Title 24 is implemented through the local planning and permit process. Subsequent development projects incentivized by the Hub Plan, the two individual development projects, and projects under the HSD would adhere to the above regulations and standards to significantly reduce energy and fuel use during construction as well as operation.

San Francisco adopted a Green Building Code in 2008; in 2010, it adopted California's Green Building Standards Code (CALGreen), with modifications. The current code is the 2016 San Francisco Green Building Code, which combines all mandatory elements of the 2016 CALGreen regulations as well as stricter local requirements.[290] Applicants who apply for a building permit from January 1, 2017, through December 31, 2019, must conform to the 2016 San Francisco Green Building Code. Applicants who apply for a permit after December 31, 2019, would be subject to the next iteration of the building code. Under San Francisco Environment Code chapter 7, municipal projects of 10,000 square feet or larger are required to obtain LEED Gold certification. For those projects, the permit applicant must provide submittal documentation showing that the building will meet LEED Gold certification requirements. The 2016 San Francisco Green Building Code also requires building permit submittals to show that they meet the compliance margin required by the applicable rating system and the California Building Energy Efficiency Standards in effect at the time of permit submittal. California Building Energy Efficiency Standards documentation must be prepared using software from the California Energy Commission's List of Approved Computer Programs for the Building Energy Efficiency Standards. Buildings that meet a LEED for Building Design and

[289] California Energy Commission, *2016 Building Energy Efficiency Standards*, 2018, *http://www.energy.ca.gov/title24/2016standards/*, accessed: February 12, 2018.

[290] City and County of San Francisco, *Green Building: Submittal Instructions, per AB-093* (updated January 1, 2017), 2017, *http://sfdbi.org/sites/default/files/IS%20GB-01.pdf*, accessed: February 13, 2018.

Construction standard or LEED Core and Shell standard must prepare and submit all standard documentation required by the California Energy Commission to demonstrate compliance with the California Building Energy Efficiency Standards (Title 24, part 6) in effect on the date of permit application. LEED certification requires larger commercial buildings to generate renewable energy onsite; improve energy efficiency by 10 percent beyond Title 24, part 6; or purchase renewable energy credits.

For the proposed project-specific development, goals for development of a sustainable design will contribute to the efficient consumption of fuel, water, and energy. The 30 Van Ness Avenue Project would comply with GreenPoint or LEED Gold standards and include electric-vehicle charging spaces in the garage. In addition, the heating, ventilation, and air-conditioning systems would be designed and optimized to improve energy efficiency, thermal comfort, and natural lighting. The project sponsor for the 98 Franklin Street Project would either seek LEED certification or meet applicable GreenPoint requirements. In addition, the sponsor would incorporate several sustainability features, including stormwater and rainwater collection features and a wastewater treatment system, which would lead to further reductions in water consumption.

Approval of the Hub Plan would not immediately result in wasteful consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency because the planning decisions would have no immediate effect on the environment. The approvals could, however, cause an effect related to the consumption of energy resources by enabling future development, consistent with the approvals, that would result in demands on these resources. However, any such future project would be infill development near existing modes of public transportation, existing water supplies, and existing water supply and energy infrastructure. Furthermore, future development projects would be subject to the most current energy and water efficiency standards in effect at the time the projects are proposed. Therefore, implementation of the Hub Plan would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, large amounts of energy resources would not be used during construction or operation, and conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency would not occur.

The streetscape and street network improvements are expressly intended to increase the attractiveness and usability of alternative modes of travel to automobiles, such as walking, bicycling, and transit. Therefore, the streetscape and street network improvements, over time, would most likely result in an incremental decrease in fuel use and, thus, energy use in the area affected by these improvements. Therefore, the streetscape and street network improvements would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Approval of project-specific development associated with the Hub Plan, streetscape and street network improvements, and the two individual development projects, would not result in wasteful, inefficient, or unnecessary consumption of energy resources, large amounts of fuel, water, or energy would not be used during construction or operation, because such development would be designed to comply with current energy and efficiency standards, and no conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency would occur. This impact would be ***less than significant***.

**Mitigation:** None required.

**Impact C-EN-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, or reasonably foreseeable projects, would not result in a considerable contribution to cumulative impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant)**

The geographic context for the analysis of cumulative impacts associated with energy is the city. Development of past, present, and future projects will use energy resources. Projects developed in the city, including projects proposed within the Hub Plan area, would be subject to the most current energy and water efficiency standards in effect at the time the projects are proposed. The current standards are the 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings and 2016 San Francisco Green Building Code. Conformance with these requirements would result in less-than-significant impacts related to the use of energy resources and adherence to state or local plans for renewable energy or energy efficiency on a project level. Because the city is almost entirely built out, past, present, and future projects would be infill projects, making best use of limited space; these projects would not constitute a cumulative impact. Therefore, the Hub Plan and the two individual development projects would not make a cumulatively considerable contribution to a cumulative impact. The cumulative impact would be ***less than significant.***

**Mitigation:** None required.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **21. AGRICULTURE AND FORESTRY RESOURCES:** In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forestland, including the Forest and Range Assessment Project and the Forest Legacy Assessment project, and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. | | | | | |
| **Would the project:** | | | | | |
| 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 non-agricultural use? | ☐ | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with existing zoning for, or cause rezoning of, 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? | ☐ | ☐ | ☐ | ☒ | ☐ |
| e) Involve other changes in the existing environment that, because of their location or nature, could result in the conversion of Farmland to non-agricultural use or forestland to non-forest use? | ☐ | ☐ | ☐ | ☒ | ☐ |

**Impact AG-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, would not (a) convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; (b) conflict with existing zones for agricultural use or a Williamson Act contract; (c) conflict with existing zoning for, or cause rezoning of, forestland or timberland; (d) result in the loss of forestland or conservation of forestland to non-forest use; or (e) involve other changes in the existing environment that, because of their location or nature, could result in the conversion of Farmland to non-agricultural use or forestland to non-forest use. (No Impact)**

The Hub Plan and the two individual development projects would be located within an urban area of the city with a mix of residential and commercial uses, as described in Chapter 2, Project Description, Section C, Project Location, of the Draft EIR. None of the land in the Hub Plan area, including the land for the two individual development projects, is designated for agricultural or forest-related uses. The California Department of Conservation, under the Division of Land Resource Protection's Farmland Mapping and Monitoring Program, identifies the Hub Plan

area as Urban and Built-Up Land and not as any of the "Farmland" classifications.[291] Additionally, the Hub Plan area is not zoned for agricultural use and is not subject to a Williamson Act contract.[292] Therefore, the Hub Plan and the two individual development projects would not convert Farmland to non-agricultural use, would not conflict with any such zoning or contracts, and would not result in the loss of forestland or conversion of forestland to non-forest use.

**Mitigation**: None required.

**Impact C-AG-1: The Hub Plan, as well as individual development projects at 30 Van Ness Avenue and 98 Franklin Street, in combination with other past, present, or reasonably foreseeable projects, would not result in impacts on agriculture and forestry resources. (No Impact)**

As described above, the Hub Plan and the two individual development projects would have no impact with respect to agriculture and forestry resources; therefore, the Hub Plan and the two individual development projects, would not contribute to any cumulatively considerable impact on agriculture and forestry resources.

**Mitigation**: None required.

[291] The five agricultural land classifications ("Farmland") include Prime Farmland, which consists of the land that is able to sustain long-term crop production; Farmland of Statewide Importance, which refers to lands with a similar land use, an irrigation system, and the physical characteristics of Prime Farmland but with minor shortcomings, such as steeper soils; Unique Farmland, which consists of lands with lesser quality soils but capable of producing California's leading agricultural cash crops; Farmland of Local Importance, which are designated by individual counties; and Grazing Land, which consists of lands that are most suited for livestock grazing. California Department of Conservation, *DOC Maps: Agriculture*, 2017, *https://maps.conservation.ca.gov/agriculture/*, accessed: July 11, 2019.

[292] Ibid.

| Topics: | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|
| **22. Wildfire: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:** | | | | | |
| a) Substantially impair an adopted emergency response plan or emergency evacuation plans? | ☐ | ☐ | ☐ | ☐ | ☒ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☐ | ☒ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☐ | ☐ | ☒ |
| d) Expose people or structure to significant risks including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☐ | ☒ |

The City and bordering areas within San Mateo County do not have any state responsibility areas for fire prevention or lands that have been classified as very high fire hazard severity zones.[293] Therefore, this topic is not applicable and is not discussed further.

[293] California Department of Forestry and Fire Protection, *Draft Fire Hazard Severity Zones in LRA: San Francisco County, http://frap.fire.ca.gov/webdata/maps/san_francisco/fhszl06_1_map.38.pdf, a*ccessed July 10, 2019.

| Topics: | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact | Not Applicable |
|---|---|---|---|---|---|---|
| **23.** | **MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:—** | | | | | |
| a) | Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | ☒ | ☐ | ☐ | ☐ | ☐ |
| b) | Have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ | ☐ |
| c) | Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ | ☐ |

Any of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, could result in adverse impacts on the environment related to land use, air quality, noise, cultural resources, transportation and circulation, and wind and shadow. These topics are further analyzed in the EIR. Mitigation measures have been included in this initial study to reduce potential impacts related to biological resources, paleontological resources, and hazardous materials to a less-than-significant level.

None of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would have cumulatively considerable impacts on topics that are fully analyzed in this initial study, as discussed under each applicable environmental topic. A cumulative impact analysis for those topics not addressed in this initial study is provided in the EIR.

Potential adverse effects on human beings have been considered as a part of the analysis of individual environmental topics in this initial study. None of the project's components, including the Hub Plan, the two individual development projects at 30 Van Ness Avenue and 98 Franklin Street, and the Hub HSD, would result in environmental impacts that would have substantial adverse effects on humans. A discussion of effects on human beings for those topics not addressed in this initial study is provided in the EIR.

# F. PUBLIC NOTICE AND COMMENT

The department prepared and distributed a Notice of Availability of a Notice of Preparation (NOP) of an EIR on May 23, 2018. The notices were mailed to a variety of City departments and neighborhood groups, other public agencies, and interested parties. A public scoping meeting was held at 170 Otis Street, 1st Floor, Born Auditorium, San Francisco, California 94103 on June 12, 2018, at which oral comments from the public were received and transcribed. At the public scoping meeting, two people commented. Written comments regarding the scope of the EIR were accepted for a standard 30-day period, from May 23, 2018, until June 22, 2018. Five comment letters were received, none of which arrived after the close of the comment period.

Comments on the following topics were raised during the public scoping period and therefore are addressed in this initial study or in the EIR:

- Project Description
  - Requests the type of planning document be specified
  - Requests an assessment and analysis of community benefits
  - Concern about affordable housing to be provided under the Hub Plan[294]
- Population and Housing
  - Requests thorough analysis on cumulative social impact of potential housing and office developments
  - Requests discussion of steps to mitigate impact on lower-income Tenderloin and SoMa community
- Transportation and Traffic
  - Signal timing adjustments may be required because of the proposed residential/commercial development.
  - Project's fair-share contribution, financing, scheduling, implementation responsibilities, and lead agency monitoring should be discussed for all proposed mitigation measures.
  - Request to analyze project with a 1 VMT per capita threshold of significance
  - Consider ride-hailing services and e-commerce delivery impacts on loading and possible mitigation
  - Consider work shuttle effects

[294] The Hub Plan would amend the 2008 Market and Octavia Area Plan of the San Francisco General Plan, focusing on the easternmost portions of the Market and Octavia Area Plan (Planning Department Case No. 2003.0347).

- Concern that too much vehicular parking is proposed; request for zero private vehicular parking
- Concern about mass transit impacts in the area
- Concern that data from the 1990s will be used
- Requests a community process where affected community members can give feedback on safer and walkable streets.

- Wind
  - Request to include analysis of wind impacts on people bicycling and people walking and potential mitigation
- Alternatives
  - Request for alternatives with a zero vehicular parking ratio, closing 12th Street to motorized vehicle, and forced right turns off of Market Street at Gough Street

# G. DETERMINATION

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and 2) has been addressed by mitigation measures, based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to applicable standards, and (b) have been avoided or mitigated, pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Date_____

_____

Lisa Gibson
Environmental Review Officer
for
John Rahaim
Director of Planning

# H. INITIAL STUDY PREPARERS

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