



# **DRAFT** ENVIRONMENTAL IMPACT REPORT

## 447 Battery Street Project

PLANNING DEPARTMENT  
CASE NO. 2014.1036E

STATE CLEARINGHOUSE NO. 2019080137



SAN FRANCISCO  
**PLANNING**  
DEPARTMENT

	Draft EIR Publication Date:	October 21, 2020
	Draft EIR Public Hearing Date:	November 12, 2020
	Draft EIR Public Comment Period:	October 22, 2020–December 7, 2020

*Written comments should be sent to:*

Rachel Schuett, Senior Environmental Planner | 49 South Van Ness Avenue, Suite 1400 | San Francisco, CA 94103 |





**DATE:** October 21, 2020  
**TO:** Distribution List for the 447 Battery Street Project Draft EIR  
**FROM:** Lisa Gibson, Environmental Review Officer  
**SUBJECT:** Request for the Draft Environmental Impact Report for the 447 Battery Street Project (Planning Department Case No. 2014.1036E)

This is the Draft of the Environmental Impact Report (EIR) for the 447 Battery Street Project. A public hearing will be held on the adequacy and accuracy of this document. After the public hearing, our office will prepare and publish a document titled "Responses to Comments," which will contain a summary of all relevant comments on this Draft EIR and our responses to those comments. It may also specify changes to this Draft EIR. Those who testify at the hearing on the Draft EIR will automatically receive a copy of the Responses to Comments document, along with notice of the date reserved for certification; others may receive a copy of the Responses to Comments and notice by request or by visiting our office. This Draft EIR together with the Responses to Comments document will be considered by the Planning Commission in an advertised public meeting and will be certified as a Final EIR if deemed adequate.

After certification, we will modify the Draft EIR as specified by the Responses to Comments document and print both documents in a single publication called the Final EIR. The Final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one document, rather than two. Therefore, if you receive a copy of the Responses to Comments document in addition to this copy of the Draft EIR, you will technically have a copy of the Final EIR.

We are aware that many people who receive the Draft EIR and Responses to Comments have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the Final EIR [in Adobe Acrobat format on a CD] to private individuals only if they request them. Therefore, if you would like a copy of the Final EIR, please fill out and mail the postcard provided inside the back cover to the Environmental Planning division of the Planning Department within two weeks after certification of the EIR. Any private party not requesting a Final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the Final EIR.

Thank you for your interest in this project.





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# SUMMARY

## INTRODUCTION

This environmental impact report (EIR) chapter summarizes the 447 Battery Street Project (proposed project) and its potential environmental impacts. This summary is intended to highlight major areas of importance in the environmental analysis, as required by section 15123 of the California Environmental Quality Act (CEQA) Guidelines. This chapter briefly summarizes the proposed project. Following the synopsis of the proposed project, a summary of impacts and mitigation measures, areas of known controversy, summary of the alternatives, and the environmentally superior alternative are provided. A summary table presents the environmental impacts of the proposed project identified in the EIR by topic and the mitigation measures identified to reduce or lessen significant impacts. Impacts identified in the initial study are listed in a separate summary table, along with any applicable mitigation measures or improvement measures. Following the summary tables is a table that compares the impacts of the alternatives with the proposed project.

**Table S-1**, p. S-6, provides an overview of the following:

- Environmental impacts with the potential to occur as a result of the proposed project,
- The level of significance of the environmental impacts before implementation of any identified mitigation measures, and
- A statement clarifying whether any identified mitigation measure(s) would avoid or reduce significant environmental impacts and the level of significance for each impact after the mitigation measures are implemented.

This summary should not be relied upon for a thorough understanding of the proposed project, individual impacts, and mitigation measures. Please see Chapter 2, Project Description, for a complete description of the proposed project; Chapter 3, Environmental Setting and Impacts, and the initial study (Appendix B) for a complete description of impacts and mitigation measures; and Chapter 5, Alternatives, for a complete description of the alternatives to the proposed project and their significant impacts.

## PROJECT SYNOPSIS

The project sponsor, 447 Partners, LLC, proposes to redevelop a 7,178-square-foot (0.16-acre) rectangular property at the northwest corner of Battery and Merchant streets, within San Francisco's Financial District neighborhood, with a large hotel and ground-floor retail. The project site is currently occupied by an approximately 25,180-square-foot, three-story building with five commercial tenants. The building's office and retail uses include a furniture rental store

and a wine bar. The proposed project would involve retaining the existing building façade, as seen by the public; replacing the internal structure to bring it up to building and structural codes; and constructing an addition to create a new 18-story, 200-foot-tall hotel with a ground-floor lobby and restaurant. The hotel would have a total of 198 hotel rooms on 16 floors, with another restaurant on the 18<sup>th</sup> floor. Four below-grade basement levels would contain conference rooms, mechanical equipment, a loading area, and vehicle and bicycle parking. New privately owned public open space (POPOS) would be provided along Merchant Street, in addition to private terraces for hotel guests and restaurant patrons. The proposed project would also include improvements to Merchant Street that would be consistent with the base requirements of the Better Streets Plan.

## SUMMARY OF IMPACTS AND MITIGATION MEASURES

The San Francisco Planning Department (department) published a Notice of Preparation of an Environmental Impact Report and Public Scoping Meeting on August 7, 2019, announcing the intent to prepare and distribute a focused EIR. An initial study was also prepared (Appendix B). One topic is analyzed in this EIR: Cultural Resources (historic architectural); all other topics are covered within the initial study (EIR Appendix B).

All impacts of the proposed project and associated mitigation measures in this EIR are summarized under their own subsection in **Table S-1**, S-6. Under each topic, impacts follow the order of the corresponding impact discussion in Chapter 3, Environmental Setting and Impacts, of this EIR. For the topics evaluated in the EIR, the levels of significance for the impacts are identified as:

- **No Impact** – No adverse changes (or impacts) to the environment are expected.
- **Less than Significant** – Impact that does not exceed the defined significance criteria or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations.
- **Less than Significant with Mitigation** – Impact that is reduced to a less-than-significant level through implementation of the identified mitigation measures.
- **Significant and Unavoidable with Mitigation** – Impact that exceeds the defined significance criteria and can be reduced through compliance with existing local, state, and federal laws and regulations and/or implementation of all feasible mitigation measures but cannot be reduced to a less-than-significant level.
- **Significant and Unavoidable** – Impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations and for which there are no feasible mitigation measures.



Where applicable, **Table S-1**, p. S-6, identifies the level of significance for impacts after implementation of the identified mitigation measure(s) in the column labeled “Level of Significance after Mitigation.” All mitigation measures are applicable to the proposed project.

**Table S-1**, p. S-6, should not be relied upon for a thorough understanding of the proposed project and its associated impacts and mitigation needs; it is presented to the reader as an overview of the impacts and mitigation measures of the proposed project. Please see the environmental topic sections in Chapter 3, Environmental Setting and Impacts, of this EIR and Section E, Evaluation of Environmental Effects, in the initial study (Appendix B) for a thorough discussion and analysis of project-level and cumulative environmental impacts and the mitigation measures identified to address the impacts.

As described in **Table S-1**, p. S-6, this EIR identifies one significant and unavoidable impact related to demolition of the building at 447 Battery Street, a historical resource for the purposes of CEQA. **Table S-1**, p. S-6, also identifies mitigation measures that could be implemented by the project sponsor to reduce the impacts of the proposed project. As shown in **Table S-2**, p. S-12, the initial study identified five significant impacts related to cultural resources (archaeology and human remains), tribal cultural resources, noise, air quality, and geology and soils (paleontology) that would be mitigated to less-than-significant levels with the measures identified in that table.

## AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

On the basis of public comments on the notice of preparation (Appendix A), potential areas of controversy for the proposed project include the following:

- Public services
- Loading
- Traffic
- Ingress/egress
- Social and public health impacts of shadow
- Impacts on public transit
- Air quality from construction
- Hazards during construction
- Construction noise
- Parking
- Loading and transportation network companies
- Design options

See Chapter 1, Introduction, for a list of issues raised by comments on the notice of preparation and where those issues are addressed in the EIR.

## SUMMARY OF ALTERNATIVES

As evaluated and identified in Section 3.A, Historic Architectural Resources, for the proposed project, demolition of the building at 447 Battery Street would result in a significant and unavoidable impact on the historical resource. Therefore, in developing the alternatives to be analyzed in this EIR, the department considered a range of feasible design configurations and development programs to avoid or lessen the significant impact on the historical resource while optimizing the development potential on the project site.

The EIR evaluates three alternatives: Alternative A – No Project Alternative (as required by CEQA Guidelines section 15126.6[e]), Alternative B – Full Preservation Alternative, and Alternative C – Partial Preservation Alternative. These alternatives are summarized below. **Table S-3**, p. S-53, compares the characteristics and potential significant impacts of the proposed project with those of the alternatives. Detailed descriptions of the alternatives are provided in Chapter 5, Alternatives.

- **Alternative A – No Project Alternative:** No modifications to the existing historical resource would be made, and no additional commercial or hotel units would be added. The historic character-defining features of the building at 447 Battery Street would be retained; no modifications, repairs, or restoration activities would be conducted.
- **Alternative B – Full Preservation Alternative:** Under this alternative, all of the character-defining features of the historical resource at 447 Battery Street would be retained. This alternative would feature a two-story addition and mechanical penthouse above the existing three-story building, for a total of 31,419 square feet, including 2,630 square feet for a ground-floor restaurant and kitchen and 28,789 square feet for hotel use, including guest and service lobbies on the ground floor and four floors with 42 hotel rooms above, which would be accessed via U-shaped corridors on the upper floors. Alternative B would not include any basement levels or excavation.
- **Alternative C – Partial Preservation Alternative:** This alternative would retain the majority of the character-defining features of the historical resource at 447 Battery Street, which are mostly on the east and south façades. However, the north and west façades and the interior structure would not be retained, and the historical resource's spatial relationships with its site and environment would be altered. Alternative C would feature four basement stories (the same as the proposed project), three stories within the façades of the existing building, nine additional stories, and a mechanical penthouse, for a total of 110,615 square feet. This would include 7,384 square feet for restaurant space on two floors and 80,869 square feet for hotel use. Alternative C would provide a total of 130 hotel rooms, which would be accessed via U-shaped corridors on the upper floors and require excavation to construct the four basement levels (the same as the proposed project).

## ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Pursuant to CEQA Guidelines section 15126.6(e)(2), an EIR is required to identify the environmentally superior alternative (i.e., the alternative that has the fewest environmental impacts) from among the alternatives evaluated if the proposed project has significant impacts that cannot be mitigated to a less-than-significant level.

The No Project Alternative would result in no change to existing environmental conditions. This alternative is considered the overall environmentally superior alternative because the significant impacts associated with implementation of the proposed project would not occur with the No Project Alternative. However, if the No Project Alternative is found to be the environmentally superior alternative, CEQA requires selection of an “environmentally superior alternative other than the No Project Alternative” from among the other alternatives. Alternative A (No Project Alternative) is considered the environmentally superior alternative because it would not result in any changes to the historic building. Although Alternatives B (Full Preservation Alternative) and C (Partial Preservation Alternative) both contain numerous design strategies that would help preserve many of the property’s historic characteristics, they would still involve some construction activities that would alter its character. None of the significant or less-than-significant impacts that would occur with implementation of the proposed project would occur with implementation of Alternative A. However, if the environmentally superior alternative is the No Project Alternative, CEQA requires that another alternative be identified as the environmentally superior alternative.

Because Alternative B would preserve more components of the historic property than the proposed project and Alternative C and would not require excavation, Alternative B is considered the environmentally superior alternative.

## SUMMARY TABLES

**Table S-1** and **Table S-2**, p. S-12, includes the impacts and mitigation measures identified in the EIR and initial study for the proposed project; **Table S-3**, p. S-53, compares the significant impacts of the proposed project with those impacts of the alternatives. It also determines if the project sponsor’s objectives would be met by the proposed project and the alternatives.

**Table S-1. Summary of Impacts of Proposed Project Identified in the EIR**

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Cultural Resources</b>			
<p><b>Impact CR-1:</b> The proposed project would cause a substantial adverse change in the significance of onsite historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.</p>	S	<p><b>M-CR-1a: Prepare and Submit Historical Documentation of Built-Environment Resources</b></p> <p>The project sponsor shall retain a professional who meets the Secretary of the Interior’s Qualification Standards for Architectural Historian or Historian (36 Code of Federal Regulations part 61), an architect with demonstrated experience in Historic American Buildings Survey measured drawings, and a photographer with demonstrated experience in Historic American Buildings Survey photography to prepare written and photographic documentation for the Jones-Thierbach Coffee Company Building. The Historic American Buildings Survey documentation package for the resource shall be reviewed and approved by the San Francisco Planning Department’s preservation staff prior to the issuance of any demolition, site, or construction permit for the project.</p> <p>The documentation shall consist of the following:</p> <ul style="list-style-type: none"> <li>• <i>Historic American Buildings Survey-level Photographs:</i> Historic American Buildings Survey standard large-format photography shall be used to document the built-environment resource and its surrounding context. The scope of the photographs shall be reviewed and approved by the San Francisco Planning Department’s preservation staff for concurrence, and all photography shall be conducted according to the current National Park</li> </ul>	SUM

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>Service Historic American Buildings Survey standards. The photograph set shall include distant/elevated views to capture the extent and context of the resource.</p> <ul style="list-style-type: none"> <li>○ All views shall be referenced on a key map of the resource, including a photograph number with an arrow to indicate the direction of the view.</li> <li>○ The draft photograph contact sheets and key map shall be provided to the San Francisco Planning Department's preservation staff for review to determine the final number and views for inclusion in the final dataset.</li> <li>○ Historic photographs identified in previous studies shall also be collected, scanned as high-resolution digital files, and reproduced in the dataset.</li> <li>• <i>Written Historic American Buildings Survey Narrative Report:</i> A written historical narrative, using the outline format, shall be prepared in accordance with the Historic American Buildings Survey Historical Report Guidelines.</li> <li>• <i>Measured Drawings:</i> A set of measured drawings shall be prepared to document the overall design and character-defining features of the Jones-Thierbach Coffee Company Building. Original design drawings of the resource, if available, shall be digitized and incorporated into the measured drawings set. The San Francisco Planning Department's preservation staff shall assist the consultant in determining the appropriate level of measured drawings.</li> </ul>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> <li>• <i>Print-on-Demand Booklet:</i> Following preparation of the Historic American Buildings Survey photography, narrative report, and drawings, a print-on-demand softcover book shall be produced for the resource that compiles the documentation and historical photographs. The print-on-demand book shall be made available to the public for distribution as outlined below.</li> </ul> <p>Format of Final Dataset:</p> <ul style="list-style-type: none"> <li>• The project sponsor shall contact the History Room of the San Francisco Public Library, San Francisco Planning Department, Northwest Information Center, and California Historical Society to inquire as to whether the research repositories would like to receive a hard or digital copy of the final dataset. Labeled hard copies and/or digital copies of the final book, containing the photograph sets, narrative report, and measured drawings, shall be provided to these repositories in their preferred format. If the above-named repositories deny the invitation to accept these materials, additional outreach will occur in consultation with the San Francisco Planning Department's preservation staff to identify any additional appropriate organizations for housing the documentation materials.</li> <li>• The project sponsor shall prepare documentation for review and approval by the San Francisco Planning Department's preservation staff, along with the final Historic American Buildings Survey dataset, that outlines the outreach, response, and actions taken with regard to the</li> </ul>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>repositories listed above. The documentation shall also include any research conducted to identify additional interested groups and the results of that outreach. The project sponsor shall make digital copies of the final dataset, which shall be made available to additional interested organizations, if requested.</p> <p><b>M-CR-1b: Develop and Implement an Interpretive Program</b></p> <p>The project sponsor shall work with the San Francisco Planning Department's preservation staff or other qualified professionals to institute an interpretive program onsite that references the Jones-Thierbach Coffee Company Building's history and the contribution of the historical resource to the broader neighborhood and the local coffee industry. The interpretive program shall include historical exhibits, incorporating a permanent display featuring historic photos of the affected resource and a description of its historical significance, in a publicly accessible location on the project site. This may also include a website or walking tour itineraries. The contents of the interpretative program shall be determined in consultation with the San Francisco Planning Department's preservation staff. Development of the interpretive displays shall be overseen by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations part 61). An outline of the format and the</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>location and content of the interpretive displays shall be reviewed and approved by the San Francisco Planning Department's preservation staff prior to issuance of a demolition permit or site permit. The format, location, content, specifications, and maintenance of the interpretive displays must be finalized prior to issuance of any building permits for the project.</p> <p><b>M-CR-1c: Video Recordation</b></p> <p>The project sponsor shall work with the San Francisco Planning Department's preservation staff and other qualified professionals to undertake video documentation of the Jones-Thierbach Coffee Company Building and its setting. The documentation shall be conducted by a professional videographer, preferably one with experience recording architectural resources, prior to the commencement of any demolition or project activities at the project site or the issuance of any demolition, site, or construction permits for the project. The documentation shall be narrated by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate), as set forth by the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations part 61). The documentation shall include as much information as possible, using visuals in combination with narration, about the materials, construction methods, current condition, historic use, and significance and historic context of the historical resource.</p>	



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		Digital copies of the video documentation shall be submitted to the San Francisco Planning Department; archival copies of the video documentation shall be submitted to repositories, including, but not limited to, the San Francisco Public Library, Northwest Information Center, and California Historical Society. If the above-named repositories deny the invitation to accept these materials, additional outreach will occur in consultation with the San Francisco Planning Department's preservation staff to identify additional appropriate organizations for housing the documentation materials. The video documentation shall be reviewed and approved by the San Francisco Planning Department's preservation staff prior to issuance of a demolition, site, or building permit for the project.	
<b>Impact CR-2:</b> The proposed project would not cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	NI	None required.	NA
<b>Impact C-CR-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in demolition and/or alteration of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	LTS	None required.	NA

**Table S-2. Summary of Impacts of Proposed Project Identified in the Initial Study**

<b>Environmental Impacts</b>	<b>Level of Significance before Mitigation</b>	<b>Mitigation and Improvement Measures</b>	<b>Level of Significance after Mitigation</b>
<b>Land Use and Land Use Planning</b>			
<b>Impact LU-1:</b> The proposed project would not physically divide an established community.	NI	None required.	NA
<b>Impact LU-2:</b> The proposed project would not 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.	LTS	None required.	NA
<b>Impact C-LU-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Population and Housing</b>			
<b>Impact PH-1:</b> The proposed project would not induce substantial unplanned population growth, either directly or indirectly.	LTS	None required.	NA
<b>Impact PH-2:</b> The proposed project would not displace a substantial number of existing housing units, people, or employees or create demand for additional housing elsewhere.	LTS	None required.	NA
<b>Impact C-PH-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative population and housing impacts.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Cultural Resources</b>			
<b>Impact CR-1:</b> The proposed project could a substantial adverse change in the significance of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	S	See Table S-1, Summary of Impacts of Proposed Project Identified in the EIR.	NA
<b>Impact CR-2:</b> The proposed project could cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	S	See Table S-1, Summary of Impacts of Proposed Project Identified in the EIR.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<p><b>Impact CR-3:</b> The proposed project could cause a substantial adverse change in the significance of an archaeological resource, as defined in section 15064.5.</p>	S	<p><b>M-CR-3: Conduct Archaeological Testing and, if Required, Archaeological Monitoring</b></p> <p>Based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources and on human remains and associated or unassociated funerary objects. The project sponsor shall retain the services of an archaeological consultant from the rotational qualified archaeological consultants list maintained by the department's archaeologist. After the first project approval action, or as directed by the Environmental Review Officer, the project sponsor shall contact the department archaeologist to obtain the names and contact information for the next three archaeological consultants on the qualified archaeological consultants list. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the Environmental Review Officer for review and comment and be considered draft reports subject to revision until final approval by the Environmental Review Officer. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the Environmental Review Officer, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means for reducing potential effects on a significant archaeological resource, as defined in CEQA Guidelines sections 15064.5(a) and (c), to a less-than-significant level.</p> <p><i>Consultation with Descendant Communities:</i> On discovery of an archaeological site associated with descendant Native Americans, the overseas Chinese, or other potentially interested descendant group, an appropriate representative of the</p>	LTS

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>descendant group and the Environmental Review Officer shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archaeological field investigations of the site and offer recommendations to the Environmental Review Officer regarding appropriate archaeological treatment of the site, recovered data from the site, and, if applicable, any interpretative treatment of the associated archaeological site. A copy of the final archaeological resources report shall be provided to the representative of the descendant group.</p> <p><i>Archaeological Testing Program.</i> The archaeological consultant shall prepare and submit to the Environmental Review Officer for review and approval an archaeological testing plan. The archaeological testing program shall be conducted in accordance with the approved archaeological testing plan. The archaeological testing plan shall identify the archaeological resource(s) that could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program is to determine, to the extent possible, the presence or absence of archaeological resources and identify and evaluate whether any archaeological resource encountered on the site constitutes a historical resource under CEQA.</p> <p>At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to the Environmental Review Officer. If, based on the archaeological testing program, the archaeological consultant finds that significant archaeological resources may be present, the Environmental Review Officer, in consultation with the archaeological consultant, shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. No archaeological data recovery shall be undertaken without the prior approval of the Environmental Review Officer or the department archaeologist. If the Environmental Review Officer determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> <li>• The proposed project shall be redesigned to avoid any adverse effect on the significant archaeological resource, or</li> <li>• A data recovery program shall be implemented, unless the Environmental Review Officer determines that the archaeological resource is of greater interpretive significance rather than research significance and that interpretive use of the resource is feasible.</li> </ul> <p><i>Archaeological Monitoring Program.</i> If the Environmental Review Officer, in consultation with the archaeological consultant, determines that an archaeological monitoring program shall be implemented, the archaeological monitoring program shall include, at a minimum, the following provisions:</p> <ul style="list-style-type: none"> <li>• The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult regarding the scope of the archaeological monitoring program reasonably prior to commencement of any project-related soil-disturbing activities. The Environmental Review Officer, in consultation with the archaeological consultant, shall determine which project activities shall be archaeologically monitored. In most cases, any soil-disturbing activities (e.g., demolition, foundation removal, excavation, grading, utility installation, site remediation) shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and their depositional context.</li> <li>• The archaeological consultant shall undertake a worker training program for soil-disturbing workers that shall include an overview of expected resource(s), how to identify the evidence of the expected resource(s), and the appropriate protocol in the event of apparent discovery of an archaeological resource.</li> <li>• The archaeological monitor(s) shall be present on the project site, according to a schedule agreed upon by the archaeological consultant and the Environmental Review Officer, until the Environmental Review Officer has, in consultation with project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits.</li> <li>• The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.</li> </ul>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> <li>• If an intact archaeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/ construction activities and equipment until the deposit is evaluated. If the archaeological monitor has cause to believe that deep foundation activities (e.g., foundation work, shoring) may affect an archaeological resource, such activities shall be terminated until an appropriate evaluation of the resource has been made in consultation with the Environmental Review Officer. The archaeological consultant shall immediately notify the Environmental Review Officer of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit and present the findings of this assessment to the Environmental Review Officer.</li> </ul> <p>Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the Environmental Review Officer.</p> <p><i>Archaeological Data Recovery Program.</i> The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan. The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult on the scope of the archaeological data recovery plan prior to preparation of a draft archaeological data recovery plan. The archaeological consultant shall submit a draft archaeological data recovery plan to the Environmental Review Officer. The archaeological data recovery plan shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the archaeological data recovery plan shall identify which scientific/historical research questions are applicable to the expected resource, which data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, shall be limited to the portions of the historical property that could be adversely affected by the</p>	



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical. The scope of the archaeological data recovery plan shall include the following elements:</p> <ul style="list-style-type: none"> <li>• Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.</li> <li>• Cataloging and Laboratory Analysis. Descriptions of selected cataloging systems and artifact analysis procedures.</li> <li>• Discard and Deaccession Policy. Descriptions of and rationale for field and post-field discard and deaccession policies.</li> <li>• Interpretive Program. Consideration of an onsite/offsite public interpretive program during the course of the archaeological data recovery program.</li> <li>• Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.</li> <li>• Final Report. Descriptions of proposed report format and distribution of results.</li> <li>• Curation. Descriptions of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.</li> </ul> <p><i>Human Remains and Associated or Unassociated Funerary Objects.</i> The treatment of human remains and associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws, including immediate notification of the Office of the Chief Medical Examiner of the City and County of San Francisco and, in the event of the medical examiner's determination that the human remains are Native American remains, notification of the California Native American Heritage Commission, which shall appoint a most likely descendant (Public Resources Code section 5097.98). The Environmental Review Officer shall also be immediately notified upon discovery of human remains.</p> <p>The archaeological consultant, project sponsor, Environmental Review Officer, and most likely descendent shall make all reasonable efforts to develop an agreement for</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]) within six days of the discovery of the human remains. This proposed timing shall not preclude the Public Resources Code section 5097.98 requirement that descendants make recommendations or preferences for treatment within 48 hours of being granted access to the site. The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the Environmental Review Officer to accept the recommendations of a most likely descendant. The archaeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects, as specified in the treatment agreement, if such as agreement has been made, or, otherwise, as determined by the archaeological consultant and the Environmental Review Officer. If no agreement is reached, state regulations shall be followed, including reburial of the human remains and associated burial objects with appropriate dignity on the property, in a location not subject to further subsurface disturbance (Public Resources Code section 5097.98).</p> <p><i>Final Archaeological Resources Report.</i> The archaeological consultant shall submit a final archaeological resources report to the Environmental Review Officer that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/ data recovery program(s) undertaken. The final archaeological resources report shall include a curation and deaccession plan for all recovered cultural materials. The final archaeological resources report shall also include an interpretation plan for public interpretation of all significant archaeological features.</p> <p>Copies of the final archaeological resources report shall be sent to the Environmental Review Officer for review and approval. Once approved by the Environmental Review Officer, the consultant shall also prepare a public distribution version of the</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		final archaeological resources report. Copies of the final archaeological resources report shall be distributed as follows: California Archaeological Site Survey, Northwest Information Center, shall receive one copy, and the Environmental Review Officer shall receive a copy of the transmittal of the final archaeological resources report to the Northwest Information Center. The Environmental Planning Division of the department shall receive one bound copy of the final archaeological resources report as well as one unlocked, searchable portable document format copy on compact disc, along with copies of any formal site recordation forms (California Department of Parks and Recreation 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of public interest in the resource or high interpretive value, the Environmental Review Officer may require different, or additional, content for the final report, a different format, and a different distribution plan.	
<b>Impact CR-4:</b> The proposed project could disturb human remains, including those interred outside of formal cemeteries.	S	See <b>Mitigation Measure M-CR-3</b> , Conduct Archaeological Testing and, if Required, Archaeological Monitoring.	LTS
<b>Impact C-CR-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in demolition and/or alteration of historical resources, as defined in section 15064.5, including	S	See Table S-1, Summary of Impacts of Proposed Project Identified in the EIR.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
resources listed in articles 10 or 11 of the San Francisco Planning Code.			
<b>Impact C-CR-2:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on archaeological resources and human remains.	S	See <b>Mitigation Measure M-CR-3</b> , Conduct Archaeological Testing and, if Required, Archaeological Monitoring.	LTS
<b>Tribal Cultural Resources</b>			
<b>Impact TCR-1:</b> The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	S	<b>M-TCR-1: Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance</b> If the Environmental Review Officer determines that a significant archeological resource is present and, in consultation with the affiliated Native American tribal representatives, that the resource constitutes a tribal cultural resource that could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible. If the Environmental Review Officer determines that preservation in place 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	LTS

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		Review Officer determines that preservation in place is not an adequate or feasible option, then the project sponsor shall implement an interpretive program 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 for those displays or installations, the producers or artists involved with the displays or installations, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists; oral histories from local Native Americans; artifact displays and interpretation; and educational panels or other informational displays.	
<b>Impact C-TCR-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on tribal cultural resources.	S	See Mitigation Measure <b>M-TCR-1, Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance</b> , and Mitigation Measure <b>M-CR-3, Conduct Archaeological Testing and, if Required, Archaeological Monitoring</b> .	LTS

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Transportation and Circulation</b>			
<b>Impact TR-1:</b> The proposed project would not involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit.	LTS	None required.	NA
<b>Impact TR-2:</b> The proposed project would not create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations, nor would it interfere with accessibility for people walking or bicycling to and from the project site	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
and adjoining areas or result in inadequate emergency access.			
<b>Impact TR-3:</b> The proposed project would not substantially delay public transit.	LTS	None required.	NA
<b>Impact TR-4:</b> The proposed project would not cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or adding new roadways to the network.	LTS	None required.	NA
<b>Impact TR-5:</b> The proposed project would not result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit.	LTS	<b>I-TR-5a: Management of Freight Loading/Service Vehicle Activities</b> The project sponsor should ensure that building management deploys attendants during all vehicle movements into or out of the project's off-street freight loading dock on Merchant Street. The attendant's primary duties would include ensuring that movements occur without negatively affecting the safety of motorists, bicyclists, and pedestrians and minimizing any disruptions to traffic, bicycle, and pedestrian circulation. The attendant would be responsible for ensuring that no conflicts with bicyclists, pedestrians, or motorists would occur before the freight loading/service vehicle operator begins his or her movement into or out of the elevator. While the vehicle is maneuvering into or out of the space, the attendant would also be	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>responsible for guiding the vehicle into or out of the elevator; this includes providing instructions or guidance to the vehicle operator and holding any arriving bicyclists, pedestrians, and motorists until it is safe for them to pass. The project sponsor should also ensure that tenants report any expected use of the off-street freight loading dock to building management and that building management coordinates such activities to maximize use of the off-street dock (in lieu of disruptive alternatives such as double parking on the street) to the extent feasible and minimize any scheduling conflicts.</p> <p><b>I-TR-5b: Management of Passenger Loading Activities</b></p> <p>It should be the responsibility of the project sponsor to ensure that project-generated passenger loading activities along Battery Street are accommodated within the confines of the proposed on-street white zone or in available on-street parking spaces. Specifically, the project sponsor should monitor passenger loading activities at the proposed zone to ensure that such activities are in compliance with the following requirements:</p> <ul style="list-style-type: none"> <li>• Double parking, queuing, or other project-generated activities should not result in intrusions into the adjacent travel lane or obstruction of the adjacent sidewalk. Any project-generated vehicle conducting, or attempting to conduct, passenger pickup or drop-off activities should not occupy the adjacent travel lane such that traffic, transit, or bicycle circulation is inhibited, and associated passenger and pedestrian activity should not occupy the adjacent sidewalk such that pedestrian circulation is inhibited.</li> <li>• Project-generated activities should not result in a vehicle queue, defined as one or more vehicles blocking any portion of any public right-of-way for a combined period of 15 minutes a day for at least three days a week observed during a one-month period.</li> <li>• Should passenger loading activities at the proposed on-street passenger loading zone not be in compliance with the above requirements, the project sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or</li> </ul>	



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>deployment of staff members to direct passenger loading activities; use of off-site parking facilities or shared parking with nearby uses; additional TDM measures, as described in the Planning Commission's TDM Program Standards; and/or limited hours for access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the department.</p> <ul style="list-style-type: none"> <li>• If the planning director, or his or her designee, suspects that project-generated passenger loading activities in the proposed passenger loading zone are not in compliance with the above requirements, the department should notify the property owner in writing. The property owner, or his or her designated agent (such as building management), should hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant should submit a report to the department, documenting conditions. Upon review of the report, the department should determine whether or not project-generated passenger loading activities are in compliance with the above requirements and notify the property owner of the determination in writing.</li> <li>• If the department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner, or his or her designated agent, should have 90 days from the date of the written determination to carry out abatement measures. If, after 90 days, the department determines that the property owner, or his or her designated agent, has been unsuccessful in ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure compliance. These restrictions should be determined by the department in coordination with the SFMTA, as deemed appropriate, based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner, or his or her designated agent, should be responsible for relaying these restrictions to building tenants to ensure compliance.</li> </ul> <p><b>I-TR-5c: Event-Related Transportation Strategies.</b> In addition to the measures described under Improvement Measure I-TR-5b, Management of Passenger Loading</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>Activities, other measures may be warranted to minimize any potential disruptions to traffic, transit, and bicycle and pedestrian circulation as a result of events at the project site. When booking or hosting events in the proposed hotel's function/conference spaces, the hotel operator and building management should work together with event sponsors to identify the expected transportation needs of the event and implement improvement measures to assist with event-related passenger loading. Potential measures could include (but are not limited to) the following:</p> <ul style="list-style-type: none"> <li>• For events that may generate substantial demand for curbside passenger loading, in excess of regular (non-event) conditions, manage use of the proposed passenger loading zone to ensure that adequate space is provided to accommodate the additional vehicles while maintaining regular (non-event) use of the zone. If necessary, apply for (temporary) extended hours for the passenger loading zone through the SFMTA to accommodate event-related passenger loading. If additional space is necessary, apply for temporary signage through the SFMTA to convert on-street parking in the immediate vicinity of the project site (including on-street commercial loading zones, if not in use) into additional space for event-related passenger loading. If warranted, implement a temporary curbside valet program or deploy staff members to direct and facilitate passenger loading activities to maximize efficient use of the zone and minimize disruptions to traffic, transit, and bicycle and pedestrian circulation. If substantial passenger queuing is expected at the zone during the post-event period, encourage event attendees to wait inside the hotel lobby and avoid obstructing pedestrian circulation along the sidewalk adjacent to the zone.</li> <li>• Provide general transit information (e.g., directions to/from key transit hubs, routes, schedules, fares) to event sponsors and hosts (i.e., organizations or individuals renting the event space) for distribution to event attendees, and encourage attendees to take transit, bike, or walk when traveling to/from the event. If necessary, provide general information about nearby public parking facilities (e.g., maps, directions, rates, etc.) to event sponsors for distribution to</li> </ul>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		event attendees. Any information should be provided to event sponsors and hosts in advance of events to ensure adequate time for dissemination to event attendees through online websites, email communications, mailings, and/or other means.	
<b>Impact C-TR-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative transportation impacts.	LTS	None required.	NA
<b>Noise</b>			
<b>Impact NOI-1:</b> Construction of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	S	<b>M-NOI-1: Construction Noise Control</b> The project sponsor shall develop a set of site specific noise attenuation measures under the supervision of a qualified acoustical consultant to ensure that maximum feasible noise attenuation shall be achieved for the duration of construction activities. Prior to commencement of demolition and construction activities, the project sponsor shall submit the construction noise control plan to the department for review and approval. Noise attenuation measures shall be implemented to meet a goal of not increasing noise levels from construction activities by more than 10 dBA above the ambient noise level at sensitive receptor locations. Noise measures may include, but are not limited to, those listed below. <ul style="list-style-type: none"> <li>Require that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the</li> </ul>	LTS

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>manufacturer and that all equipment be operated and maintained to minimize noise generation.</p> <ul style="list-style-type: none"> <li>• Prohibit gasoline or diesel engines from having unmuffled exhaust systems.</li> <li>• Ensure that equipment and trucks for project construction use the best available noise control techniques (e.g., improved mufflers, redesigned equipment, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds) wherever feasible. According to FHWA, the use of shields or barriers around noise sources can reduce noise by 5 to 10 dBA, depending on the type of barrier used.</li> <li>• Use “quiet” gasoline powered or electrically powered compressors as well as electric rather than gasoline or diesel powered forklifts for small lifting, where feasible.</li> <li>• Locate stationary noise sources, such as temporary generators, concrete saws, and crushing/processing equipment, as far from nearby receptors as possible; muffle and enclose noise sources within temporary enclosures and shield with barriers, which reduces construction noise by as much as 5 dB; or implement other measures, to the extent feasible.</li> <li>• Undertake the noisiest activities during times of least disturbance to surrounding residents and occupants, such as midday or early afternoon when residents are more likely to be at work and less likely to be sleeping, as feasible.</li> <li>• In response to noise complaints received from people in the project area, monitor the effectiveness of noise attenuation measures by taking noise measurements. A plan for noise monitoring shall be provided to the City for review prior to the commencement of each construction phase.</li> <li>• The construction noise control plan must include the following measures for responding to and tracking complaints pertaining to construction noise: <ul style="list-style-type: none"> <li>○ A procedure and phone numbers for notifying the Department of Building Inspection, health department, or the police department of complaints (during regular construction hours and off hours).</li> <li>○ A sign posted onsite describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction.</li> </ul> </li> </ul>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<ul style="list-style-type: none"> <li>○ Designation of an onsite construction complaint and enforcement manager for the project.</li> <li>○ A plan for notification of neighboring residents and nonresidential building managers within 300 feet of the project construction area at least 30 days in advance of activities that could increase daytime ambient noise levels at sensitive receptor locations by 10 dBA or more. The notification must include the associated control measures that will be implemented to reduce noise levels.</li> </ul>	
<b>Impact NOI-2:</b> Operation of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	LTS	None required.	NA
<b>Impact NOI-3:</b> Construction and operation of the proposed project would not generate excessive ground-borne vibration or ground-borne noise levels.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact C-NOI-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative noise and vibration impacts. (Less than Significant with Mitigation)	S	See Mitigation Measure <b>M-NOI-1, Construction Noise Control.</b>	LTS
<b>Air Quality</b>			
<b>Impact AQ-1:</b> The proposed project's construction activities would not generate fugitive dust or criteria air pollutants, violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	None required.	NA
<b>Impact AQ-2:</b> The proposed project's construction activities	S	<b>M-AQ-2: Construction Emissions Minimization Plan</b> The project sponsor or the project sponsor's Contractor shall comply with the following:	LTS

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<p>would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations.</p>		<p>A. <i>Engine Requirements.</i></p> <ol style="list-style-type: none"> <li>1. All off-road equipment greater than 25 hp and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either U.S. Environmental Protection Agency (USEPA) or California Air Resources Board (ARB) Tier 2 off-road emission standards, and have been retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards automatically meet this requirement.</li> <li>2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.</li> <li>3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes, at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The Contractor shall post legible and visible signs in English, Spanish, and Chinese, in designated queuing areas and at the construction site to remind operators of the two-minute idling limit.</li> <li>4. The Contractor shall instruct construction workers and equipment operators on the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturer specifications.</li> </ol> <p>B. <i>Waivers.</i></p> <ol style="list-style-type: none"> <li>1. The department's Environmental Review Officer or designee (ERO) may waive the alternative source of power requirement of Subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the Contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).</li> </ol>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation									
		<p>2. The ERO may waive the equipment requirements of Subsection (A)(1) if a particular piece of off-road equipment with an ARB Level 3 VDECS is technically not feasible, the equipment would not produce desired emissions reduction due to expected operating modes, installation of the equipment would create a safety hazard or impaired visibility for the operator, or there is a compelling emergency need to use off-road equipment that is not retrofitted with an ARB Level 3 VDECS. If the ERO grants the waiver, the Contractor must use the next-cleanest piece of off-road equipment, according to Table M-AQ-2.</p> <p><b>TABLE M-AQ-2: OFF-ROAD EQUIPMENT COMPLIANCE STEP-DOWN SCHEDULE</b></p> <table><tr><th>Compliance Alternative</th><th>Engine Emission Standard</th><th>Emissions Control</th></tr><tr><td>1</td><td>Tier 2</td><td>ARB Level 2 VDECS</td></tr><tr><td>2</td><td>Tier 2</td><td>ARB Level 1 VDECS</td></tr></table> <p>C. <i>Construction Emissions Minimization Plan.</i> Before starting on-site construction activities, the Contractor shall submit a Construction Emissions Minimization Plan (Plan) to the ERO for review and approval. The Plan shall state, in reasonable detail, how the Contractor will meet the requirements of Section A.</p> <p>1. The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to: equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. For VDECS installed, the description may include: technology type, serial number, make, model, manufacturer, ARB verification number level, and installation date and hour meter reading on installation</p>	Compliance Alternative	Engine Emission Standard	Emissions Control	1	Tier 2	ARB Level 2 VDECS	2	Tier 2	ARB Level 1 VDECS	
Compliance Alternative	Engine Emission Standard	Emissions Control										
1	Tier 2	ARB Level 2 VDECS										
2	Tier 2	ARB Level 1 VDECS										



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
		<p>date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.</p> <ol style="list-style-type: none"> <li>2. The project sponsor shall ensure that all applicable requirements of the Plan have been incorporated into the contract specifications. The Plan shall include a certification statement that the Contractor agrees to comply fully with the Plan.</li> <li>3. The Contractor shall make the Plan available to the public for review on-site during working hours. The Contractor shall post at the construction site a legible and visible sign summarizing the Plan. The sign shall also state that the public may ask to inspect the Plan for the project at any time during working hours and shall explain how to request to inspect the Plan. The Contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.</li> </ol> <p>D. <i>Monitoring.</i> After the start of construction activities, the Contractor shall submit quarterly reports to the ERO documenting compliance with the Plan. After completion of construction activities and prior to receiving a final certificate of occupancy, the project sponsor shall submit to the ERO a final report summarizing construction activities, including the start and end dates and duration of each construction phase, and the specific information required in the Plan.</p>	

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact AQ-3:</b> During project operations, the proposed project would not result in emissions of criteria air pollutants at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	None required.	NA
<b>Impact AQ-4:</b> During project operations, the proposed project would not generate toxic air contaminants, including diesel particulate matter, and expose sensitive receptors to substantial air pollutant concentrations.	S	<b>M-AQ-4: Best Available Control Technology for Diesel Generators</b> The project sponsor shall ensure that the backup diesel generator meet or exceed one of the following emission standards for particulate matter: (1) Tier 4 certified engine, or (2) Tier 2 or Tier 3 certified engine that is equipped with a California Air Resources Board (ARB) Level 3 Verified Diesel Emissions Control Strategy (VDECS). A non-verified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical ARB verified model and if the Bay Area Air Quality Management District (BAAQMD) approves of its use. The project sponsor shall submit documentation of compliance with the BAAQMD New Source Review permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emission standard requirement of this mitigation measure to the department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.	LTS
<b>Impact AQ-5:</b> The proposed project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact AQ-6:</b> The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	None required.	NA
<b>Impact C-AQ-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative air quality impacts.	S	See Mitigation Measures <b>M-AQ-2, Construction Emissions Minimization Plan</b> , and <b>M-AQ-4, Best Available Control Technology for Diesel Generators</b> .	LTS
<b>Greenhouse Gases</b>			
<b>Impact C-GG-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not generate greenhouse gas emissions at levels that would result in a significant impact on the	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions.			
<b>Wind</b>			
<b>Impact WI-1:</b> The proposed project would not alter wind hazards in publicly accessible areas of substantial pedestrian use.	LTS	None required.	NA
<b>Impact C-WI-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative wind impacts.	LTS	None required.	NA
<b>Shadow</b>			
<b>Impact SH-1:</b> The proposed project would not create new shadow that substantially and adversely affects the use	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
and enjoyment of publicly accessible open spaces.			
<b>Impact C-SH-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative shadow impacts.	LTS	None required.	NA
<b>Recreation</b>			
<b>Impact RE-1:</b> The proposed project would not result in a substantial increase in the use of existing parks and recreational facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated, nor would it include recreational facilities or require the construction or	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
expansion of recreational facilities that might have an adverse physical effect on the environment.			
<b>Impact C-RE-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative recreation impacts.	LTS	None required.	NA
<b>Utilities and Service Systems</b>			
<b>Impact UT-1:</b> The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, would not exceed the capacity of the wastewater treatment provider serving the project site, or require construction of new stormwater drainage facilities;	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
wastewater treatment facilities; electric power, natural gas, or telecommunications facilities; or the expansion of existing facilities.			
<b>Impact UT-2:</b> The SFPUC has adequate water supplies available to serve the project from existing entitlements and resources, and the proposed project would not require expansion or construction of new water supply resources or facilities.	LTS	None required.	NA
<b>Impact UT-3:</b> The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and would comply with all applicable statutes and regulations related to solid waste.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact C-UT-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative utilities or service systems impacts.	LTS	None required.	NA
<b>Public Services</b>			
<b>Impact PS-1:</b> The proposed project would not result in an increase in demand for police protection, fire protection, schools, or other services to an extent that would result in substantial adverse physical impacts associated with the construction or alteration of governmental facilities.	LTS	None required.	NA
<b>Impact C-PS-1:</b> The proposed project, in combination with past, present, and reasonably	LTS	None required.	NA



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts on public service facilities.			
<b>Biological Resources</b>			
<b>Impact BI-1:</b> The proposed project would not 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.	LTS	None required.	NA
<b>Impact BI-2:</b> The proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.			
<b>Impact BI-3:</b> The proposed project would not conflict with the City's local tree ordinance.	NI	None required.	NA
<b>Impact C-BI-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative biological resources impacts.	LTS	None required.	NA
<b>Geology and Soils</b>			
<b>Impact GE-1:</b> The proposed project would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
death involving rupture, ground shaking, liquefaction, or landslides.			
<b>Impact GE-2:</b> The proposed project would not result in substantial loss of topsoil or erosion.	LTS	None required.	NA
<b>Impact GE-3:</b> The proposed project would not be located on a 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.	LTS	None required.	NA
<b>Impact GE-4:</b> The proposed project would not be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<p><b>Impact GE-5:</b> The proposed project could directly or indirectly destroy a unique paleontological resource or site.</p>	S	<p><b>M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources</b></p> <p>Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find, and a qualified paleontologist shall be notified to evaluate the significance.</p> <p>If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and the San Francisco Planning Department. There shall be no construction work in the area to allow recovery of fossil remains in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan in accordance with the standards of the Society of Vertebrate Paleontology. The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City shall determine which of the recommendations in the recovery plan are necessary and feasible; these recommendations shall be implemented before construction activities resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.</p>	LTS
<p><b>Impact GE-6:</b> Construction activities for the proposed project would not directly or</p>	NI	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
indirectly result in damage to, or destruction of, unique geologic features.			
<b>Impact C-GE-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative geology and soil impacts.	LTS	None required.	NA
<b>Hydrology and Water Quality</b>			
<b>Impact HY-1:</b> The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	LTS	None required.	NA
<b>Impact HY-2:</b> The proposed project would not substantially deplete groundwater supplies or interfere substantially	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
with groundwater recharge such that the project would impede sustainable groundwater management of the basin.			
<b>Impact HY-3:</b> The proposed project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or the addition of impervious surfaces that would result in substantial erosion, siltation, or flooding; substantially increase the rate or amount of surface runoff and result in flooding onsite or offsite; or 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.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact HY-4:</b> The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	None required.	NA
<b>Impact C-HY-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative hydrology and water quality impacts.	LTS	None required.	NA
<b>Hazards and Hazardous Materials</b>			
<b>Impact HZ-1:</b> The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact HZ-2:</b> The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment.	LTS	None required.	NA
<b>Impact HZ-3:</b> The proposed project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within a 0.25 mile of an existing or proposed school.	LTS	None required.	NA
<b>Impact HZ-4:</b> The proposed project would not interfere with the implementation of an adopted emergency response plan or evacuation plan.	LTS	None required.	NA



Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact C-HZ-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts related to hazards and hazardous materials.	LTS	None required.	NA
<b>Energy</b>			
<b>Impact EN-1:</b> The proposed project 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.	LTS	None required.	NA

Environmental Impacts	Level of Significance before Mitigation	Mitigation and Improvement Measures	Level of Significance after Mitigation
<b>Impact C-EN-1:</b> The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative energy impacts.	LTS	None required.	NA

**Table S-3. Comparison of the Environmental Impacts of the Proposed Project to the Impacts of the Alternatives**

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Land Use and Planning</b>					
Physical Division of Community	Impact LU-1: The proposed project would not physically divide an established community.	NI	Same as the proposed project. (NI)	Same as the proposed project. (NI)	Same as the proposed project. (NI)
Conflict with Land Use Plans	Impact LU-2: The proposed project would not 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.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative Land Use	Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Population and Housing</b>					
Population Growth	Impact PH-1: The proposed project would not induce substantial unplanned population growth, either directly or indirectly.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Housing Demand	Impact PH-2: The proposed project would not displace a substantial number of existing housing units, people, or employees or create demand for additional housing elsewhere.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Cumulative Population and Housing	Impact C-PH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative population and housing impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cultural Resources</b>					
Historical Resources – Onsite	Impact CR-1: The proposed project would cause a substantial adverse change in the significance of onsite historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	SUM	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Similar to the proposed project. (SUM)
Historical Resources – Offsite	Impact CR-2. The proposed project would not cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	NI	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)
Archaeological Resources	Impact CR-3: The proposed project could cause a substantial adverse change in the significance of an archaeological resource, as defined in section 15064.5.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
Human Remains	Impact CR-4. The proposed project could disturb human remains, including those interred outside of formal cemeteries.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Cumulative Historical Resources	Impact C-CR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in demolition and/or alteration of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTS)
Cumulative Archaeological Resources	Impact C-CR-2. The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on archaeological resources and human remains.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Tribal Cultural Resources</b>					
Change in Significance	Impact TCR-1. The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
Cumulative Tribal Consultation Resources	Impact C-TCR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on tribal cultural resources.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)

Topic	Impact	Proposed Project	Alternative A: No Project Alternative	Alternative B: Full Preservation Alternative	Alternative C: Partial Preservation Alternative
<b>Transportation and Circulation</b>					
Circulation Interference	Impact TR-1. The proposed project would not involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Hazardous Conditions	Impact TR-2. The proposed project would not create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations, nor would it interfere with accessibility for people walking or bicycling to and from the project site and adjoining areas or result in inadequate emergency access.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Transit Delay	Impact TR-3. The proposed project would not substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
VMT	Impact TR-4: The proposed project would not cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or adding new roadways to the network.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Loading	Impact TR-5. The proposed project would not result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative	Impact C-TR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative transportation impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Noise</b>					
Construction Noise	Impact NOI-1. Construction of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Operational Noise	Impact NOI-2. Operation of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Vibration	Impact NOI-3. Construction and operation of the proposed project would not generate excessive ground-borne vibration or ground-borne noise levels.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Cumulative	Impact C-NOI-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative noise and vibration impacts.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
<b>Air Quality</b>					
Fugitive Dust (Construction)	Impact AQ-1. The proposed project's construction activities would not generate fugitive dust or criteria air pollutants, violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
PM2.5 and TACs (Construction)	Impact AQ-2. The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
Criteria Air Pollutants	Impact AQ-3. During operations, the proposed project would not result in emissions of criteria air pollutants at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)



<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
PM2.5 and TACs (Operations)	Impact AQ-4. During operations, the proposed project would not generate toxic air contaminants, including diesel particulate matter, and expose sensitive receptors to substantial air pollutant concentrations.	LTSM	Less than the proposed project. (LTS)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
Conflict with Clean Air Plan	Impact AQ-5. The proposed project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)
Other Emissions	Impact AQ-6. The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative	Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative air quality impacts.	LTSM	Less than the proposed project. (LTS)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
<b>Greenhouse Gas Emissions</b>					
Cumulative GHG	Impact C-GG-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not generate greenhouse gas emissions at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Wind</b>					
Wind in Outdoor Public Areas	Impact WI-1: The proposed project would not alter wind hazards in publicly accessible areas of substantial pedestrian use.	LTS	Greater than the proposed project. (LTS)	Greater than the proposed project. (LTS)	Greater than the proposed project. (LTS)
Cumulative Wind	Impact C-WI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative wind impacts.	LTS	Greater than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Shadow</b>					
Outdoor Public Areas	Impact SH-1. The proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative Shadow	Impact C-SH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative shadow impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Recreation</b>					
Use of Facilities	Impact RE-1: The proposed project would not result in a substantial increase in the use of existing parks and recreational facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated, nor would it include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative Recreation Impacts	Impact C-RE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative recreation impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Utilities and Service Systems</b>					
Expansion of Utilities	Impact UT-1: The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, would not exceed the capacity of the wastewater treatment provider serving the project site, or require construction of new stormwater drainage facilities, wastewater treatment facilities, or electric power, natural gas, or telecommunications facilities or expansion of existing facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Water Supplies	Impact UT-2: The SFPUC has adequate water supplies available to serve the project from existing entitlements and resources, and the proposed project would not require expansion or construction of new water supply resources or facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Solid Waste Disposal and Landfill Capacity	Impact UT-3: The proposed project would be served by a landfill with adequate permitted capacity to accommodate the project's solid waste disposal needs and comply with all applicable statutes and regulations related to solid waste.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative Utilities	Impact C-UT-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative utility or service systems impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Public Services</b>					
Demand for Services	Impact PS-1: The proposed project would not result in an increase in demand for police protection, fire protection, schools, or other services to an extent that would result in substantial adverse physical impacts associated with the construction or alteration of governmental facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Cumulative Demand	Impact C-PS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts on public service facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Biological Resources</b>					
Sensitive Species	Impact BI-1: The proposed project would not 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Migration	Impact BI-2: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Conflict with Local Tree Ordinance	Impact BI-3: The proposed project would not conflict with the City's local tree ordinance.	LTS	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Cumulative Biological Resources	Impact C-BI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative biological resources impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Geology and Soils</b>					
Seismic and Geologic Hazards	Impact GE-1: The proposed project would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or death involving rupture, ground shaking, liquefaction, or landslides.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)
Erosion	Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)
Geologic Unit/Unstable Soil	Impact GE-3: The proposed project would not be located on a 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.	LTS	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)
Expansive Soil	Impact GE-4: The proposed project would not be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property.	LTS	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Paleontological Resources	Impact GE-5: The proposed project could directly or indirectly destroy a unique paleontological resource or site.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
Damage to Unique Geologic Features during Construction	Impact GE-6: Construction activities for the proposed project would not directly or indirectly result in damage to, or destruction of, unique geologic features.	LTS	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)
Cumulative Geology and Soils	Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative geology and soil impacts.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	similar to the proposed project. (LTS)
<b>Hydrology and Water Quality</b>					
Water Quality Standards	Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Groundwater	Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Drainage	Impact HY-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or the addition of impervious surfaces that would result in substantial erosion, siltation, or flooding; substantially increase the rate or amount of surface runoff and result in flooding onsite or offsite; or 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.	LTS	Similar to the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Groundwater Management Plan	Impact HY-4: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)
Cumulative Hydrology	Impact C-HY-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative hydrology and water quality impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)



<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Hazards and Hazardous Materials</b>					
Transit and Disposal	Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Create Public Hazard	Impact HZ-2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Schools	Impact HZ-3: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Emergency Response Plan	Impact HZ-4: The proposed project would not interfere with implementation of an adopted emergency response plan or evacuation plan.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative	Impact C-HZ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts related to hazards and hazardous materials.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Energy</b>					
Wasteful or Inefficient Energy Consumption	Impact EN-1: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
Cumulative Energy	Impact C-EN-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative energy impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

# **1. INTRODUCTION**

## **A. PROJECT SUMMARY**

This environmental impact report (EIR) analyzes the potential environmental effects associated with the 447 Battery Street Project (proposed project). Specifically, 447 Partners, LLC, the project sponsor, proposes to redevelop a 7,178-square-foot (0.16-acre) rectangular property at the northwest corner of Battery and Merchant streets, within San Francisco's Financial District neighborhood, with a large hotel and ground-floor retail. The project site is currently occupied by an approximately 25,180-square-foot, three-story building with five commercial tenants. The building's office and retail uses include a furniture rental store and a wine bar. The proposed project would involve retaining the existing building façade, as seen by the public; replacing the internal structure to bring it up to building and structural codes; and adding an addition to create a new 18-story, 200-foot-tall hotel with a ground-floor lobby and restaurant. The hotel would have a total of 198 hotel rooms on 16 floors, with another restaurant on the 18<sup>th</sup> floor. Four below-grade basement levels would contain conference rooms, mechanical equipment, a loading area, and vehicle and bicycle parking. A new privately owned public open space (POPOS) would be provided along Merchant Street, in addition to private terraces for hotel guests and restaurant patrons. The proposed project would also include improvements to Merchant Street that would be consistent with the base requirements of the Better Streets Plan.

## **B. PURPOSE OF THIS EIR**

This EIR for the proposed project was prepared in accordance with all criteria, standards, and procedures of the California Environmental Quality Act (CEQA), as amended (California Public Resources Code section 21000 et seq.); the CEQA Guidelines (California Code of Regulations title 14, section 15000 et seq.); and chapter 31 of the San Francisco Administrative Code. In accordance with CEQA section 21067 and sections 15367 and 15050–15053 of the CEQA Guidelines, the City and County of San Francisco (City) is the lead agency, under whose authority this document has been prepared.

As described by CEQA and the CEQA Guidelines, public agencies are charged with the duty of avoiding or substantially lessening significant environmental effects, where feasible. In undertaking this duty, a public agency has an obligation to balance a proposed project's significant effects on the environment with its benefits, including economic, social, technological, legal, and other nonenvironmental characteristics.

As defined in CEQA Guidelines section 15382, a “significant effect on the environment” is:

...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

CEQA states that an EIR must be prepared before a discretionary decision can be made to approve a project that may cause a significant effect on the environment that cannot be mitigated. The EIR is a public information document for use by governmental agencies and the public to identify and evaluate the potential environmental impacts of a project, identify mitigation measures to lessen or eliminate significant adverse impacts, and examine feasible alternatives to the project.

The City must consider the information in this EIR and make certain findings with respect to each significant effect identified. The decision makers will review and consider the information in this EIR, along with other information available during the public review process, before they decide to approve, disapprove, or modify the proposed project or adopt an alternative to the proposed project.

## **C. TYPE OF EIR**

This document is a project-level EIR, pursuant to CEQA Guidelines section 15161. A project-level EIR focuses on the changes in the environment that would result from construction and operation of a specific development project. Furthermore, this EIR is a focused EIR, pursuant to CEQA Guidelines section 15063(c). An initial study was prepared for the proposed project, in accordance with section 15128 (see Appendix B of this EIR), to identify which effects of the proposed project would result in less-than-significant impacts, and therefore not require further analysis, and which would warrant a more detailed analysis in the EIR. The initial study is being published concurrently with the EIR. The comments on the initial study will be accepted during the public review period for the EIR.<sup>1</sup> Thus, this EIR focuses the environmental analysis on those topics identified in the initial study with the potential to have significant environmental impacts.

An EIR is an informational document used by a lead agency (in this case, the City) when considering approval of a project. The purpose of an EIR is to provide public agencies and members of the public with detailed information regarding the environmental effects of

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<sup>1</sup> Under CEQA Guidelines section 15128, the EIR must contain a brief statement indicating the reasons why certain effects were determined not to be significant and thus were not discussed in the EIR.

implementing a proposed project. An EIR should analyze a project's environmental consequences, identify ways to reduce or avoid a project's potential environmental effects, and identify alternatives to a project that can avoid or reduce impacts.

This EIR provides information to be used in the planning and decision-making process. It is not the purpose of an EIR to recommend approval or denial of a project.

Before it can approve the project, the City, as the lead agency and decision-making entity, must certify that this EIR has been completed in compliance with CEQA, that the information in the EIR has been considered, and that the EIR reflects the City's independent judgment. CEQA requires decision makers to balance the benefits of a project against its unavoidable environmental consequences. If environmental impacts are identified as significant and unavoidable, the City may still approve the project if it finds that social, economic, or other benefits outweigh the unavoidable impacts. The City would then be required to state in writing the specific reasons for approving the project, based on information in the EIR and other information sources in the administrative record. This reasoning is called a "statement of overriding considerations" (Public Resources Code section 21081; CEQA Guidelines section 15093). In addition, the City must adopt a mitigation monitoring and reporting program, describing the measures that were made a condition of project approval to avoid or mitigate significant effects on the environment (Public Resources Code section 21081.6; CEQA Guidelines section 15097). The mitigation monitoring and reporting program, which is adopted at the time of project approval, is designed to ensure compliance with the project description and EIR mitigation measures during and after project implementation. If the City decides to approve the project, it will be responsible for verifying that the mitigation monitoring and reporting program for this project is implemented.

The EIR will be used primarily by the City during approval of future discretionary actions and permits.

## **D. CEQA ENVIRONMENTAL REVIEW PROCESS**

### **NOTICE OF PREPARATION**

In accordance with sections 15063 and 15082 of the CEQA Guidelines, the San Francisco Planning Department (department) sent a Notice of Preparation of an Environmental Impact Report regarding the proposed project to responsible and trustee agencies as well as interested entities and individuals on August 7, 2019, thereby beginning the formal CEQA scoping process. The purpose of the scoping process is to allow the public and government agencies to comment on the issues and provide input on the scope of the EIR. The mailing list for the NOP included federal, state, and local agencies; regional and local interest groups; and property owners within 300 feet of the project site. The scoping period began on August 7, 2019, and ended on September 6, 2019.

## COMMENTS ON THE NOTICE OF PREPARATION

Four comment letters and emails were received during the public scoping period. **Table 1-1** summarizes the environmental concerns raised in these written communications. The table also cross references the applicable EIR or initial study sections that address these comments.

**Table 1-1. Summary of EIR Scoping Comments**

Commenter	Comment Topic(s)	Coverage in the EIR and Initial Study
Cynthia Gómez (Unite Here, Local 2)	Public Services Loading Traffic Ingress/Egress Transportation Transportation Network Companies (TNCs) Shadow Project Description	<ul style="list-style-type: none"> <li>• E.13, Public Services</li> <li>• E.5, Transportation and Circulation</li> <li>• E.10, Shadow</li> <li>• Chapter 2, Project Description</li> </ul>
Deborah Morris	Air Quality Hazards Noise Project Description Parking Loading Transportation	<ul style="list-style-type: none"> <li>• E.7, Air Quality</li> <li>• E.17, Hazards and Hazardous Materials</li> <li>• E.6, Noise</li> <li>• E.5, Transportation and Circulation</li> <li>• Chapter 2, Project Description</li> </ul>
Jonathan Franke	Project Description Noise Traffic	<ul style="list-style-type: none"> <li>• Chapter 2, Project Description</li> <li>• E.6, Noise</li> <li>• E.5, Transportation and Circulation</li> </ul>
Mary Rakow	Parking Transportation TNCs Loading Traffic Project Description	<ul style="list-style-type: none"> <li>• E.5, Transportation and Circulation</li> <li>• Chapter 2, Project Description</li> </ul>

## DRAFT EIR AND INITIAL STUDY PUBLIC REVIEW PROCESS

The CEQA Guidelines and San Francisco Administrative Code chapter 31 encourage public participation in the planning and environmental review processes. The department provides opportunities for the public to present comments and concerns regarding this EIR and its appendices, including the initial study (Appendix B), throughout the environmental review

process. These opportunities include a public review and comment period and a public hearing on the draft EIR and initial study before the San Francisco Planning Commission.

The public review period for the draft EIR and initial study is from October 22, 2020, to December 7, 2020. The planning commission will hold a public hearing on the draft EIR and initial study during the 45-day public review and comment period to solicit public comment on the information presented in the draft EIR and initial study. The public hearing will be held on November 12, 2020, at City Hall, Dr. Carlton B. Goodlett Place, Room 400, San Francisco, California, beginning at 12:00 p.m. or later (call 415.588.6422 the week of the hearing for a recorded message giving a more specific time).

The EIR and all attachments, including the initial study (Appendix B), are available on the department's Negative Declarations and EIRs web page (<http://sfplanning.org/environmental-impact-reports-negative-declarations>). CDs and paper copies are also available at the Planning Information Center counter on the second floor of 49 South Van Ness Avenue, San Francisco. Documents referenced in this EIR are available for review at the department's office on the fourteenth floor of 49 South Van Ness Avenue in Case File No. 2014.1036E (call 628.652.7600).

Governmental agencies, interested organizations, and members of the public are invited to submit written comments on the draft EIR and initial study during the public review period. Written public comments may be submitted by email to [rachel.schuett@sfgov.org](mailto:rachel.schuett@sfgov.org) or by mail to:

San Francisco Planning Department  
Attention: Rachel Schuett  
49 South Van Ness Avenue, Suite 1400  
San Francisco, CA 94103

Members of the public are not required to provide personal identifying information when they communicate with the San Francisco Planning Commission. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the department's website or in other public documents.

## **FINAL EIR AND EIR CERTIFICATION**

Following the close of the public review and comment period, the department will prepare and publish the responses-to-comment document, which will contain all written and recorded oral comments on this draft EIR, written responses to those comments, copies of the letters or emails received, and any necessary revisions to the draft EIR. Together, the draft EIR and the responses-to-comment document will constitute the final EIR.

Not less than 10 days before the San Francisco Planning Commission's hearing to consider certification of the final EIR, the final EIR will be made available to the public and any board(s),

commission(s), or department(s) that will be responsible for carrying out or approving the proposed project or project alternative.

During an advertised public meeting, the planning commission will consider the documents and, if found adequate, certify the final EIR. Certification of the final EIR by the commission (1) signifies that the document has been completed in compliance with CEQA, (2) the document was presented to the San Francisco Planning Commission and the commission reviewed and considered the information contained in the final EIR before approving the proposed project, and (3) the document reflects the lead agency's independent judgment and analysis.

CEQA requires that agencies neither approve nor implement a proposed project unless the project's significant environmental impacts have been reduced to a less-than-significant level, essentially eliminating, avoiding, or substantially lessening potentially significant impacts, except when certain findings are made. If an agency approves a project that would result in significant adverse impacts that cannot feasibly be mitigated to less-than-significant levels (i.e., significant and unavoidable impacts), the agency must state the reasons for its action in writing; demonstrate that mitigation is not feasible, based on the EIR or other information in the record; and adopt a statement of overriding considerations, as described above.

At the time of project approval, CEQA and the CEQA Guidelines require lead agencies to adopt a mitigation monitoring and reporting program, which would be made a condition of project approval to mitigate or avoid significant impacts on the environment (CEQA Guidelines section 21081.6; CEQA Guidelines section 15097). This EIR identifies and presents the project-specific mitigation and improvement measures that would be included in the mitigation monitoring and reporting program for the 447 Battery Street Project as a condition of approval.

## E. DOCUMENT ORGANIZATION

Consistent with CEQA Guidelines section 15120 to 15132, this EIR describes the proposed project, the required approvals, and the existing land use plans and policies applicable to the proposed project; identifies the potential environmental impacts of the proposed project, mitigation measures for significant impacts, and the cumulative adverse impacts to which the proposed project could make a substantial contribution; discusses the growth-inducing and significant unavoidable effects of the project; and evaluates alternatives to the project that could avoid or reduce significant impacts while still meeting most of the project's objectives.

This EIR is divided into the following chapters and appendices:

- The **Summary** chapter provides a concise overview of the project, the environmental impacts that would result from the proposed project, the mitigation and improvement measures identified to reduce or eliminate the impacts, the project alternatives and their comparative environmental effects, and the areas of controversy and issues to be resolved.



- **Chapter 1, Introduction**, describes the purpose of the EIR, the environmental review process, the public and agency comments received on the scope of the EIR, and the organization of the EIR.
- **Chapter 2, Project Description**, presents a detailed discussion of the location, setting, and characteristics of the project site; the project objectives; project features; and environmental review requirements and approvals.
- **Chapter 3, Environmental Setting and Impacts**, addresses issues related to cultural resources (historic architectural). This includes a description of existing conditions with respect to the environmental topic (environmental setting), the regulatory framework, the approach to analysis, the identification and evaluation of project-specific and cumulative impacts; and mitigation measures, when appropriate.
- **Chapter 4, Other CEQA Considerations**, summarizes any growth-inducing impacts, irreversible changes to the environment, significant and unavoidable environmental impacts, and areas of controversy to be resolved that would result from project implementation, pursuant to section 15126.2 of the CEQA Guidelines.
- **Chapter 5, Alternatives**, presents and analyzes alternatives to the proposed project and compares their environmental effects to those of the proposed project. Three alternatives are described and evaluated: the No Project Alternative (Alternative A), the Full Preservation Alternative (Alternative B), and the Partial Preservation Alternative (Alternative C). This chapter also identifies the environmentally superior alternative and discusses alternatives considered but rejected as infeasible.
- **Chapter 6, List of Preparers**, identifies City staff members and consultants who helped prepare the EIR and the persons and organizations consulted during preparation of the EIR.
- **Appendix A** provides a copy of the Notice of Preparation of an Environmental Impact Report that was prepared for the project.
- **Appendix B** provides a copy of the initial study that was prepared for the project, including an analysis of land use and land use planning, population and housing, cultural (archaeological) resources, tribal cultural resources, transportation and circulation, noise, air quality, greenhouse gas emissions, wind, shadow, recreation, utilities and service systems, public resources, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral resources, energy resources, agricultural resources, and wildfire.
- **Appendix C** provides information to support the noise section in the initial study.

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## **2. PROJECT DESCRIPTION**

### **A. PROJECT OVERVIEW**

The project sponsor, 447 Partners, LLC, proposes to redevelop a 7,178-square-foot (0.16-acre) rectangular property at the northwest corner of Battery and Merchant streets, within San Francisco's Financial District neighborhood, with a large hotel and ground-floor retail. The project site is currently occupied by an approximately 25,180-square-foot, three-story building with five commercial tenants. The building's office and retail uses include a furniture rental store and wine bar. The 447 Battery Street Project (proposed project) would involve retaining the existing building façade, as seen by the public; replacing the internal structure to bring it up to building and structural codes; and constructing an addition to create a new 18-story, 200-foot-tall hotel with a ground-floor lobby and restaurant. The hotel would have a total of 198 hotel rooms on 16 floors, with another restaurant on the 18<sup>th</sup> floor. Four below-grade basement levels would contain conference rooms, mechanical equipment, a loading area, and vehicle and bicycle parking. A new privately owned public open space (POPOS) would be provided along Merchant Street, in addition to private terraces for hotel guests and restaurant patrons. The proposed project would also include improvements to Merchant Street that would be consistent with the base requirements of the Better Streets Plan, as discussed below.

### **B. PROJECT SPONSOR OBJECTIVES**

The project sponsor seeks to achieve the following objectives through implementation of the proposed project:

- Add a well-designed building to an underutilized parcel in an area with a demonstrated demand for hotel rooms;
- Construct a four-star hotel with enough rooms to make hotel use feasible for an operator, which generally requires approximately 200 or more hotel rooms, as well as meeting space and a ballroom;
- Provide a basement for vehicle parking and mechanical equipment, as well as the bicycle parking and employee showers and lockers required by the planning code;
- Conduct structural and seismic upgrades to the existing building to allow construction of a multi-story addition above;
- Construct a well-designed building that balances the architectural elements of the existing façade and an addition;
- Provide employment during construction and operation that benefits the city economically;

- Improve Merchant Street by providing a POPOS and a partially shared street that includes trees, seating areas, bicycle parking, and special paving, as well as active bar/restaurant and lobby uses in the ground floor or the hotel, thereby bringing more pedestrian life to the neighborhood;
- Improve Battery Street by adding street trees and bicycle parking as well as street life from hotel and restaurant patrons;
- Provide active restaurant uses to the site, including a full-service restaurant, café/bar, and rooftop bar/lounge.

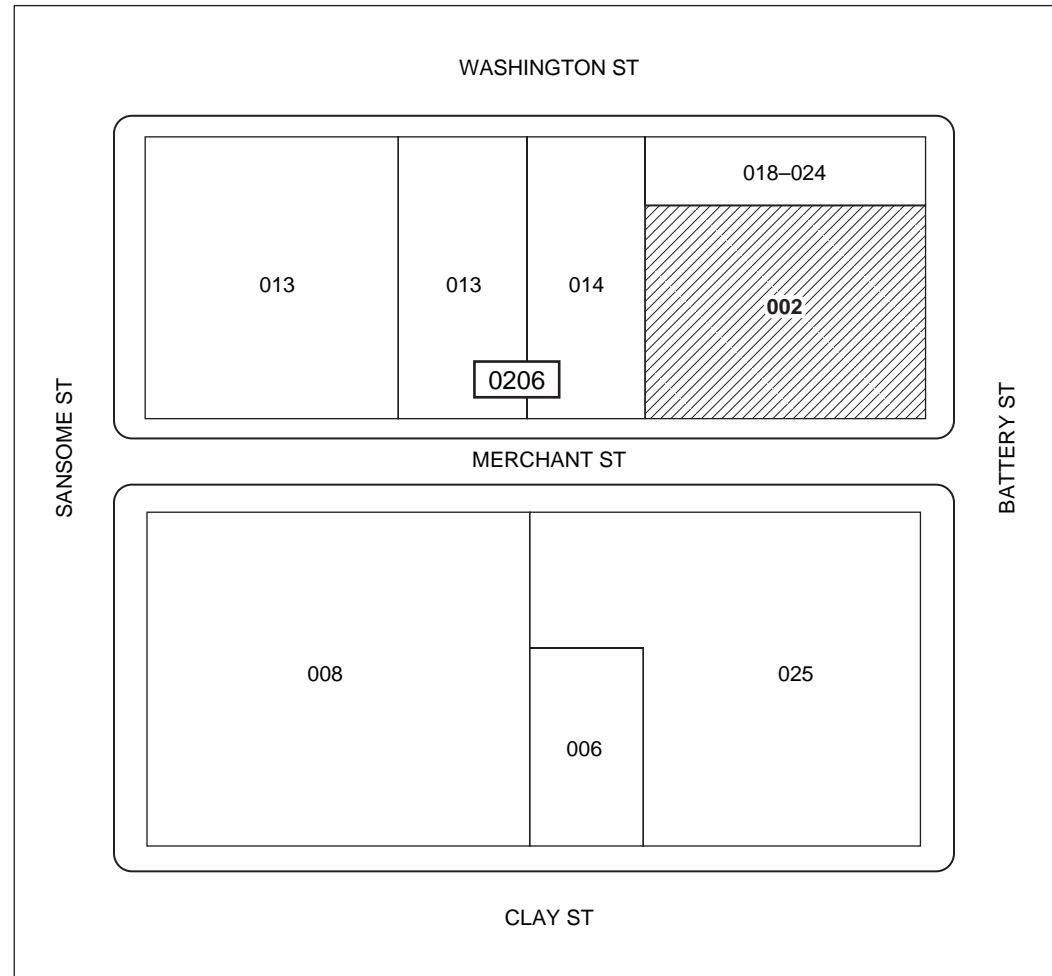
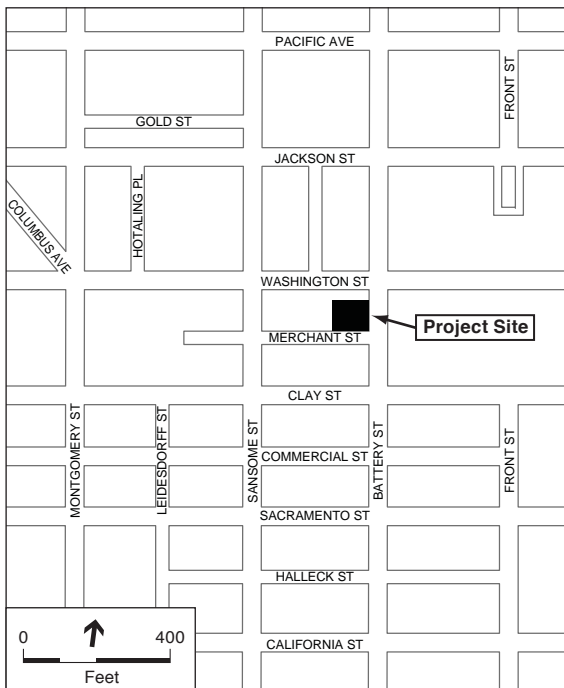
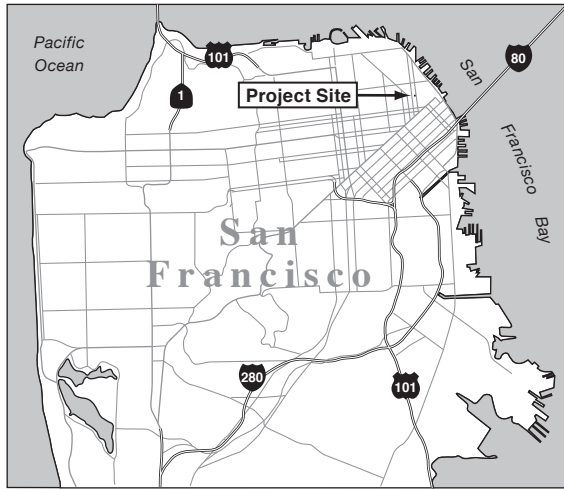
## C. PROJECT LOCATION AND EXISTING CONDITIONS


### PROJECT LOCATION

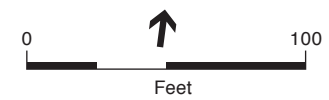
The approximately 7,178-square-foot (0.16-acre) project site (Assessor's Block 0206, Lot 002) is at the northwest corner of Battery and Merchant streets, on a block bounded by Washington Street to the north, Battery Street to the east, Clay Street to the south, and Sansome Street to the west (see **Figure 2-1**). Merchant Street, an east-west street that divides the block in two, forms the southern boundary of the project site.

Streets surrounding the project site have one or two lanes and are not considered major arterials. Battery, Washington, and Sansome streets are all two lane-roadways; Merchant Street is a one-lane road. The nearest major thoroughfares are Columbus Avenue to the west, Market Street to the south, and The Embarcadero to the west. However, both Battery Street and Sansome Street support important functions related to circulation by serving as major routes for regional traffic into and out of the Financial District (particularly commuters residing in the East Bay and North Bay) as well as local traffic from residents living in neighborhoods northwest of downtown. Regional roadways that serve the project site are I-80, I-280, and U.S. 101, all three of which have on- and off-ramps within 0.5 mile of the project site.

The project site is connected to the transit network by numerous San Francisco Municipal Railway (Muni) stations. Muni bus routes 1, 10, and 12 all operate within a couple blocks of the project site. The project site is less than 0.5 mile (approximately five blocks) from Market Street, Muni's busiest transit corridor, which is served by surface buses on high-frequency trunk lines that radiate out to most of the city as well as the Muni Metro, which operates six underground light-rail lines through the Market Street Subway. Surface transit running along Market Street includes the F Market & Wharves historic streetcar service and Muni bus routes 5, 5R, 6, 7, 9, 9R, 21, 31, 38, and 38R. Muni Metro has entrances along Market Street, the closest of which are the Embarcadero (0.3 mile south) and Montgomery (0.4 mile south) stations; these are served by the J, KT, L, M, and N Muni Metro light-rail lines. Other nearby major Muni corridors include the 2, 3, 8, 8AX, 8BX, 14, 14R, 14X, 30, 45, E, and NX Muni bus routes. Supplementary Muni service is provided by the line C California



-  Project Site
- 002** Lot Numbers
- 0206** Assessor's Block



Source: Heller Manus Architects 2019.

cable car and various limited-service lines, including the Richmond Expresses, 30X Marina Express, 41 Union, 81X Caltrain Express, and 82X Levi Plaza Express. Bay Area Rapid Transit, which provides regional public transit service, is also at the Embarcadero and Montgomery stations on Market Street. Other regional public transit service providers are the Alameda-Contra Costa Transit District; the Golden Gate Bridge, Highway and Transportation District; the San Mateo County Transit District; Caltrain; the Western Contra Costa Transit Authority; and ferry operators, including the Water Emergency Transportation Authority and Golden Gate Ferry.

## EXISTING CONDITIONS

### *Project Site*

The project site is generally flat, with an elevation of approximately 1 to 2 feet, San Francisco City Datum.<sup>1</sup> The site is rectangular in shape, with approximately 74 feet of frontage on Battery Street and approximately 97 feet of frontage on Merchant Street.

The project site is currently developed with an approximately 25,180-square-foot, three-story, 45-foot-tall building that occupies the entire lot. The building was constructed in 1907 and is considered to be an historic resource.<sup>2</sup> The firm that initially occupied the subject building was Thierbach and Company, a medium-sized, San Francisco-based coffee roasting and wholesaling company led by Charles Frederick Thierbach. In 1912, Michael P. Jones joined the firm, which changed its name, accordingly, to the Jones-Thierbach Coffee Company. The Jones-Thierbach Coffee Company occupied the building until 1966.<sup>3</sup> After the company vacated, the property was converted to an office and retail building in 1967. The building's current office and retail uses include a furniture rental store and a wine bar on the ground floor. The second- and third-floor tenants are technology companies.

### *Surrounding Uses*

Two buildings adjoin the project site: a seven-story office building to the north with ground-floor retail space (401–423 Washington Street) and a three-story building to the west with a ground-floor restaurant (424 Merchant Street). Adjacent to the project site, across Merchant Street, is an 11-story hotel with ground-floor commercial uses (424 Clay Street and 425 Battery Street). To the east, across Battery Street, is an adjacent two-story parking garage and Maritime Plaza. West of the project site, at Sansome and Merchant streets, is San Francisco Fire Department Station 13.

The area surrounding the project site is a densely built area with land uses that consist primarily of neighborhood-serving retail uses on the ground level, with commercial uses above. Parking,

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<sup>1</sup> San Francisco City Datum establishes the city's zero point for surveying purposes at approximately 11.3 feet above the current 1988 North American Vertical Datum. Because tides are measured from mean lower low water (about 3.1 feet below mean sea level), an elevation of 0 feet San Francisco City Datum is approximately 8.2 feet above mean sea level.

<sup>2</sup> See EIR Section 3.A, Cultural Resources.

<sup>3</sup> Page & Turnbull, *447 Battery Street, San Francisco Historic Resource Evaluation, Part I*, revised October 6, 2017.

residential, hotel, office, and institutional facilities are also present in the area. The nearest residential buildings include the 21-story mixed-use building at 550 Battery Street (the Gateway apartments and townhomes) and a 23-story mixed-use residential building northeast of the project site. The nearest hotels are the Club Quarters Hotel at 424 Clay Street and Le Méridien at 333 Battery Street, immediately south of the project site, and the Hilton at 750 Kearny Street, two blocks west of the project site. Although the project site is adjacent to three- and seven-story buildings, the area includes high-rise buildings as well, such as the Transamerica Pyramid, the second -tallest building in San Francisco, and the 21-story mixed-use building at 550 Battery Street.

Vegetation in the immediate vicinity of the project site is generally limited to street trees. Nearby public parks and open spaces include Maritime Plaza, Transamerica Redwood Park, Sydney G. Walton Square, Sue Bierman Park, Empire Park, Portsmouth Square Plaza, St. Mary's Square, Market/Battery Plaza, and One Bush Plaza.

### ***Existing Zoning/Height and Bulk Requirements***

The project site is within San Francisco's Financial District neighborhood and the Downtown Area Plan area, as identified in the San Francisco General Plan. The project site is also within a C-3-O (Downtown Office) zoning district and a 200-S height and bulk district. This height district allows for a building height of 200 feet. Regarding this bulk district, the bulk controls for the lower tower are a maximum length of 160 feet, a maximum floor size of 20,000 square feet, and a maximum diagonal dimension of 190 feet. The bulk controls for the upper tower are a maximum length of 130 feet, a maximum average floor size of 12,000 square feet, a maximum floor size for any floor of 17,000 square feet, and a maximum average diagonal dimension of 160 feet.

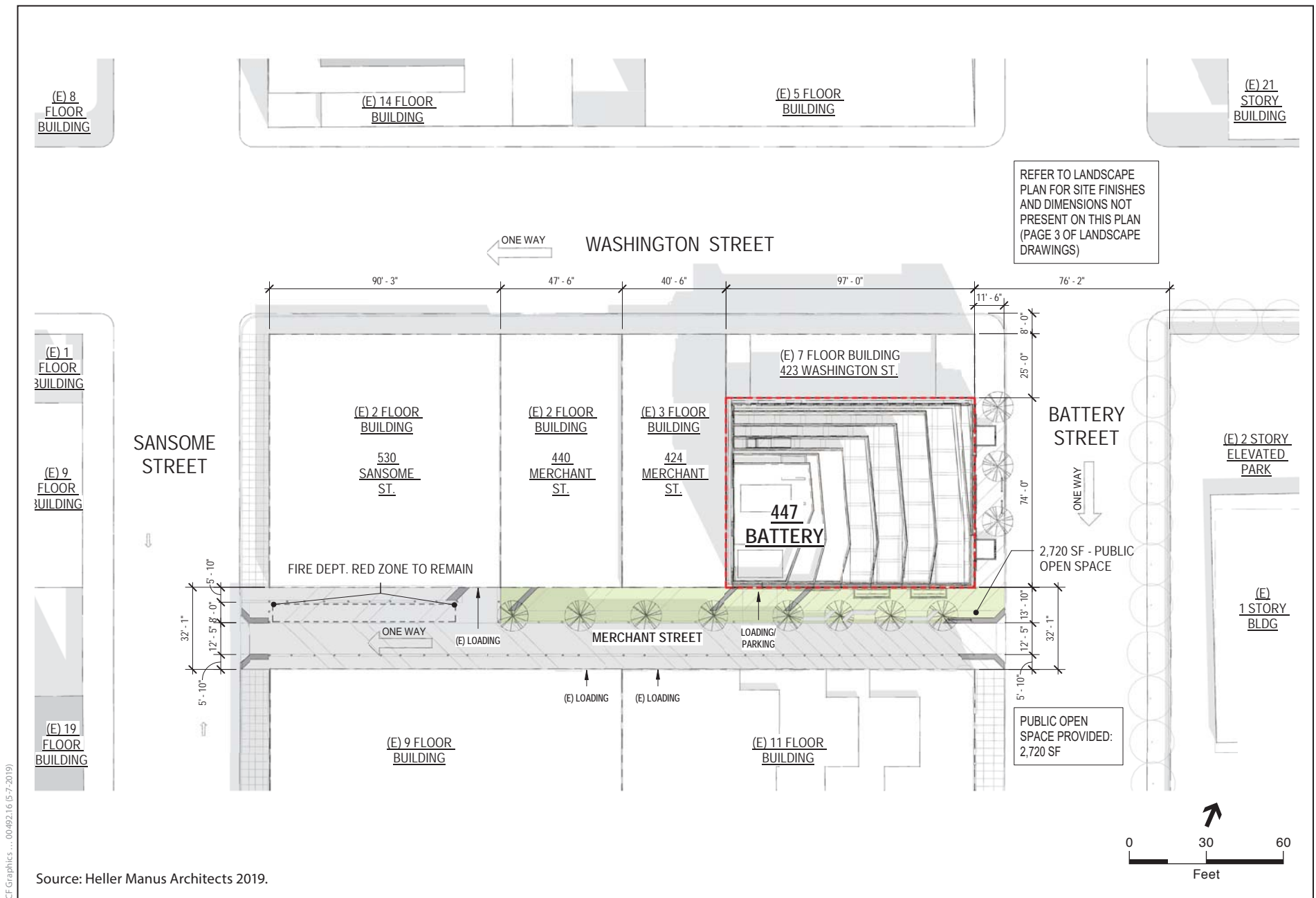
The project site is not within a historic district. The Washington-Broadway Special Use District and the Jackson Square Special Use District are directly north of the project site. Waterfront Special Use District 3 is three blocks north of the project site. In addition, the project site is one block southeast of the Jackson Square Historic District, two blocks northeast of the Commercial-Leidesdorff Conservation District, and two blocks north of the Front-California Conservation District.

## **D. PROJECT CHARACTERISTICS**

The proposed project would involve retaining the existing building façade, as seen by the public. The interior would be reconfigured to comply with the current building code and accommodate an additional 143,449 square feet of space at the project site. Ultimately, the proposed project would consist of an 18-story, 200-foot-tall hotel. The hotel would have 198 rooms on 16 floors, with a lobby and restaurant on the ground floor and mezzanine and another restaurant on the 18<sup>th</sup> floor.

## **SITE PLAN**

The proposed project would have frontages on Battery and Merchant streets, as shown in **Figure 2-2**.



447 Battery Street Project  
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**Figure 2-2**  
**Proposed Site Plan**



Landscaping would be provided on Battery and Merchant streets, while loading would be provided on Merchant Street.

## DEVELOPMENT PROGRAM

**Table 2-1** summarizes the characteristics of the proposed project. There would be a total of 143,499 square feet of development, including 122,148 square feet for commercial uses (hotel, lobbies, conference, and restaurant), 13,680 square feet for vehicle parking, and 404 square feet for bicycle parking. The proposed project would provide 2,720 square feet of POPOS along Merchant Street, 2,203 square feet of required commercial open space, and 3,934 square feet of terrace space. In addition, 24 vehicle parking spaces, 13 class 1 bicycle parking spaces, and 19 class 2 bicycle parking spaces would be provided.

**Table 2-1. Project Characteristics and Planning Code Compliance**

Project Component	Area
Commercial (hotel, lobbies, conference, restaurant)	122,148 square feet
Vehicle Parking <sup>a</sup>	13,680 square feet
Bicycle Parking	404 square feet
TOTAL <sup>b</sup>	143,449 square feet
Privately Owned Public Open Space	2,720 square feet (located on Merchant Street)
Common Open Space	2,203 square feet
Private Open Space	3,934 square feet
Project Component	Amount
Hotel Rooms (total)	198
Parking Spaces	
Auto <sup>c</sup>	24
Bicycle (class 1)	13
Bicycle (class 2)	19
Height of Building	200 feet (up to 220 feet inclusive of elevator/stair penthouse, parapet, and various rooftop elements) <sup>d</sup>
Number of Stories	18
Floor Area Ratio	16:3

Source: Heller Manus Architects, 2019.

a. Includes garage circulation space in the basement levels.

b. Includes mechanical uses not listed in this table.

c. Includes two Americans with Disabilities Act-compliant accessible spaces.

d. Consistent with the planning code height and bulk designations for the project site, the building height is 200 feet, with up to 20 feet allowed for rooftop appurtenances.

## ***Ground-Floor Plan***

The ground floor would include the hotel lobby, a restaurant/bar, a loading dock/car elevator, and a fire command center (see **Figure 2-3**). Pedestrian access would be from Battery and Merchant streets. The mezzanine level would include a restaurant, a kitchen, and dining areas; the eastern portion of the mezzanine level would be open to the ground floor. For security, the building would include a camera system and valets at the entry. The building would require approximately 50 employees during operation.

## ***Basement Level Plans***

The four basement levels would include one level for ancillary hotel uses, one level for mechanical uses, and two levels for parking (see **Figure 2-4** through **Figure 2-7**, pp. 2-10 through 2-13). Basement Level 1 would include a conference center, gym, and spa areas for use by hotel guests.

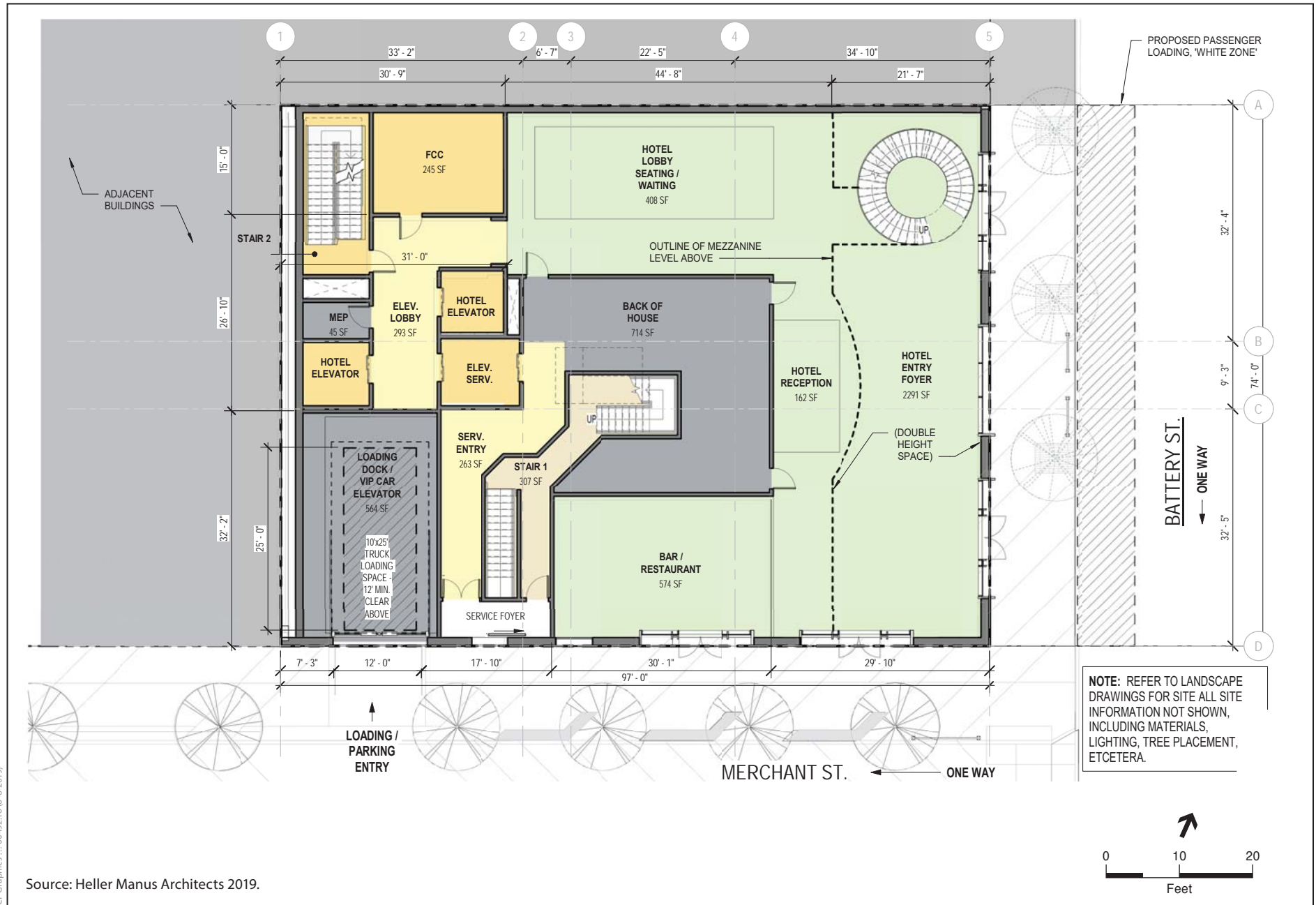
Basement Level 2 would include mechanical uses, such as electric generators, a fuel pump room, building storage, and maintenance areas as well as a room for bicycle parking, showers, and lockers. Basement Level 3 would be used for loading, accessed from the loading dock/car elevator at Merchant Street, discussed in detail in the Parking, Loading, and Bicycle Facilities section, below. Basement Level 4, the parking level, would provide 22 valet parking spaces (in stackers) as well as two Americans with Disabilities Act– (ADA-) compliant accessible spaces for valet use, also accessed from the loading dock/car elevator at Merchant Street.

## ***Upper Floor Plans***

Floors 2 through 17 of the building would contain 198 hotel rooms. Floors 2 through 8 would each contain 13 hotel rooms, Floors 9 through 14 would each contain 14 hotel rooms, Floor 15 would contain 11 hotel rooms, Floor 16 would contain eight hotel rooms, and Floor 17 would contain four hotel rooms (see **Figure 2-8** and **Figure 2-9**, pp. 2-14 and 2-15). The hotel rooms would vary in size from 300 square feet to 628 square feet, offering a mix of 167 regular rooms and 31 suites. Floor 18 would include a restaurant and bar. Floors 15 through 18 would each include a private terrace, facing either Battery Street or Washington Street or facing west toward Sansome Street.

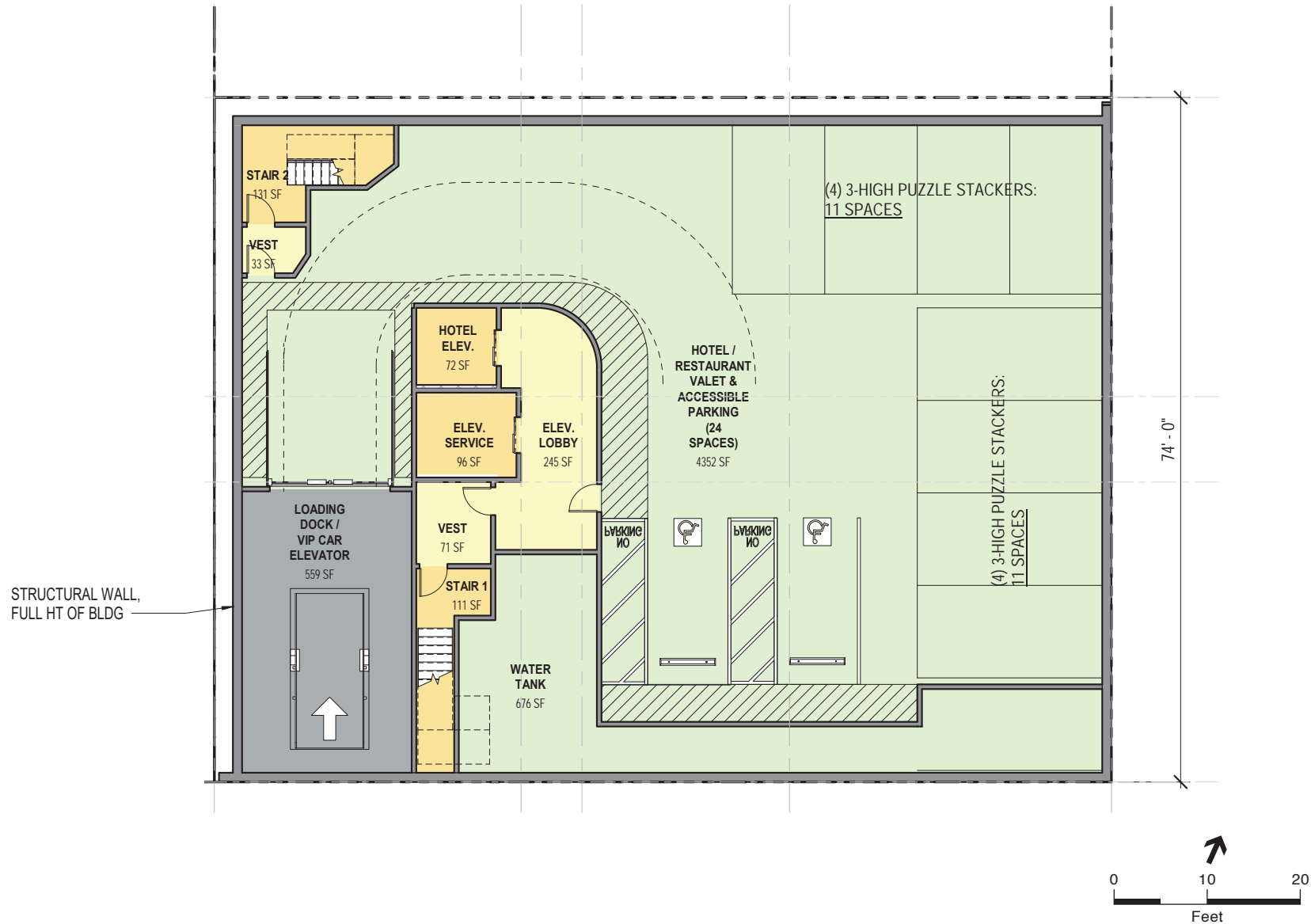
## ***Elevations and Renderings***

The proposed structure would be approximately 200 feet in height to the roof, with a mechanical penthouse extending up to 20 feet above the roof height, for a total height of 220 feet (see **Figure 2-10**, p. 2-16).

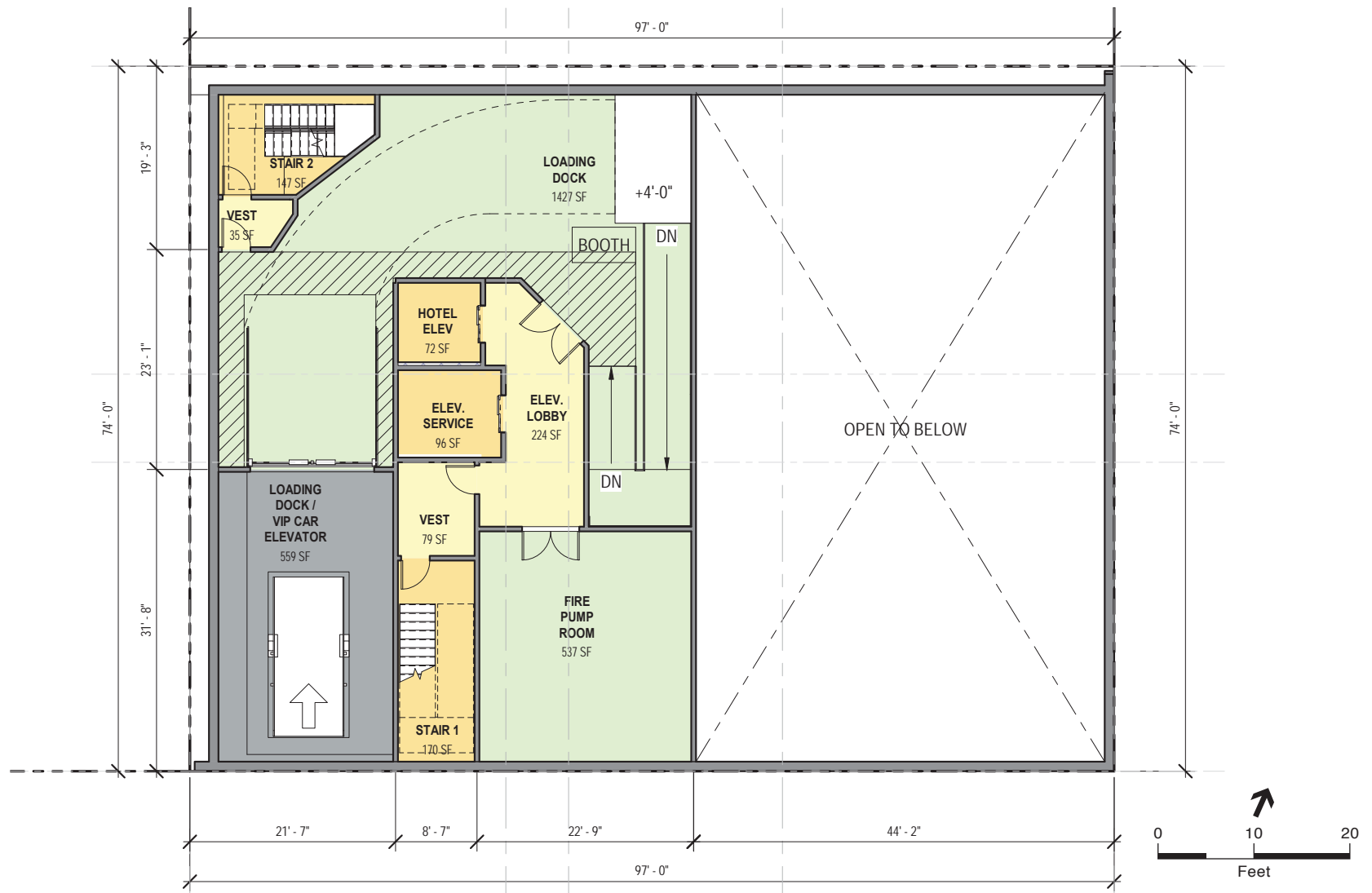


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**Figure 2-3**  
**Proposed Ground Floor Plan**



Source: Heller Manus Architects 2019.



Source: Heller Manus Architects 2019.

**Figure 2-5**  
**Proposed Basement Level 3 Plan**



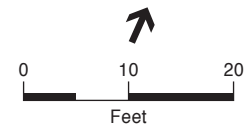
Source: Heller Manus Architects 2019.

**Figure 2-6**  
**Proposed Basement Level 2 Plan**



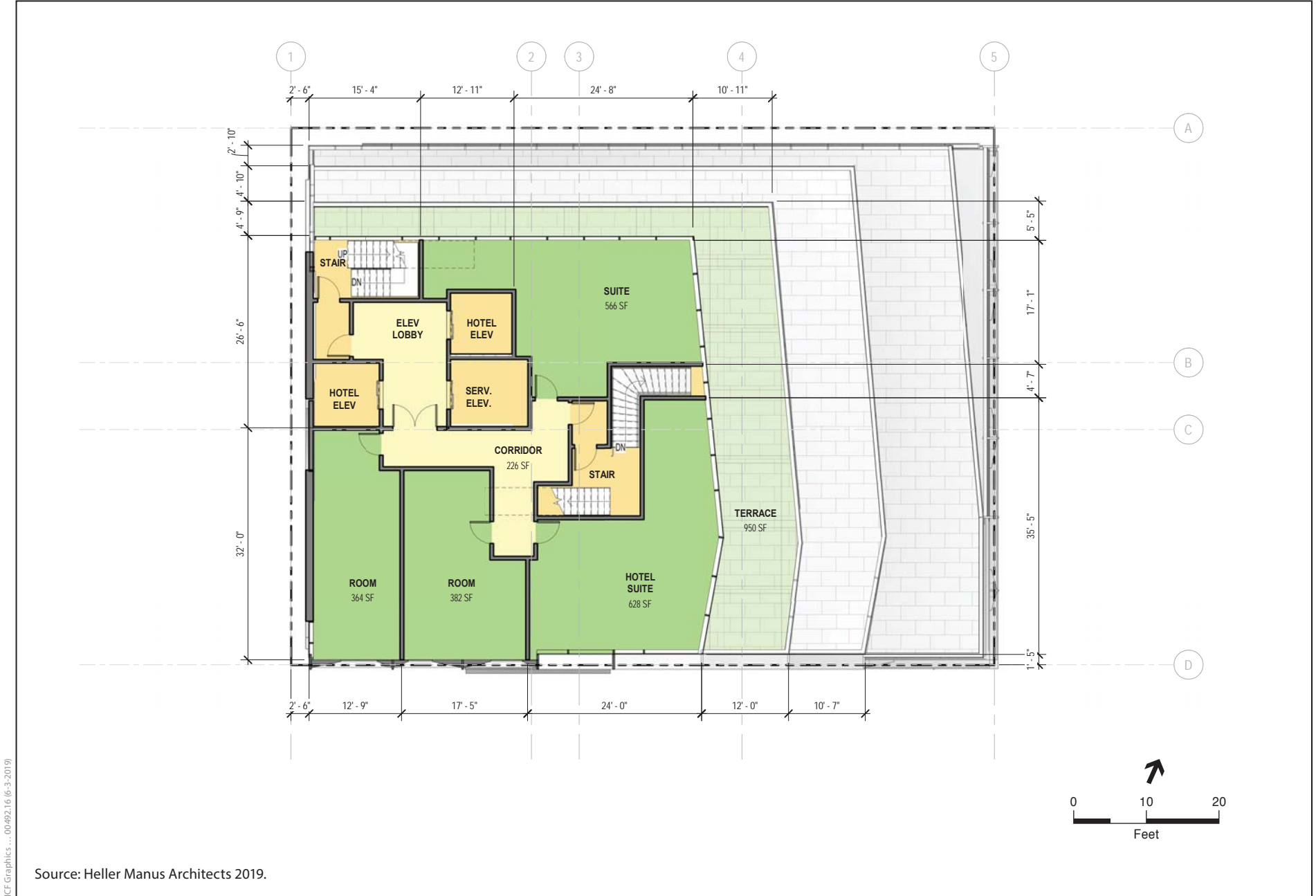


Source: Heller Manus Architects 2019.

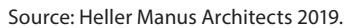


**Figure 2-8**  
**Proposed Level 2 Hotel Plan**





**Figure 2-9**  
**Proposed Level 17 Hotel Plan**



The building would be designed in a contemporary architectural style, employing glass and limestone as the primary building materials. For the primary façades on Merchant and Battery streets, the proposed design would feature large glass storefronts that would be articulated by a glass overhang. The existing brick façade would be retained for the ground floor and mezzanine, with a glass façade used for Floors 3 through 18.

The project would comply with the City and County of San Francisco's (City's) Green Building Code and meet Leadership in Energy and Environmental Design Gold requirements. Conceptual renderings were prepared by the project architect to illustrate how the proposed project would appear from different vantage points (see **Figure 2-11** and **Figure 2-12**, pp. 2-18 and 2-19). The vantage point in **Figure 2-11** is southeast of the project site, across Battery Street, at the western edge of Maritime Plaza. The vantage point in **Figure 2-12**, p. 2-19, is east of the project site, across Battery Street, also at the western edge of Maritime Plaza but from the height of the tower (approximately 150 feet).

### ***Open Space***

The proposed project would include approximately 2,720 square feet of POPOS along Merchant Street. Street furniture, such as tables and benches, would be placed along the Merchant Street sidewalk in front of the proposed building, along with stone paving and new street trees from Battery Street to Sansome Street. The proposed 2,720 square feet of privately owned public open space would exceed the planning code open space requirement for proposed hotel and restaurant uses (2,203 square feet). In addition, approximately 3,934 square feet of terrace space would be provided on floors 15 through 18 for hotel and restaurant guests.

### ***Parking, Loading, and Bicycle Facilities***

The existing building contains no off-street parking spaces. The proposed project would create one new curb cut and add an approximately 10-foot-wide garage door along Merchant Street for the loading dock/car elevator, which would provide access to the loading and parking levels. As shown in **Figure 2-4**, p. 2-10, the proposed project would add 24 valet parking spaces in Basement Level 4; 22 of the spaces would be in stackers, and two would be individually accessible ADA-compliant spaces. Car-share parking spaces would not be provided. Vehicle parking spaces would be available to hotel guests and restaurant patrons. Access to the parking spaces would be from the loading dock/car elevator on Merchant Street, which would be sized for both trucks and vehicles. A truck or service van would back up into the loading dock/car elevator and be transported down to Basement Level 3. Once in Basement Level 3, the truck or service van would back up to the loading dock. After unloading, the truck or service van would depart through the loading dock/car elevator and exit at Merchant Street. For vehicles, a valet driver would take the vehicle from patrons on Battery Street, then enter the loading dock/car elevator on Merchant Street and be transported down to Basement Level 4. The valet driver would put the vehicle in an open parking spot until the vehicle is needed again, at which point the valet would take the vehicle up the loading dock/car elevator and back to Battery Street to deliver it to the driver.



Source: Heller Manus Architects 2020.





Source: Heller Manus Architects 2020.

Thirteen class 1 bicycle parking spaces would be provided on Basement Level 2 in code-complaint, lift-assisted double-deck bicycle racks, as shown in **Figure 2-6**, p. 2-12. The bicycle racks would have a manually operated system that would stack the bicycles on two tiers, with lift-assist top trays that would slide down to within inches of the ground, requiring minimal lifting of the bicycle to the tray. As shown in **Figure 2-3**, p. 2-9, access to the bicycle spaces would be from the ground-level foyer on Merchant Street, located between the stairs and the loading dock/car elevator, or from the hotel reception area on Merchant or Battery streets where patrons would take an elevator to Basement Level 2.

Nineteen class 2 bicycle parking spaces would be provided in bicycle racks on Battery Street and Merchant Street, as shown in **Figure 2-3**, p. 2-9. These bicycle parking spaces would be available to hotel guests, restaurant patrons, building employees, and all members of the public. Access to the bicycle spaces would be from the lobby entry on Merchant Street or Battery Street.

### ***Landscaping***

No trees would be removed as part of the proposed project because none currently exist at the project site. As part of the project, three new street trees would be planted on Battery Street, and eight new street trees would be planted on Merchant Street, as shown in **Figure 2-3**, p. 2-9. The proposed tree types are London plane for Battery Street and Fastigiata ginkgo for Merchant Street. The sidewalks adjacent to the proposed building along Merchant and Battery streets would be replaced with decorative paving and curbs.

### ***Foundation and Excavation***

The project's deep foundation is anticipated to require the use of auger pressure-grouted displacement piles, drilled shafts, auger cast piles, Fundex piles, or torque-down piles. The proposed project would include excavation to a maximum depth of approximately 55 feet to accommodate the four subterranean levels and the building's foundation; approximately 15,000 cubic yards of material would be excavated.

### ***Construction Schedule***

Demolition and construction are estimated to take approximately 31 months over six phases, including demolition (one month), site preparation (three months), grading/excavation (seven months), building construction (17 months), paving (two months), and architectural coating work (one month). Construction is expected to commence in February 2021.

## **E. APPROVALS REQUIRED FOR THE PROPOSED PROJECT**

The proposed project would require approvals from several authorities, including those listed below.

### **ACTIONS BY THE PLANNING COMMISSION**

- Approval of conditional use authorization from the Planning Commission under Planning Code section 303 to permit hotel uses.
- Approval of Downtown Project Authorization from the Planning Commission, per Planning Code section 309 for projects within a C-3 zoning district greater than 50,000 square feet in area or 75 feet in height and for granting exceptions to the requirements of certain sections of the planning code.

### **ACTIONS BY OTHER CITY DEPARTMENTS**

- San Francisco Planning Department and Department of Building Inspection – Approval of the site permit.
- Department of Building Inspection – Approval of demolition, grading, and building permits for demolition of the existing building and construction of the new building as well as a night noise permit for nighttime construction.
- Department of Public Health – Approval of compliance with Maher Ordinance.
- San Francisco Public Works – Approval of a street space permit from the Bureau of Street Use and Mapping if sidewalks are used for construction staging and pedestrian walkways are constructed in the curb lanes.
- San Francisco Public Works – Approval of construction within the public right-of-way (e.g., bulb-outs, sidewalk extensions) to ensure consistency with the Better Streets Plan.
- San Francisco Public Works – Approval of a permit to plant street trees adjacent to the project site.
- San Francisco Public Works – Approval of maintenance agreement for Merchant Street improvements, subject to major encroachment permit.
- San Francisco Municipal Transportation Agency – Approval of the placement of bicycle racks on the sidewalk, as well as other sidewalk improvements, by the Sustainable Streets Division.
- San Francisco Municipal Transportation Agency – Approval of a special traffic permit from the Sustainable Streets Division if sidewalks are used for construction staging and pedestrian walkways are constructed in the curb lanes.

- San Francisco Municipal Transportation Agency – Approval of construction within the public right-of-way (e.g., bulb-outs, sidewalk extensions) to ensure consistency with the Better Streets Plan.
- San Francisco Public Utilities Commission – Approval of any changes to sewer laterals (connections to the City sewer).
- San Francisco Public Utilities Commission – Approval of an erosion and sediment control plan, in accordance with article 4.1 of the San Francisco Public Works Code.
- San Francisco Public Utilities Commission – Approval of post-construction stormwater design guidelines, including a stormwater control plan that complies with the City’s 2016 Stormwater Management Requirements and Design Guidelines.
- San Francisco Board of Supervisors – Approval of major encroachment permit by board resolution for Merchant Street improvements.
- San Francisco Recreation and Parks – Approval of a joint resolution by the Planning Commission and San Francisco Recreation and Parks to raise the absolute cumulative shadow limit on Maritime Plaza.
- San Francisco Entertainment Commission – Determine if a hearing is required as well as possible noise attenuation conditions.



## **3. ENVIRONMENTAL SETTING AND IMPACTS**

### **A. INTRODUCTION**

This chapter provides a project-level analysis of the physical environmental impacts associated with implementing the proposed project, as described in Chapter 2, Project Description. It describes the environmental setting, assesses impacts (offsite, onsite, construction related, operational, direct, indirect, and cumulative), and identifies mitigation measures to reduce or avoid the identified significant environmental impacts.

### **B. SCOPE OF ANALYSIS**

The environmental setting discussion describes the current physical conditions, or baseline conditions, in the project area. The baseline used for environmental impacts analysis under the California Environmental Quality Act (CEQA) reflects the conditions present at the time the Notice of Preparation of an Environmental Impact Report (NOP) for the environmental impact report (EIR) was published. As discussed in Chapter 1, Introduction, the project's NOP was published on August 7, 2019. The initial study (Appendix B) concluded that many of the physical environmental impacts of the proposed project would result in no impact or less-than-significant impacts and that mitigation measures agreed to by the project sponsor and required as conditions of approval would reduce significant impacts to a less-than-significant level. CEQA does not require further assessment of a project's less-than-significant impacts. The initial study identified less-than-significant project impacts related to the following environmental topics:

- Agriculture and Forestry Resources (all topics)
- Air Quality (all topics)
- Biological Resources (all topics)
- Cultural Resources (archaeological resources and human remains)
- Energy (all topics)
- Geology and Soils (all topics)
- Greenhouse Gas Emissions (all topics)
- Hazards and Hazardous Materials (all topics)
- Hydrology and Water Quality (all topics)
- Land Use and Land Use Planning (all topics)
- Mineral Resources (all topics)
- Noise (all topics)

- Population and Housing (all topics)
- Public Services (all topics)
- Recreation (all topics)
- Shadow (all topics)
- Transportation (all topics)
- Tribal Cultural Resources (all topics)
- Utilities and Service Systems (all topics)
- Wildfire (all topics)
- Wind (all topics)

The initial study determined that the proposed project could result in potentially significant impacts related to the following topic, as discussed in this EIR:

- Cultural resources (historic architectural)

## **C. SPECIFIC APPROACHES TO THE CEQA ANALYSIS**

### **AESTHETICS AND PARKING ANALYSIS (SENATE BILL 743 AND CEQA SECTION 21099)**

CEQA section 21099(d) provides that “aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”<sup>1</sup> Accordingly, aesthetics and parking are not considered when determining whether a project that meets all of the following three criteria has the potential to result in significant environmental impacts:

- The project is in a transit priority area.<sup>2</sup>
- The project is on an infill site.<sup>3</sup>
- The project is a residential, mixed-use residential, or employment center development.<sup>4</sup>

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<sup>1</sup> See section 21099(d)(1) of the CEQA statute.

<sup>2</sup> CEQA section 21099(a)(7) defines a transit priority area as an area within 0.5 mile of an existing or planned major transit stop. A major transit stop is defined in CEQA section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency-of-service interval of 15 minutes or less during the morning and afternoon peak commute periods.

<sup>3</sup> CEQA section 21099(a)(4) defines an infill site as a lot in an urban area that has been previously developed or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

<sup>4</sup> CEQA section 21099(a)(1) defines an employment center as a project on property zoned for commercial uses with a floor area ratio of no less than 0.75 in a transit priority area.

The proposed project meets the first, second, and third criteria; therefore, this EIR does not consider aesthetics or the adequacy of parking in determining the significance of project impacts under CEQA.

CEQA section 21099(e) states that a lead agency maintains the authority to consider impacts on aesthetics pursuant to local design review ordinances or other discretionary powers and that impacts on aesthetics do not include impacts on historical or cultural resources. As such, the San Francisco Planning Department (department) does consider aesthetics for design review and evaluating effects on historical or cultural resources.

The department recognizes that the public and decision makers may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. Therefore, some of the information that otherwise would have been provided in an aesthetics section of this EIR (such as visual simulations of the proposed project) is included in Chapter 2, Project Description. However, this information is provided solely for informational purposes and, pursuant to CEQA, is not used to determine the significance of the environmental impacts of the project.

Similarly, the department acknowledges that parking conditions may be of interest to the public and the decision makers. Therefore, the initial study presents parking demand information in Section E.5, Transportation and Circulation, for informational purposes and considers any secondary physical impacts associated with a constrained parking supply as applicable in the transportation, air quality, greenhouse gas, noise, and pedestrian safety analyses.

## **D. SCOPE AND ORGANIZATION OF THIS CHAPTER**

Each environmental topic analyzed in this chapter includes the subsections listed below.

### **INTRODUCTION**

This subsection includes a brief description of the types of impacts analyzed and a summary of the impacts that were “focused out” in the initial study (i.e., impacts that were determined to result in a less-than-significant impact).

### **ENVIRONMENTAL SETTING**

This subsection describes baseline physical conditions (e.g., existing land uses, transportation conditions, the noise environment) at the project site and in the surrounding area with respect to a specific environmental topic at the time the NOP was issued. Conditions are described with sufficient detail and breadth to allow a general understanding of the environmental impacts of the proposed project.

## REGULATORY FRAMEWORK

This subsection describes the relevant federal, state, regional, and/or local regulatory requirements that are directly applicable to the environmental topic being analyzed.

## IMPACTS AND MITIGATION MEASURES

This subsection evaluates the potential for the proposed project to result in direct or indirect adverse impacts on the existing physical environment, with consideration of both short-term and long-term impacts. The analysis covers all project phases, including construction and operation. The significance thresholds for environmental impacts are defined at the beginning of this subsection, and the discussion of the approach to the analysis explains how the significance thresholds have been applied in evaluating the impacts of the proposed project.

Both project-level and cumulative impacts are analyzed. Project-level impacts could result from actions related to implementation of the proposed project. Cumulative impacts could result from implementation of the proposed project in combination with other cumulative projects in the study area.

### E. SIGNIFICANCE CRITERIA AND CLASSIFICATION OF IMPACTS

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The guidelines for implementing CEQA direct that this determination be based on scientific and factual data, including the entire record for the project, and not on argument, speculation, or unsubstantiated evidence. The significance criteria used in this EIR to determine the severity of impacts are those established by the department's Environmental Planning Division. The Environmental Planning Division's guidance is based on CEQA Guidelines Appendix G, with the procedures set forth in chapter 31.10 of the San Francisco Administrative Code. The significance thresholds are presented in each environmental topic section of this chapter before the discussion of impacts.

The impacts of the proposed project are organized into separate categories, based on the significance thresholds for that topic. Project-specific impacts are discussed first, followed by the cumulative analysis. Impacts are numbered and shown in boldface type. Impacts are numbered consecutively within each topic and include an abbreviated reference to the impact section (e.g., "CR"). The following abbreviations are used for individual topics:

- CR: Cultural Resources

Impacts are categorized by type of impact, as follows:

- *No Impact (NI)*. No adverse changes (or impacts) on the environment are expected.

- *Less than Significant (LS)*. An impact that would not involve an adverse physical change to the environment, would not exceed the defined significance criteria, or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, or federal laws and regulations.
- *Less than Significant with Mitigation (LSM)*. An impact that would be reduced to a less-than-significant level through implementation of the identified mitigation measures.
- *Significant and Unavoidable with Mitigation (SUM)*. An adverse physical environmental impact that would exceed the defined significance criteria and be reduced through compliance with existing local, state, or federal laws and regulations and/or implementation of all feasible mitigation measures but would not be reduced to a less-than-significant level.
- *Significant and Unavoidable (SU)*. An adverse physical environmental impact that would exceed the defined significance criteria and would not be eliminated or reduced to a less-than-significant level through compliance with existing local, state, or federal laws and regulations and for which there are no feasible mitigation measures.

## **F. MITIGATION MEASURES**

CEQA Guidelines section 15126.4 states that an EIR “shall describe feasible measures which could minimize significant adverse impacts.” CEQA requires mitigation measures to have an essential nexus and be roughly proportional to the significant impact identified in the EIR. The project sponsor is required to implement the mitigation measures identified in this chapter, and the lead agency (in this case, the City and County of San Francisco) is responsible for overseeing the project sponsor’s implementation of such mitigation measures.

Pursuant to CEQA Guidelines section 15126.4, mitigation measures are not required for environmental impacts that are not found to be significant. Therefore, in cases where this EIR finds the physical environmental impact of the proposed project to be less than significant but the department identifies one or more measures to lessen the project’s already less-than-significant impact, the measures are identified as “improvement measures.” If the proposed project is approved, the project sponsor has indicated that it would incorporate all improvement measures identified in this EIR as part of the project.

## **G. CUMULATIVE IMPACTS**

Cumulative impacts, as defined in CEQA Guidelines section 15355, refer to two or more individual effects that, when taken together, are “considerable” or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts taking place over time. If the analysis determines that the potential exists for the proposed project, taken together with past, present, and

reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project's incremental contribution to any significant cumulative impact is itself significant (i.e., cumulatively considerable).

- An EIR shall discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable" (e.g., the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current, and probable future projects, including those outside the control of the agency, if necessary).
- An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- A project's contribution is less than cumulatively considerable, and therefore not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
- The discussion of impact severity and likelihood of occurrence need not be as detailed as for effects attributable to the project alone.
- The focus of analysis should be on the cumulative impact to which the identified other projects contribute rather than attributes of the other projects that do not contribute to the cumulative impact.

## APPROACH TO CUMULATIVE IMPACTS

Two approaches to a cumulative impact analysis are provided in CEQA Guidelines section 15130(b)(1):

1. The analysis can be based on a list of past, present, and reasonably foreseeable future projects producing closely related impacts that could combine with those of a proposed project, or
2. A summary of projections contained in a general plan or related planning document can be used to determine cumulative impacts.

The factors described below were used to determine the appropriate level of cumulative analysis in this EIR. To determine whether the overall long-term impacts of projects would be cumulatively significant, the analysis generally considers the following:

- **Similar Environmental Impacts.** A relevant future project contributes to effects on resources that are also affected by the proposed project. A relevant future project is defined as one that is "reasonably foreseeable," such as a project for which an application has been filed with the approving agency or a project that has approved funding.

- **Geographic Scope and Location.** A relevant project is within the geographic area where effects could combine. The geographic scope varies on a resource-by-resource basis. For example, the geographic scope for evaluating cumulative effects on air quality consists of the affected air basin.
- **Timing and Duration of Implementation.** Effects associated with activities for a relevant project (e.g., short-term construction or demolition or long-term operations) would very likely coincide with the related effects of the proposed project.

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project together with related impacts from past, present, and reasonably foreseeable future projects. The goal of this analysis is to determine whether the overall long-term impacts of all projects would be cumulatively significant and whether the proposed project itself would cause a cumulatively considerable incremental contribution to any such cumulatively significant impacts.

The analysis in this EIR employs both a list-based and a projections-based approach.

The cumulative impact analysis for each individual resource topic is presented in each resource section of this chapter immediately after the description of the direct project impacts and identified mitigation measures.

## CUMULATIVE SETTING

Past, present, and reasonably foreseeable cumulative development projects within the vicinity of the project site are listed below in **Table 3-1** and mapped in **Figure 3-1**, p. 3-10. These cumulative projects are either under construction or the subject of an environmental evaluation application on file with the department. As shown in **Table 3-1**, up to 283 dwelling units, 200 hotel rooms, 64,611 square feet of retail space, and 74,697 square feet of office space may be developed in the vicinity of the project site.

In addition to these cumulative development projects, several transportation network changes would occur in the project vicinity. The Transit Effectiveness Project was designed to implement systemwide changes to San Francisco Municipal Railway (Muni) service and streamline operations, adapt to changes in travel patterns, and improve reliability and passenger experience. Specific changes to the Muni routes in the vicinity of the proposed project include changes to the 1, 10, 12, 30X, and 41 Muni routes. The San Francisco Bicycle Plan designates existing bikeways along the Battery Street/Sansome Street and Washington Street/Clay Street couplets for “minor improvements” and the segment of Battery Street between The

Embarcadero and Clay Street for “long-term improvements.”<sup>5</sup> The first phase of the Clay Street Red Transit-Only Lanes Project, completed in 2015, involved the installation of “red carpet” paint treatments for the existing transit-only lane on Clay Street from Sansome Street to Front Street. The second phase of the project—extending the paint treatments to the segment of the existing transit-only lane upstream (west) of Sansome Street to Montgomery Street and enacting legislative changes to convert the segment to a 24-hour transit-only lane—was originally scheduled for public hearings, approval, and construction in 2015 but has yet to be completed.

The Columbus Avenue Safety Project would implement pedestrian safety improvements along Columbus Avenue, including permanent corner bulb-outs and new continental crosswalk striping at multiple intersections along Columbus Avenue (at Grant Avenue, Stockton Street/Green Street, Vallejo Street, and Pacific Avenue/Kearny Street) as well as a road diet between Broadway and Washington Street. As part of the Kearny Corridor Multimodal Improvement Project, the San Francisco Municipal Transportation Agency (SFMTA) is studying potential multimodal improvements for Kearny Street and Montgomery Street between Broadway and Market Street and for Washington Street and Clay Street between Montgomery Street and Stockton Street to improve pedestrian safety, traffic conditions, and transit reliability and implement new bikeways. Finally, many major citywide projects are also ongoing, including the Central Subway, Van Ness Avenue Bus Rapid Transit, Geary Corridor Bus Rapid Transit, the Caltrain Modernization Program, expanded ferry service from the Water Emergency Transportation Authority, and various capacity upgrades to Bay Area Rapid Transit.

**Table 3-1. Cumulative Development Projects**

Address	Case File No.	Dwelling Units	Hotel Rooms	Uses (gross square feet)		Other/Notes
				Retail	Office	
3 Stark Street	2018-012758E					Change of use from office to preschool.
1020–1028 Kearny Street	2017-000282E	24				Change of use from office to group housing.
425 Broadway	2017-015678E	48		4,529	26,840	Six story, 64- foot-tall mixed-use building

<sup>5</sup> “Minor improvements” are changes to pavement markings and signage, parking configurations, and intersection traffic signal timing plans, while “long-term improvements” involve either major improvements to existing bikeways or potential future additions of streets or pathways to the bikeway network.



Address	Case File No.	Dwelling Units	Hotel Rooms	Uses (gross square feet)		Other/Notes
				Retail	Office	
17 Osgood Place	2017-001423E					Renovation of and addition to existing building to convert ground floor commercial space to one-bedroom residential unit and merge two existing residential units into one 2-bedroom residential unit. No change to unit count or height of the building.
875 Sansome Street	2017-003622E	9		3,110	5,700	Six-story, 65-foot mixed-use building.
88 Broadway	2016-007850E	178		10,572	1,562	Two six-story buildings with affordable family and senior housing.
838 Grant Avenue	2016-015777E					Interior tenant improvements; includes remodeling front façade, enlarging the commercial space, and converting basement from retail to restaurant use.
733 Kearny Street (Portsmouth Square)	2018-013597E					Improvements to almost all park features, including plazas, children's play areas, clubhouse, landscaping, and associated waterproofing, structural upgrades, and site work.
700 Montgomery Street (Academy of Art University)	2008.0586E					Change of use from office and retail to office and post-secondary educational institution and retail.
530 Sansome Street	2019-017481		200	46,400	39,800	A 200-room visitor-serving hotel, plus office, gym, and restaurant uses, and a new fire station.
809 Sacramento Street	2016-010671E	1			795	Vertical addition, adding two stories; addition of office use to the first floor.
650 Sacramento Street	2017-009472E	19				Adaptive re-use conversion of three-story building to four-story group housing.
220 Battery Street	2015-009783E	4				Vertical addition of two stories on top of a two-story building.
<b>TOTAL</b>		<b>283</b>	<b>200</b>	<b>64,611</b>	<b>74,697</b>	

Sources: San Francisco Planning Department, *San Francisco Property Information Map*, 2019, <http://sfplanninggis.org/pim/>, accessed June 7, 2019.



447 Battery Street Project  
Case No: 2014.1036E

**Figure 3-1**  
**Cumulative Development Projects**

## 3.A HISTORIC ARCHITECTURAL RESOURCES

### INTRODUCTION

This section assesses project impacts on historical architectural resources. It describes the historic architectural resources on the project site, identifies potential historic architectural resources near the project site, evaluates potential direct and indirect impacts on historic architectural resources that could result from the proposed project, and identifies mitigation measures to avoid or reduce potential adverse impacts. Project-related impacts on archeological resources, human remains, and tribal cultural resources are addressed in Appendix B, initial study, of this environmental impact report (EIR).

### ENVIRONMENTAL SETTING

#### ***Definitions and Data Sources***

A historical resource is defined in California Environmental Quality Act (CEQA) Guidelines section 15064.5(a) as one that is listed in, or determined to be eligible for listing in, the California Register of Historical Resources (California register). In addition, a resource that (i) is identified as significant in a local register of historical resources, such as article 10 and/or article 11 of the San Francisco Planning Code, or (ii) is deemed significant because of its identification in a historical resources survey meeting the requirements of California Public Resources Code section 5024.1(g) is presumed to be a historical resource “unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.” CEQA section 21084.1 also permits a lead agency to determine that a resource constitutes a historical resource, even if the resource does not meet the foregoing criteria.

For the purposes of this EIR, the term *historic architectural resource* is used to distinguish such resources from archeological resources, which may also be considered historical resources under CEQA. Archeological resources, including archeological resources that are potentially historical resources under CEQA Guidelines section 15064.5, are addressed in Appendix B, initial study, of this EIR.

The information and analysis in this section are based on *447 Battery Street, San Francisco, Historic Resource Evaluation Response Part 1* (HRER Part 1), 2017, and *447 Battery Street, San Francisco, Historic Resource Evaluation Response Part 2* (HRER Part 2), prepared in 2017 and revised in 2020.<sup>1,2</sup>

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<sup>1</sup> San Francisco Planning Department, *447 Battery Street, San Francisco, Historic Resources Evaluation Response Part 1*, 2017. This document (and all other documents cited in this report, unless otherwise noted) is available for review at the San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, as part of Case File No. 2014.1036ENV.

<sup>2</sup> San Francisco Planning Department, *447 Battery Street, San Francisco, Historic Resource Evaluation Response Part 2*, 2020.

## Property Description

The existing building at 447 Battery Street (that is, the Jones-Thierbach Coffee Company Building), generally has a rectangular footprint that fills the majority of the parcel, with the exception of a light shaft along the western edge of the parcel, formed by a recessed section of the building's rear façade. The building is three stories high, 48 feet tall, and has a flat roof surrounded by a parapet. The exterior of the Jones-Thierbach Coffee Company Building features an exposed brick substratum laid in a common bond pattern. The internal structure features heavy timber beams. The primary façade, facing east toward Battery Street, has three non-original openings at the ground floor that contain recent storefront and entrance assemblies. The second and third stories feature seven evenly spaced bays, each of which contains a segmental arched opening with a non-original tripartite metal-sash window. The south façade, facing toward Merchant Street, contains eight bays that also feature segmental arched openings. The ground floor openings feature the same non-original window configurations as the primary façade, while the second and third stories feature steel-sash windows with divided lights. A non-original metal-frame entrance has been inserted at one of the original window openings near the west end of the south façade. A cornice formed by bands of brick courses spans the east and south façades immediately below the roofline.

## Design and Construction of 447 Battery Street

The building at 447 Battery Street was constructed in 1907 at its current location in the present-day Financial District, an area of San Francisco that was largely industrial and commercial in character around the turn of the twentieth century and effectively leveled by the earthquake and fires that devastated much of the city in 1906. Following that disaster, members of the city's political and business spheres raced to rebuild areas within and adjacent to downtown San Francisco. Upon its construction, for coffee storage and retail uses, the building expressed the relatively straightforward design of an industrial warehouse, with a minimal level of exterior architectural ornamentation, which was limited to the evenly spaced bands of segmental arched windows at the Battery Street and Merchant Street façades as well as the simple belt courses that spanned these same façades between the third story and the roofline.

Photographs of the building taken following its construction indicate that the Battery Street and Merchant Street façades were originally covered with light-colored cladding, most likely stucco, that featured painted signage, which advertised the wares of the building's original tenant, the Jones-Thierbach Coffee Company (**Figure 3.A-1** and **Figure 3.A-2**). The building is an example of a warehouse and loft building, a commercial and industrial typology that was commonly constructed in San Francisco districts near the waterfront during the early twentieth century. At its primary Battery Street façade, the building featured large ground-floor openings with storefront assemblies. The storefronts corresponded to the Jones-Thierbach Coffee Company's publicly accessible retail and office spaces. The upper stories, however, remained largely open on the interior; these contained flexible "loft" spaces that accommodated storage of the company's wholesale coffee, teas, and spices.



**FIGURE 3.A-1. SOUTHEAST CORNER AND EAST FAÇADE OF THE JONES-THIERBACH COFFEE COMPANY BUILDING, VIEWED FROM BATTERY STREET FACING NORTH (PHOTOGRAPHED IN 1918)**

Source: San Francisco Public Works, *Photograph Collection*, Album 23, Image 5605, accessed from Western Neighborhoods Project, <http://opensfhistory.org/Display/wnp36.01933.jpg>. Edited by ICF.



**FIGURE 3.A-2. EAST FAÇADE OF THE JONES-THIERBACH COFFEE COMPANY BUILDING, VIEWED FROM BATTERY STREET FACING WEST (PHOTOGRAPHED IN 1957)**

Source: San Francisco Office of Assessor, Record Photographs, San Francisco Public Library.

The design of the Jones-Thierbach Coffee Company Building is attributed to Frank S. Van Trees, a classically trained Bay Area architect who was responsible for more architecturally ornate works elsewhere in San Francisco. The restrained design of the Jones-Thierbach Coffee Company Building suggests that Van Trees chose to employ a simplified architectural scheme that aligned with the building's utilitarian warehouse function.

### **The Jones-Thierbach Coffee Company**

The firm that initially occupied the subject building was Thierbach and Company, a medium-sized, San Francisco-based coffee roasting and wholesaling company led by Charles Frederick Thierbach. In 1912, Michael P. Jones joined the firm, which changed its name, accordingly, to the Jones-Thierbach Coffee Company. The Jones-Thierbach Coffee Company occupied the building until 1966.

The Jones-Thierbach Coffee Company contributed to the active local coffee industry, which represented a significant commercial sector in San Francisco during the second half of the nineteenth century and the first decades of the twentieth century. The earliest known coffee roaster in the city opened by 1850; over the course of the following century, numerous coffee-related companies operated in San Francisco, including importers, warehousemen, and roasters. Some companies filled more than one of these roles, and some developed into considerable operations that reached national markets, such as J.A. Folger and Company and Hills Brothers. Continuing up to the turn of the twentieth century, many local coffee companies operated warehouses, roasteries, and "factories" north of Market Street, in the vicinity of 447 Battery Street.

Following the 1906 earthquake, and into the post-World War II period, more and more coffee companies migrated to the South of Market (SoMa) district, which is where two of San Francisco's largest coffee companies built immense facilities for their operations: J.A. Folger and Company at 101 Howard Street, which constructed a building immediately before the 1906 earthquake, and Hills Brothers at 2 Harrison Street, which constructed a building in the mid-1920s. Both buildings were within blocks of the eastern waterfront, giving their respective companies access to imported goods.

### **Later Tenants and Alterations**

Following six decades of use as a coffee and tea warehouse and roasting facility—initially as Thierbach and Company and subsequently the Jones-Thierbach Coffee Company—the subject building was purchased by the Ron Kaufman Company in 1967. The new owner converted the building from its original industrial use to commercial office space and implemented alterations that included reconfiguring interior spaces as well as updating the outside appearance of the building. The latter was accomplished by removing the cladding, most likely by sandblasting, to reveal the brick construction of the exterior walls, which had previously been covered (**Figure 3.A-3**). During the 1990s, sandblasting began at the Battery Street façade but was halted before



being implemented across the entire building. Original windows at the Battery Street and Merchant Street façades appear to have been replaced at that time. Other alterations that occurred include reconfiguration of the early twentieth-century commercial storefronts facing Battery Street, which now contain modern metal-frame assemblies with awnings.



**FIGURE 3.A-3. CURRENT CONDITION OF THE JONES-THIERBACH COFFEE COMPANY BUILDING, INCLUDING BRICK ON THE EXTERIOR WALLS EXPOSED DURING CONVERSION TO COMMERCIAL OFFICE USE C.1967**

Source: Heller Manus Architects, 2019.

The setting of the Jones-Thierbach Coffee Company Building experienced a substantial shift in character during the post-World War II period. At that juncture, the San Francisco Redevelopment Agency pushed forward plans to demolish a large portion of the city's produce market district—located near the waterfront immediately east of the subject building—and construct the Golden Gateway Redevelopment Project using federally subsidized urban renewal funds. The Golden Gateway ultimately filled a large swath of downtown bounded by Broadway, Battery Street, California Street, and The Embarcadero and introduced new low-rise and high-rise housing as well as office buildings, including the multi-building Embarcadero Center office and hotel complex. Simultaneously, the Financial District crept north along Montgomery, Sansome, and Battery streets, resulting in new privately funded commercial developments such as the iconic Transamerica Pyramid (1972), located approximately two blocks west of the project site. This trend toward more dense urban development in support of commercial and financial firms displaced a number of the remaining industrial and warehousing businesses near the

waterfront north of Market Street, with the area evolving into a de facto extension of the Financial District.

Today, the parcels immediately north and south of the building feature modern commercial construction, while the buildings facing Merchant Street immediately west of the project site are remaining examples of two- or three-story early twentieth-century commercial buildings.

## ***CEQA Historical Resource Status of 447 Battery Street***

### **Previous Designations and Historical Resource Survey Evaluations**

The building at 447 Battery Street was surveyed by the Junior League of San Francisco and listed in the 1968 book *Here Today: San Francisco's Architectural Heritage* (Here Today).<sup>3</sup> The survey did not assign ratings to buildings or involve in-depth archival research. On May 11, 1970, the list of properties included in the 1968 *Here Today* book was adopted by the San Francisco Board of Supervisors through Resolution No. 268-70. Because of local adoption of *Here Today*, the survey qualifies as an official local historical register under CEQA. As such, 447 Battery Street is considered a historical built-environment resource for the purposes of CEQA review, based on its inclusion in the 1968 *Here Today* book. Furthermore, the building at 447 Battery Street was surveyed as part of the San Francisco Department of City Planning Architectural Quality Survey of 1976 (1976 DCP Survey), a city reconnaissance survey that identified and rated architecturally significant buildings and structures, using a scale of 0 (contextual) to 5 (extraordinary). Potential historical significance was not considered when assigning a rating, and research regarding the history of the buildings and structures was not conducted. The structure at 447 Battery Street was assigned a rating of 1, which recognizes “contextual importance.” Recordation alone in the 1976 DCP Survey does not qualify a property for recognition as a historical resource for the purposes of CEQA.

The Jones-Thierbach Coffee Company Building at 447 Battery Street is identified as a Category V “unrated” building under article 11 of the San Francisco Planning Code, which is described in greater detail under Regulatory Framework, below. On the basis of the article 11 rating, Category V buildings are not considered CEQA historical resources.<sup>4</sup>

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<sup>3</sup> Junior League of San Francisco, Inc., *Here Today: San Francisco's Architectural Heritage*, San Francisco: Chronicle Books, 1968 p. 251.

<sup>4</sup> San Francisco Planning Department, *San Francisco Preservation Bulletin No. 16: City and County of San Francisco Planning Department CEQA Review Procedures for Historic Resources*, March 2008, <https://sf-planning.org/sites/default/files/FileCenter/Documents/5340-PresBulletin16CEQA.pdf>, accessed December 10, 2018.



## Overview of California Register Significance Evaluation

In 2017, the San Francisco Planning Department (department) prepared an HRER Part 1, which outlined the significance of the Jones-Thierbach Coffee Company Building with respect to the four evaluative criteria of the California register. As described in section 5024.1 of the California Public Resources Code, the California register criteria, which are based on the evaluative criteria established by the National Register of Historic Places (national register), are the following:

- **Criterion A (Event):** Properties associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
- **Criterion B (Person):** Properties associated with the lives of persons important in our local, regional, or national past;
- **Criterion C (Design/Construction):** Properties that embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master or possess high artistic values; and
- **Criterion D (Information Potential):** Properties that yield, or may be likely to yield, information important in prehistory or history.

The following provides a summary of the California register eligibility evaluation presented in the HRER Part 1 from 2017.

### **Criterion 1 (Events)**

The Jones-Thierbach Coffee Company Building at 447 Battery Street, constructed in 1907, is directly associated with reconstruction efforts in downtown San Francisco following the widespread destruction caused by the 1906 earthquake and fires. Although this historic context resulted in the construction of many buildings throughout San Francisco that supported the city's linked commercial, industrial production, and trading economies, the building at 447 Battery Street is an uncommon vestige of the post-1906 reconstruction period, located in an area of the present-day Financial District that experienced widespread redevelopment in the years following World War II.

Phased implementation of the Golden Gateway Redevelopment Project, in the area east of Battery Street and immediately adjacent to the subject building, resulted in demolition of many low-scale commercial and industrial buildings that were part of operations along the city's working waterfront. The northward creep of financial institutions from areas near Market Street resulted in additional demolition in the vicinity of the subject building, which removed buildings with the same associative value as 447 Battery Street. In addition, the Jones-Thierbach Coffee Company Building has significance related to San Francisco's coffee industry. The building is the only one that was used historically for coffee roasting and warehousing that is known to remain in the industry's initial hub north of Market Street. The coffee industry held prominence in San

San Francisco, beginning in the mid-nineteenth century, and resulted in the financial success and national reach of companies such as Folger's and Hills Brothers. The building at 447 Battery Street housed a smaller coffee producer, the Jones-Thierbach Coffee Company, which represented the scale of many of the firms that contributed to this locally significant industry but were eclipsed by the prominence of larger local competitors. San Francisco's coffee industry was centered in the area north of Market Street in the late nineteenth and early twentieth centuries but had begun to shift to areas south of Market Street at approximately the time the Jones-Thierbach Coffee Company Building was constructed in 1907. The Jones-Thierbach Coffee Company remained in the building for nearly six decades.

Today, 447 Battery Street stands as a significant built-environment remnant that signifies San Francisco's economy and urban form during the first half of the twentieth century. As a result, the building at 447 Battery Street is significant under California register Criterion 1.

### **Criterion 2 (Persons)**

No significant individuals were directly associated with the building at 447 Battery Street to the extent that the building would qualify for California register inclusion under Criterion 2. The building was initially owned by Henry E. Bothin, a local industrialist, and subsequently associated with Charles Thierbach, M.P. Jones, and their heirs, who oversaw the coffee company that occupied the building from its construction until 1966. Although Bothin was a prominent individual in the Bay Area, his relationship to the building was based solely on early ownership rather than an influential role in activities that occurred there; furthermore, Thierbach and Jones do not appear to have made significant contributions to San Francisco or California history. As a result, the building at 447 Battery Street is not significant under California register Criterion 2.

### **Criterion 3 (Architecture/Design)**

The building at 447 Battery Street is architecturally significant because of its status as a rare remaining example of a brick commercial building and warehouse in the present-day Financial District. During the second half of the nineteenth century and the early twentieth century, this building type was not uncommon in areas of northeastern San Francisco. Such warehouses supported the production and storage of bulk trade goods that were shipped in and out of the city's working waterfront. The Jones-Thierbach Coffee Company Building embodies the distinctive (albeit relatively utilitarian) characteristics of the turn-of-the-twentieth-century warehouse type, including brick masonry construction, heavy timber framing, and regularly spaced window openings. Designed by locally noted architect Frank S. Van Trees, the building is a restrained and late example of a loft and warehouse building that nevertheless clearly embodies the distinctive characteristics of its building type. As a result, the building at 447 Battery Street is significant under California register Criterion 3.

#### **Criterion 4 (Information Potential)**

The building at 447 Battery Street does not represent a rare construction type that would yield information important to an understanding of San Francisco history that is not available in other historical sources or expressed in other built-environment resources of the same era. As a result, the building at 447 Battery Street is not significant under California register Criterion 4.

#### **Overview of Integrity Evaluation**

In addition to meeting at least one of the four criteria, a property or district that is eligible for California register listing must retain historic integrity, meaning that it must have the ability to convey its significance through the retention of seven aspects, or qualities, that, in various combinations, define integrity:

- **Location:** The place where the historic property was constructed;
- **Design:** The combination of elements that creates the form, plans, space, structure, and style of the property;
- **Setting:** The physical environment of the historic property, inclusive of the landscape and spatial relationships of the buildings;
- **Materials:** The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form the historic property;
- **Workmanship:** Physical evidence of the crafts of a particular culture or people during any given period in history;
- **Feeling:** The property's expression of the aesthetic or historic sense of a particular period of time; and
- **Association:** Direct link between an important historic event or person and a historic property.

The HRER Part 1 determined that the building at 447 Battery Street retains integrity of location, design, workmanship, feeling, and association but does not retain integrity of setting or materials because of extensive redevelopment in the surrounding portion of the Financial District, taking it from a largely low-scale industrial and market district to a high-rise office and commercial district, and removal of the building's cladding, Battery Street storefronts, and windows along many of its façade openings on the east and south sides. In spite of these alterations to the building's historic setting and material palette, the building retains sufficient integrity to convey its significance under California register criteria 1 and 3.

#### **Character-Defining Features**

In consideration of 447 Battery Street's significance under California register criteria 1 and 3, the resource's period of significance is 1907–1967.

The Historic Resource Evaluation Response identified the following character-defining features at 447 Battery Street:

- Three-story height and roughly rectangular footprint;
- Exterior wall construction (brick masonry);
- Openings for storefronts and building entry on Battery Street;
- Regular, evenly spaced rhythm of window openings on the first (Merchant Street only), second, and third stories (the two westernmost bays on Merchant Street are slightly closer together);
- Slightly projecting brick sill and segmental arch head at window openings; and
- Exposed brick cornice, consisting of, from bottom to top, a projecting band course, a flat frieze, several courses of corbelling, and projecting coping.

### **Historic District Contributing Status**

The building at 447 Battery Street does not contribute to any known historic districts. The building is one block southeast of the Jackson Square Landmark District, which is locally designated under article 10 of the San Francisco Planning Code. In addition, the building is approximately two blocks northeast of the Commercial-Leidesdorff Conservation District and two blocks north of the Front-California Conservation District. Each of these districts is locally designated as a conservation district under article 11 and represents an intact collection of post-1906 commercial buildings that remain embedded within the more recent and typically more densely constructed urban fabric of San Francisco's Financial District. Although the building at 447 Battery Street shares a historic context and many architectural characteristics with contributors to the surrounding historic districts, it is physically separated from those districts. The separating city blocks contain numerous examples of post-World War II construction. Therefore, the building at 447 Battery Street is not discernibly linked to the primary concentrations of buildings that form these nearby historic districts.

### ***Historical Built-Environment Resources Near the Project Site***

The following are previously identified historical built-environment resources that meet the definition of a CEQA historical resource and are located in the vicinity of the project site at 447 Battery Street:

- The building at 300 Clay Street (Alcoa Building) and Maritime Plaza (assessor's parcel numbers [APNs] 0204/019, 0204/020, 0204/021, 0204/022, and 0204/023), a modern corporate office tower and public landscaped area atop a two-story parking garage, are opposite the subject building on the east side of Battery Street. The building at 300 Clay Street and Maritime Plaza have been determined eligible for California register listing through local CEQA review.

- The U.S. Customhouse at 555 Battery Street (APN 0197/001) is a five-story Beaux Arts–style federal office building at the northwest corner of the intersection of Battery and Washington streets, one-half-block north of the project site; the U.S. Customhouse was listed in the national register in 1975 and is therefore listed in the California register. It qualifies as a historical resource under CEQA.
- The United States Appraisers Building at 630 Sansome Street (APN 0197/002) is a 16-story federal office building at the northeast corner of the intersection of Washington and Sansome streets, northwest of the project site; the building was determined eligible for California register listing through local CEQA review.
- The building at 545 Sansome Street (APN 0207/035) is a nine-story commercial office building at the southwest corner of Sansome and Washington streets, approximately one block west of the project site; the building was determined eligible for California register listing through local CEQA review.
- The Jackson Square Landmark District, which is locally designated under article 10, represents a concentration of surviving commercial buildings that date to as early as the mid-nineteenth century, in an area generally bounded by Washington, Sansome, Pacific, and Columbus streets. The Jackson Square Landmark District is highly significant as a unique example of the urban fabric of San Francisco after the Gold Rush. The southeast corner of this district lies approximately one block northwest of the project site.
- The Commercial-Leidesdorff Conservation District, locally designated under article 11, is a small historic district that fills three quadrants of the city block bounded by Clay, Sansome, Sacramento, and Montgomery streets. The district’s contributors include the small-scale commercial buildings constructed during the early twentieth century that face the interior of the block, toward the narrow Leidesdorff and Commercial streets.

## REGULATORY FRAMEWORK

The following section summarizes the plans and policies of federal, state, and local agencies that have regulatory control over historical built-environment resources.

### ***Federal***

Although the proposed project is not anticipated to require compliance with section 106 of the National Historic Preservation Act, the national register and federal guidelines related to the treatment of cultural resources are relevant for the purposes of determining whether cultural resources, as defined under CEQA, are present and guiding the treatment of such resources. The sections below summarize the relevant federal regulations and guidelines.

## National Historic Preservation Act and National Register of Historic Places

Archaeological and architectural resources (buildings and structures) are protected through the National Historic Preservation Act (16 United States Code 470f), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. The National Historic Preservation Act requires project review for effects on historic properties only when projects involve federal funding or permitting or occur on federal land; therefore, it is not applicable to discretionary actions at the municipal level. However, the National Historic Preservation Act establishes the national register, which provides a framework for resource evaluation and informs the process of determining impacts on historical resources under CEQA.

The national register is the nation's official comprehensive inventory of historic resources. Administered by the National Park Service, the national register includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. Typically, a resource that is more than 50 years of age is eligible for listing in the national register if it meets any one of the four eligibility criteria *and* retains sufficient historical integrity. A resource less than 50 years old may be eligible if it can be demonstrated that it is of "exceptional importance" or a contributor to a historic district. National register criteria are defined in *National Register Bulletin Number 15: How to Apply the National Register Criteria for Evaluation*.

Properties that are listed in the national register, as well as properties that are formally determined to be eligible for listing in the national register, are automatically listed in the California register and, therefore, considered historical resources under CEQA.

## Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings

The Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings (secretary's standards) provide guidance for reviewing work on historic properties.<sup>5</sup> Developed by the National Park Service for reviewing certified rehabilitation tax credit projects, the secretary's standards have been adopted by local government bodies across the country for reviewing proposed work on historic properties under local preservation ordinances. The secretary's standards provide a useful analytical tool for

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<sup>5</sup> U.S. Department of Interior, National Park Service, Cultural Resources, Preservation Assistance Division, *Secretary of the Interior's Standards for Rehabilitation and Illustrated Guidelines for Rehabilitating Historic Buildings*, 1992. The standards, revised in 1992, were codified as 36 Code of Federal Regulations (CFR) part 68.3 in the July 12, 1995, *Federal Register* (Vol. 60, No. 133). The revision replaces the 1978 and 1983 versions of 36 CFR 68 titled *The Secretary of the Interior's Standards for Historic Preservation Projects*. The 36 CFR 68.3 standards are applied to all grant-in-aid development projects assisted through the National Historic Preservation Fund. Another set of standards, 36 CFR 67.7, focuses on "certified historic structures," as defined by the IRS Code of 1986. The standards in 36 CFR 67.7 are used primarily when property owners are seeking certification for federal tax benefits. The two sets of standards vary slightly, but the differences are primarily technical and nonsubstantive in nature. The guidelines, however, are not codified in the *Federal Register*.

understanding and describing the potential impacts of changes to historic resources, including new construction inside or adjoining historic districts, and are used to inform CEQA review.

## **State**

California implements the National Historic Preservation Act through its statewide comprehensive cultural resource preservation programs. The California Office of Historic Preservation, an office of the California Department of Parks and Recreation, implements the policies of the National Historic Preservation Act on a statewide level. The California Office of Historic Preservation also maintains the California Historical Resources Inventory. The State Historic Preservation Officer is an appointed official who implements historic preservation programs within the state's jurisdiction.

### **California Environmental Quality Act**

A "historical resource" is defined in CEQA section 21084.1 and CEQA Guidelines section 15064.5 as a cultural resource (i.e., a built-environment resource, archaeological resource, or human remains) that meets at least one of the following criteria:

- A resource listed in, or determined by the State Historical Resources Commission to be eligible for listing in, the California register shall be considered to be historically significant (Public Resources Code section 5024.1, title 14, California Code of Regulations [CCR], section 4850 et seq.);
- A resource included in a local register of historical resources, as defined in Public Resources Code section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of Public Resources Code section 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the California register (Public Resources Code section 5024.1, title 14, CCR, section 4852).

A lead agency is allowed to determine that a resource may be a historical resource, as defined in Public Resources Code sections 5020.1(j) or 5024.1, even if does not meet any of the conditions listed above. According to CEQA Guidelines section 15064.5(b), a project is considered to have a significant effect on the environment if it causes a substantial adverse change in the significance of a historical resource.

CEQA, as codified in Public Resources Code section 21000 et seq. and implemented by the CEQA Guidelines (14 CCR section 15000 et seq.), is the principal statute governing environmental review of projects in California. As stated above, CEQA defines a historical resource as a property listed in, or eligible for listing in, the California register; included in a qualifying local register; or determined by a lead agency to be historically significant. In order to be considered a historical resource, a property must generally be at least 50 years old; when acting as the CEQA lead agency, the department uses a threshold of 45 years. Section 21084.1 of the Public Resources Code and section 15064.5 of the CEQA Guidelines define a historical resource for purposes of CEQA.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a resource is neither a unique archaeological resource nor a historical resource, the CEQA Guidelines note that the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines section 15064.5[c][4]). In addition, projects that comply with the secretary's standards benefit from a regulatory presumption under CEQA that they would have a less-than-significant impact on a historical resource (14 CCR 15126.4[b][1]). Projects that do not comply with the secretary's standards may or may not cause a substantial adverse change in the significance of a historical resource and must be subject to further analysis to assess whether they would result in material impairment of a historical resource's significance.

### **California Register of Historical Resources**

The California register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and indicating which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code section 5024.1(a)). The California register criteria are based on the national register criteria (Public Resources Code section 5024.1[b]). Certain resources are determined by CEQA to be automatically included in the California register, including California properties formally eligible for or listed in the national register. To be eligible for the California register as a historical resource, a resource must be significant at the local, state, and/or federal level under one or more of the evaluative criteria listed above under Overview of California Register Significance Evaluation. As for the national register, a significant historical resource must possess integrity in addition to meeting the significance criteria to be considered eligible for listing in the California register. Consideration of integrity for evaluation of California register eligibility follows the definitions and criteria from National Park Service *National Register Bulletin 15*.



## Local

### San Francisco General Plan

The San Francisco General Plan Urban Design Element, originally adopted in 1986, addresses issues related to historic preservation by providing policies that emphasize preservation of notable landmarks and historic features, remodeling older buildings, and respecting the character of older buildings adjacent to new development. Policies in the general plan relevant to cultural resources include:

- **Policy 2.4:** Preserve notable landmarks and areas of historic, architectural, or aesthetic value and promote the preservation of other buildings and features that provide continuity with past development.
- **Policy 2.5:** Use care in remodeling of older buildings in order to enhance rather than weaken the original character of such buildings.
- **Policy 2.6:** Respect the character of older development nearby in the design of new buildings.

### San Francisco Planning Code

The City and County of San Francisco's (City's) commitment to historic preservation is codified in Planning Code section 101.1(b), which establishes eight general plan priority policies. Priority Policy 7 of section 101.1(b) of the planning code addresses the City's desire to preserve landmarks and historic buildings.

- **Priority Policy 7:** That landmarks and historic buildings be preserved.<sup>6</sup>

The San Francisco General Plan Housing Element also includes a relevant policy that calls for the preservation of landmark buildings and maintaining consistency of historic districts.

- **Policy 11.7:** Respect San Francisco's historic fabric by preserving landmark buildings and ensuring consistency with historic districts.

Demolition of the building on the project site could be inconsistent with this priority policy. City decision-makers, in consideration of the proposed project's general plan consistency, will evaluate all relevant general plan objectives and policies. City decision-makers will evaluate whether, on balance, the project would be consistent with the general plan, including the eight priority policies added by the Accountable Planning Initiative. Inconsistency with a particular general plan policy does not indicate that a project is inconsistent with the general plan as a whole. Further, such a policy conflict, in and of itself, does not represent a significant adverse effect on the environment, although it may serve as an indicator that such an effect could arise.

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<sup>6</sup> City and County of San Francisco, *San Francisco Planning Code*, section 101.1(b), June 23, 2018, [http://library.amlegal.com/nxt/gateway.dll/California/planning/article1generalzoningprovisions?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca\\$sanc=JD\\_102.32](http://library.amlegal.com/nxt/gateway.dll/California/planning/article1generalzoningprovisions?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sanc=JD_102.32), accessed July 4, 2018.

## San Francisco Historic Preservation Commission and Planning Code, Articles 10 and 11

The San Francisco Historic Preservation Commission (HPC) is a seven-member body that makes recommendations directly to the San Francisco Board of Supervisors regarding the designation of landmark buildings, historic districts, and significant buildings. The commission approves certificates of appropriateness for individual landmarks and landmark districts designated under article 10 and permits to alter for individual properties and conservation districts listed under article 11. The HPC reviews and comments on CEQA documents for projects that affect historic resources as well as projects that are subject to review under section 106 of the National Historic Preservation Act.

The San Francisco Charter gives the HPC the ability to identify, designate, and protect historic landmarks, including buildings, sites, objects, and districts, from inappropriate alterations. The planning code, in article 10, contains regulations regarding the way the HPC exercises its authority. Since the adoption of article 10 in 1967, the City has designated 286 landmark sites and 14 historic districts under article 10.<sup>7</sup> Article 11 of the planning code, which was adopted on September 17, 1985, contains similar regulations regarding the authority the HPC has under the San Francisco Charter for establishing significant and contributory buildings, as well as conservation districts, in the C-3 (Downtown Commercial) zoning district. Article 11 allows the City to designate individual buildings and conservation districts in the C-3 zoning district that have architectural quality and contribute to the environment. Any property that has been locally designated as an article 10 landmark; a Category I, II, III, or IV building under article 11; or a contributor to an article 10 or article 11 district is considered a CEQA historical resource. As noted earlier, Category V “unrated” buildings are not considered CEQA historical resources.<sup>8</sup>

## San Francisco Planning Department CEQA Review Procedures for Historical Resources

The department prepared the CEQA Review Procedures for Historic Resources to provide guidance in determining whether a resource is considered a historical resource, as defined by CEQA. Three categories of properties are defined as follows:

- Category A. Category A has two subcategories:
  - Category A.1. Resources listed in or formally determined to be eligible for the California register.

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<sup>7</sup> City and County of San Francisco, *Article 10: Preservation of Historical Architectural and Aesthetic Landmarks*, 2019, [http://library.amlegal.com/nxt/gateway.dll/California/planning/article10preservationofhistoricalarchite?f=templates\\$fn=altmain-nf.htm\\$q=\[field%20folio-destination-name:%27Article%2010%27\]\\$x=Advanced#JD\\_Article10](http://library.amlegal.com/nxt/gateway.dll/California/planning/article10preservationofhistoricalarchite?f=templates$fn=altmain-nf.htm$q=[field%20folio-destination-name:%27Article%2010%27]$x=Advanced#JD_Article10), accessed April 22, 2020.

<sup>8</sup> San Francisco Planning Department, *San Francisco Preservation Bulletin No. 16: City and County of San Francisco Planning Department CEQA Review Procedures for Historic Resources*, March 2008, <https://sf-planning.org/sites/default/files/FileCenter/Documents/5340-PresBulletin16CEQA.pdf>, accessed December 10, 2018.

- Category A.2. Resources listed in adopted local registers or properties that appear eligible, or may become eligible, for the California register.
- Category B. Properties requiring further consultation and review.
- Category C. Properties determined not to be historical resources or a property for which the City has no information indicating that the property is a historical resource.

To determine if a property is eligible as a historical resource for the purposes of CEQA, the department (lead agency) requires an evaluation of a property's individual significance for listing in the California register as well as an examination of a property's relationship to any eligible historic district. To assess impacts within historic districts, the department examines several factors, including, but not limited to, the size and significance of a historic district, the number and location of contributing features/non-contributing features, district integrity, district boundaries, and details regarding the proposed project. Assessments within historic districts are examined on a case-by-case basis because of the wide variety and unique nature of historical resources and historic districts.

## IMPACTS AND MITIGATION MEASURES

This section describes the impact analysis related to historical built-environment resources for the proposed project. It describes the methods used to determine the impacts of the proposed project and lists the criteria used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany the discussion of each identified significant impact.

### ***Significance Criteria***

The proposed project would have a significant impact on historical built-environment resources if it were to result in the following:

- Cause a substantial adverse change in the significance of a historical resource, as defined in Public Resources Code section 21084.1 and CEQA Guidelines section 15064.5, including those resources listed in article 10 or 11 of the San Francisco Planning Code.

Section 15064.5(b)(1) of the CEQA Guidelines defines "substantial adverse change to a historical resource" as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired." Material impairment of a historical resource, as defined in CEQA Guidelines section 15064.5(b)(2), occurs when a project "demolishes or materially alters in an adverse manner" those physical characteristics of the resource that express its significance and justify its inclusion in, or eligibility for listing in, the California register or a qualified local

register of historical resources or evaluation as historically significant in a qualified local survey.

### ***Methods for Analysis***

Project impacts are analyzed for historical built-environment properties within and near the project site that meet the definition of historical resources, as outlined in Public Resources Code section 21084.1 and CEQA Guidelines section 15064.5, and described in Environmental Setting, above. Per CEQA Guidelines section 15064.5(b)(2), the analysis considers the potential for proposed project activities to materially impair the significance of a historical resource by causing direct changes to the physical characteristics of that resource as well as by causing changes in its immediate setting.

### ***Impacts and Mitigation Measures***

Impacts CR-3, CR-4, and TCR-1, related to archeological resources, human remains, and tribal cultural resources, are discussed in the initial study; see Appendix B.

**Impact CR-1. The proposed project would cause a substantial adverse change in the significance of onsite historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Significant and Unavoidable with Mitigation)**

The following section provides an analysis of the proposed project's potential to cause material impairment to historical built-environment resources, including the Jones-Thierbach Coffee Company Building at 447 Battery Street as well as historical built-environment resources located near the project site.

#### **Impacts on the Jones-Thierbach Coffee Company Building**

The proposed project involves modifications to the physical characteristics of the Jones-Thierbach Coffee Company Building, which has been determined to be eligible for listing in the California register and is listed in an adopted local survey such that it qualifies as a historical resource under CEQA. To address the potential for material impairment to the resource, the proposed project is analyzed in relation to the secretary's standards. The standards for rehabilitation provide guidance for reviewing proposed work on historic properties, with the stated goal of making possible "a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values."<sup>9</sup> As described under California Environmental Quality Act, proposed projects that are found to comply with the secretary's standards are presumed to have a less-than-significant impact on

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<sup>9</sup> National Park Service, *Standards for Rehabilitation*, Technical Preservation Services, <https://www.nps.gov/tps/standards/four-treatments/treatment-rehabilitation.htm>, accessed April 16, 2020.

historical built-environment resources under CEQA. Proposed projects that comply with some but not all of the secretary's standards require further analysis to determine whether those projects would materially impair the significance of historical built-environment resources.

The HRER Part 2, issued by the planning department on July 31, 2020, determined that the proposed project would not comply with the secretary's standards. Specifically, the HRER Part 2 found that the proposed project would not comply with rehabilitation standards 1, 2, 5, 9, and 10. The analysis pertaining to these five rehabilitation standards is presented below.

**Rehabilitation Standard 1: A Property Shall Be Used for Its Historic Purpose or Be Placed in a New Use that Requires Minimal Change to the Defining Characteristics of the Building and Its Site and Environment.**

The repurposing of the Jones-Thierbach Coffee Company Building into a new use as a hotel would involve the following changes to the existing building's defining characteristics: the removal of two exterior façades, the building's interior structure, and roof; insertion of new openings in the remaining façades; and construction of a new hotel tower that incorporates the retained building fabric. The proposed tower would be of an incompatibly large size and scale in relation to the current historic building volume, resulting in a dramatic change in the site and environment of the Jones-Thierbach Coffee Company. For these reasons, the proposed new use of the historical resource would require substantial alterations to the historical resource. The proposed project would not comply with rehabilitation standard 1.

**Rehabilitation Standard 2: The Historic Character of a Property Will Be Retained and Preserved. The Removal of Distinctive Materials or Alteration of Features, Spaces, and Spatial Relationships that Characterize the Property Will Be Avoided.**

The proposed project would involve changes to the building's façade. These would include removal of a sill at the central ground-floor display window on the east (Battery Street) façade and several original segmental arched window and door openings on the ground floor of the south (Merchant Street) façade. The openings on the south façade, in addition to surrounding areas of brick masonry, would be removed to accommodate a new loading bay, new exit door, and two new glazed storefronts. Upon completion of the proposed project, only one ground-floor window opening would remain on the south façade with its original dimensions. The upper-story window openings on the east and south façades would be retained, and new historically compatible wood-sash windows would be installed to replace current non-historic metal-sash windows in these openings. In addition, the proposed project would demolish the building's roof and all interior materials, inclusive of structural support members, wall materials, and floor plates. A new 18-story tower would be constructed on the site; the remaining façades of the historic building would form a shell for the tower's lower-most three stories. The HRER Part 2 states that the high volume of material that would be removed from the building's interior would be enough for the proposed project to meet the definition of standard demolition. Furthermore, construction of the 18-story tower would change the three-story height of the Jones-Thierbach

Coffee Company Building, which is a character-defining feature. As a result, the proposed project would remove distinctive materials and alter the historic massing and spatial relationships of the building such that it would not comply with rehabilitation standard 2.

**Rehabilitation Standard 5: Distinctive Features, Finishes, and Construction Techniques or Examples of Craftsmanship That Characterize a Historic Property Shall Be Preserved.**

The proposed project would retain some distinctive historic elements of the Jones-Thierbach Coffee Company Building, including its exterior brick facing Battery and Merchant streets. However, the removal of the interior structure, areas of exterior walls, and roof would demolish the majority of the existing building, preventing it from conveying a sufficient amount of its original material palette and construction. Furthermore, among the building's distinctive features is its three-story height, which would no longer be discernible after the construction of the 18-story hotel tower within the footprint of the existing building. The proposed project would therefore not comply with rehabilitation standard 5.

**Rehabilitation Standard 9: New Additions, Exterior Alterations, or Related New Construction Shall Not Destroy Historic Materials, Features, and Spatial Relationships that Characterize the Property. The New Work Shall Be Differentiated from the Old and Shall Be Compatible with the Historic Materials, Features, Size, Scale and Proportion, and Massing to Protect the Integrity of the Property and Environment.**

Construction of a new 18-story tower that incorporates the Jones-Thierbach Coffee Company Building's existing three-story brick-masonry façades would be perceived as a new 15-story upper addition atop a three-story building dating to the early twentieth century. The tower would remove all of the existing building's interior materials and roof, which are not identified as character-defining features, and would be differentiated from the historic façades of the Jones-Thierbach Coffee Company Building. The two stories of the tower immediately above the brick masonry base would be set back 4 feet from the planes of the Jones-Thierbach Coffee Company Building's façade and constructed using a glass and metal curtain wall. The upper 13 stories of the tower, which would project to the façade plane, would be clad in glass and stone and generally reference the historic masonry construction methods of the historic Jones-Thierbach Coffee Company Building's exterior façades. The proposed tower body would be further differentiated through an irregular window pattern that would diverge from the regularly spaced bays of the historic building volume. Despite differentiation between new construction and old, as well as references in the historic character of the original building volume, the proposed tower would greatly surpass the three-story height of the Jones-Thierbach Coffee Company Building such that the proposed project would not be compatible with the building's historic size, scale, proportion, and massing. Because of its substantial height and scale, new construction would not be subordinate to the historic building volume. As a result, the proposed project would not comply with rehabilitation standard 9.

**Rehabilitation Standard 10: New Additions and Adjacent or Related New Construction Will Be Undertaken in such a Manner that, If Removed in the Future, the Essential Form and Integrity of the Historic Property and Its Environment Will Be Unimpaired.**

Although future removal of the 18-story tower from the site is theoretically possible, if undertaken, the remaining elements of the Jones-Thierbach Coffee Company Building would comprise only exterior brick masonry façades that have experienced changes to the historic configuration of their openings at the ground floor. No interior elements of the building would remain; therefore, the building's essential form and integrity would be impaired. As such, the proposed project would not comply with rehabilitation standard 10.

**Summary of Standards Compliance and Level of Impact**

As presented above, the proposed project would not comply with rehabilitation standards 1, 2, 5, 9, and 10 because of the removal of character-defining elements from the Jones-Thierbach Coffee Company Building and construction of a new tower atop the remaining façades of the historic building, which would be incompatible with the resource's historic scale, proportions, and massing. The Jones-Thierbach Coffee Company Building, which has already experienced diminished integrity through substantial changes to its historic setting and materials, would be further altered and would not embody the distinctive characteristics of its type or period of construction and would no longer represent a good remaining example of a building associated with San Francisco's locally significant coffee industry dating to the early twentieth century. As a result, the proposed project would materially impair the significance of the Jones-Thierbach Coffee Company Building at 447 Battery Street.

Because the project would alter the existing building on the site, which qualifies as a historical resource under CEQA, in an adverse manner, the project would result in a *significant* impact on historical built-environment resources.

**Mitigation Measures**

**M-CR-1a: Prepare and Submit Historical Documentation of Built Environment Resources.**  
The project sponsor shall retain a professional who meets the Secretary of the Interior's Qualification Standards for Architectural Historian or Historian (36 Code of Federal Regulations part 61), an architect with demonstrated experience with Historic American Buildings Survey measured drawings, and a photographer with demonstrated experience in Historic American Buildings Survey photography to prepare written and photographic documentation for the Jones-Thierbach Coffee Company Building. The Historic American Buildings Survey documentation package for the resource shall be reviewed and approved by the San Francisco Planning Department's preservation staff prior to the issuance of any demolition, site, or construction permit for the project.

The documentation shall consist of the following:

- *Historic American Buildings Survey-level Photographs:* Historic American Buildings Survey standard large-format photography shall be used to document the built-environment resource and its surrounding context. The scope of the photographs shall be reviewed and approved by the San Francisco Planning Department's preservation staff for concurrence, and all photography shall be conducted according to the current National Park Service Historic American Buildings Survey standards. The photograph set shall include distant/elevated views to capture the extent and context of the resource.
  - All views shall be referenced on a key map of the resource, including a photograph number with an arrow to indicate the direction of the view.
  - The draft photograph contact sheets and key map shall be provided to the San Francisco Planning Department's preservation staff for review to determine the final number and views for inclusion in the final dataset.
  - Historic photographs identified in previous studies shall also be collected, scanned as high-resolution digital files, and reproduced in the dataset.
- *Written Historic American Buildings Survey Narrative Report:* A written historical narrative, using the outline format, shall be prepared in accordance with the Historic American Buildings Survey Historical Report Guidelines.
- *Measured Drawings:* A set of measured drawings shall be prepared to document the overall design and character-defining features of the Jones-Thierbach Coffee Company Building. Original design drawings of the resource, if available, shall be digitized and incorporated into the measured drawings set. The San Francisco Planning Department's preservation staff shall assist the consultant in determining the appropriate level of measured drawings.
- *Print-on-Demand Booklet:* Following preparation of the Historic American Buildings Survey photography, narrative report, and drawings, a print-on-demand softcover book shall be produced for the resource that compiles the documentation and historical photographs. The print-on-demand book shall be made available to the public for distribution as outlined below.

Format of Final Dataset:

- The project sponsor shall contact the History Room of the San Francisco Public Library, San Francisco Planning Department, Northwest Information Center, and California Historical Society to inquire as to whether the research repositories would like to receive a hard or digital copy of the final dataset. Labeled hard copies and/or digital copies of the final book, containing the photograph sets, narrative report, and measured drawings, shall be provided to these repositories in their preferred format. If the above named repositories



deny the invitation to accept these materials, additional outreach will occur in consultation with San Francisco Planning Department preservation staff to identify any additional appropriate organizations to house the documentation materials.

- The project sponsor shall prepare documentation for review and approval by the San Francisco Planning Department's preservation staff, along with the final Historic American Buildings Survey dataset, that outlines the outreach, response, and actions taken with regard to the repositories listed above. The documentation shall also include any research conducted to identify additional interested groups and the results of that outreach. The project sponsor shall make digital copies of the final dataset, which shall be made available to additional interested organizations, if requested.

**M-CR-1b: Develop and Implement an Interpretive Program.** The project sponsor shall work with the San Francisco Planning Department's preservation staff or other qualified professionals to institute an interpretive program onsite that references the Jones-Thierbach Coffee Company Building's history and the contribution of the historical resource to the broader neighborhood and the local coffee industry. The interpretive program would include the creation of historical exhibits, incorporating a permanent display featuring historic photos of the affected resource and a description of its historical significance, in a publicly accessible location on the project site. This may also include a website or walking tour itineraries. The contents of the interpretative program shall be determined in consultation with the San Francisco Planning Department's preservation staff. Development of the interpretive displays shall be overseen by a qualified professional who meets the standards for history, architectural history, or architecture (as appropriate) set forth by the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations part 61). An outline of the format and the location and content of the interpretive displays shall be reviewed and approved by the San Francisco Planning Department's preservation staff prior to issuance of a demolition permit or site permit. The format, location, content, specifications, and maintenance of the interpretive displays must be finalized prior to issuance of any building permits for the project.

**M-CR-1c: Video Recordation.** The project sponsor shall work with the San Francisco Planning Department's preservation staff and other qualified professionals to undertake video documentation of the Jones-Thierbach Coffee Company Building and its setting. The documentation shall be conducted by a professional videographer, preferably one with experience recording architectural resources, prior to the commencement of any demolition or project activities at the project site or the issuance of any demolition, site or construction permits for the project. The documentation shall be narrated by a qualified professional who meets the

standards for history, architectural history, or architecture (as appropriate), as set forth by the Secretary of the Interior's Professional Qualification Standards (36 Code of Federal Regulations part 61). The documentation shall include as much information as possible, using visuals in combination with narration, about the materials, construction methods, current condition, historic use, and significance and historic context of the historical resource.

Digital copies of the video documentation shall be submitted to the San Francisco Planning Department; archival copies of the video documentation shall be submitted to repositories including, but not limited to, the San Francisco Public Library, Northwest Information Center, and California Historical Society. If the above named repositories deny the invitation to accept these materials, additional outreach will occur in consultation with San Francisco Planning Department preservation staff to identify any additional appropriate organizations to house the documentation materials. The video documentation shall be reviewed and approved by the San Francisco Planning Department's preservation staff prior to issuance of a demolition, site, or building permit for the project.

### **Significance after Mitigation**

Mitigation Measures M-CR-1a through M-CR-1c would be required in order to document and interpret the significance of the Jones-Thierbach Coffee Company Building at 447 Battery Street for the public. These mitigation measures would create a collection of preservation materials that would be available to the public and inform future research. The mitigation would partially compensate for impacts associated with the proposed project through comprehensive documentation and memorialization of the resource. However, these measures would not be enough to avoid, rectify, reduce, or compensate for the loss of the Jones-Thierbach Coffee Company Building at 447 Battery Street. Because adverse alteration of the building would still occur, the impact would remain *significant and unavoidable* after application of mitigation.

**Impact CR-2. The proposed project would not cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (No Impact)**

Historical built-environment resources located near the project site include 300 Clay Street (Alcoa Building) and Maritime Plaza, the U.S. Customhouse at 555 Battery Street, the United States Appraisers Building at 630 Sansome Street, 545 Sansome Street, the Jackson Square Landmark District, and the Commercial-Leidesdorff Conservation District.

The HRER Part 2 states that the project site is in an area of downtown San Francisco that has previously experienced dramatic changes in its built environment, which comprises buildings that exhibit a range of construction dates and architectural styles from the twentieth and early

twenty-first centuries. As a result, the proposed project would not have the potential to materially impair the significance of any nearby historical resource through physical alteration or a change in a resource's setting. Therefore, the project would have no impact on these nearby historical built-environment resources. In addition, the proposed project is not located within a historic district; therefore, *no impact* on nearby historical resources would occur.

## CUMULATIVE IMPACTS

**Impact C-CR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in demolition and/or alteration of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Less than Significant)**

As described above, the Jones-Thierbach Coffee Company Building at 447 Battery Street is individually eligible for listing in the California register under Criterion 1 (events) and Criterion 3 (architecture/design).

The cumulative projects identified for the proposed project are listed in Chapter 3 of this EIR, Environmental Setting and Impacts. The impacts of foreseeable projects on identified historical resources in the vicinity of the project site (such as 700 Montgomery Street and 530 Sansome Street) would not combine with the impacts of the proposed project. The significance of 447 Battery Street is not premised on it possessing an intact and cohesive visual or functional relationship with nearby properties. Likewise, and reciprocally, the significance of nearby offsite historical resources is not premised on their having an intact and cohesive visual or functional relationship with the project site. As such, the proposed project's impact on the significance of the 447 Battery Street historical resource is independent of the impacts of nearby foreseeable projects on the significance of nearby historical resources. Such impacts would not combine to result in a significant cumulative impact. The impact would be *less than significant*. No mitigation is required.

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## 4. OTHER CEQA CONSIDERATIONS

This chapter evaluates additional considerations not previously evaluated in this environmental impact report (EIR), including significant irreversible changes that would result from project implementation, the proposed project's potential to induce population growth, areas of known controversy surrounding the proposed project, as well as further issues to be resolved. In addition, this section summarizes significant and unavoidable environmental effects that would result from project implementation.

### A. SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The Summary chapter and Section 3.A, Historic Architectural Resources, of this EIR provide a comprehensive summary of the environmental effects of the 447 Battery Street Project, including the levels of significance, both before and after mitigation. **Table S-1**, p. S-6, and **Table S-2**, p. S-12, summarize the impacts identified in the EIR and the initial study, respectively (see Summary chapter).

### B. SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

In accordance with California Environmental Quality Act (CEQA) sections 15126(b), and 15126.2(a), an EIR must identify significant and unavoidable environmental impacts that cannot be reduced to less than significant levels through regulatory compliance, design strategies, and/or mitigation incorporation. For the proposed project, only cultural resources (historic architectural) were identified as potentially subject to significant environmental effects as a result of project implementation. Significant and unavoidable environmental impacts on cultural resources are described below.

The proposed project would cause a substantial adverse change in the significance of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. The proposed project would involve removal of much of the interior built fabric of the Jones-Thierbach Coffee Company Building at 447 Battery Street as well as construction of a vertical building expansion above the historic façade, which would, overall, alter the building's appearance. This building has been determined to be eligible for listing in the California Register of Historical Resources and is listed in an adopted local survey; therefore, the building qualifies as a historical resource under CEQA. Although the exterior brick façade of the building would be retained as part of proposed project design, alterations to this historical resource would include the addition of 15 floors above the three existing floors as well as the

removal of interior floor plates, framing, and walls, with a ground-floor reorientation. The building, which has already experienced historical integrity degradation through past building material changes and changes to the surrounding historical setting, would be further materially impaired with implementation of the proposed project. Although incorporation of M-CR-1, Requirement to Prepare and Submit Historical Documentation of Built Environment Resources; M-CR-2, Requirement for Developing and Implementing an Interpretive Program; and M-CR-3, Requirement for Video Recordation, would reduce project-related impacts on this historical resource, the impacts would not be reduced to less-than-significant levels. Therefore, impacts would be significant and unavoidable with mitigation.

## **C. SIGNIFICANT IRREVERSIBLE CHANGES**

In accordance with CEQA sections 21100(b)(2)(B) and 15126(c), significant irreversible changes that would result from project implementation must be disclosed in the EIR. Irreversible changes must be evaluated to determine if such changes would be justified. Such changes may take the form of 1) long-term land use changes, 2) irreversible changes to an environmental resource, or 3) the irreversible consumption of a nonrenewable resource that would occur as a result of project implementation. Because the initial study (Appendix B) found that the project would have less-than-significant impacts on land use and planning, significant irreversible changes pertaining to long-term land use changes are not anticipated with project implementation and therefore are not discussed further in this analysis. Other irreversible changes that would occur as a result of project implementation are discussed below.

### **IRREVERSIBLE CHANGES TO AN ENVIRONMENTAL RESOURCE**

No significant irreversible environmental damage (e.g., from an accidental spill or explosion involving hazardous materials) is anticipated to occur with implementation of the proposed project. Compliance with federal, state, and local regulations related to the hotel and retail uses identified in the initial study (Appendix B) would reduce the possibility of hazardous substances used during demolition, construction, or operation of the proposed project causing significant and unavoidable environmental damage. In addition, excavation for the proposed project would not irreversibly alter the topography of the project site.

No other irreversible permanent changes, such as those that might result from construction of a large-scale mining project, hydroelectric dam, or other industrial project, would result from development of the proposed project.

### **IRREVERSIBLE CONSUMPTION OF A NONRENEWABLE RESOURCE**

Nonrenewable resources include agricultural resources such as farmland, mineral resources, and fossil fuel resources. Because such resources do not exist within the City and County of San

Francisco (City), implementation of the proposed project would not result in irreversible consumption of such resources.

Construction of the proposed project would require the use of energy, including energy produced from non-renewable resources; energy would also be consumed during the operational period of the proposed project. Construction would require the use of materials such as steel, aluminum, and other metals; concrete; lumber; sand and gravel; and other such materials as well as water. However, new buildings in California are required to conform to the energy conservation standards specified in California Code of Regulations title 24, which are among the most stringent in the United States. The standards establish energy budgets for different types of residential and nonresidential buildings; all new buildings must comply with the standards. Specific aspects of the proposed project would be as energy efficient as possible because the development would be built to Leadership in Energy and Environmental Design (LEED) Gold certification standards. In addition, the San Francisco Green Building Code requirements are designed to reduce energy and water use, divert waste from landfills, encourage alternate modes of transportation, and support the health and comfort of building occupants in San Francisco so that all buildings are healthy, sustainable places to live, work, and learn. New construction in San Francisco must meet all applicable California and local building codes, provide onsite facilities for recycling and composting, and meet the City's green building requirements, which are tied to LEED and GreenPoint Rated standards, ensuring that natural resources would be conserved or recycled to the maximum extent feasible and that greenhouse gas emissions resulting from the project would be minimized.

Even with implementation of conservation measures, the consumption of natural resources, including electricity and natural gas, would generally increase with implementation of the proposed project. However, the proposed project would not involve the wasteful, inefficient, or unnecessary consumption of energy resources, as discussed in the initial study (Appendix B). Overall, the proposed project would be expected to use less energy and water over the lifetime of the project than comparable structures that were not built to these same standards.

As further described in the initial study (Appendix B), although the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase in demand would be accommodated within available water supplies and current water supply planning. Although potable water use would increase, the proposed project would be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the San Francisco Green Building Code and the City's Non-potable Water Ordinance. In compliance with article 12C of the San Francisco Health Code, the proposed project would employ a blackwater recycling system, which would recycle wastewater generated by the building for onsite nonpotable uses, including toilet flushing, irrigation, and heating, ventilation, and air-conditioning operations/cooling demand.

During construction, water may be used for soil compaction and dust control. However, as discussed in the initial study (Appendix B), Public Works Code article 21 restricts the use of potable water for soil compaction and dust control undertaken in conjunction, unless permission is obtained from the San Francisco Public Utilities Commission. Therefore, although water consumption would increase as a result of project construction and operation, the proposed project would not involve the wasteful, inefficient, or unnecessary use of water resources, as discussed in the initial study (Appendix B).

## **D. GROWTH INDUCEMENT**

The CEQA Guidelines require that an EIR evaluate the growth-inducing impacts of a proposed action (section 15126.2[d]). A growth-inducing impact is defined in CEQA Guidelines section 15126.2(d) as:

[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth ... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement occurs if a project constructs new housing that results in new residents moving to an area. Indirect growth inducement occurs if a project creates a substantial number of new permanent employment opportunities or involves a construction effort with substantial short-term employment opportunities and indirectly stimulates the need for additional housing and services to support the new demand from such employment. Similarly, under CEQA, a project indirectly induces growth if it removes an obstacle to additional growth and development, such as a constraint on a required public service (e.g., a wastewater treatment facility). Increases in population could strain existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The proposed project, which would be built in an urbanized area, proposes no housing. It would partially demolish a three-story retail and office building and replace it with an 18-story, 198-room hotel with a lobby and restaurant on the ground floor and an additional restaurant on the 18<sup>th</sup> floor. Therefore, it is not expected to substantially alter existing development patterns in downtown or San Francisco as a whole. Therefore, direct population increases are not anticipated as a result of project implementation.

Given the total size of the proposed hotel and retail/restaurant uses on the project site, a maximum of 50 workers would be employed by the new businesses. Hotel and retail/restaurant



employment under the proposed project would most likely not attract new residents to San Francisco because such jobs are typically filled by existing area residents. Therefore, it is anticipated that most of the hotel and retail/restaurant employees would live in San Francisco (or nearby communities) and the proposed project would not generate demand for new housing. Furthermore, employment in San Francisco is projected to increase by 34 percent (191,740 jobs) between 2010 and 2040.<sup>1</sup> Even if all of the approximately 50 employees associated with the proposed project were conservatively assumed to be new to San Francisco, project-related employment growth would represent considerably less than 1 percent (0.02 percent) of the city's estimated job growth between 2010 and 2040. This estimated increase in employment would be negligible in the context of the total number of jobs in San Francisco.

Although proposed project operations would require approximately 50 employees, the existing commercial uses on the project site support approximately 40 to 50 employees. Therefore, onsite staffing requirements with project implementation would result in a net change in the number of employees that would be between zero and 10, which would not be substantially different from current staffing at the project site. Any increase in the number of employees at the project site would not be substantial relative to the existing number of employees in the vicinity, nor would the increase in the number of employees exceed the projections for growth and employment from the Association of Bay Area Governments, the San Francisco General Plan Housing Element, or Plan Bay Area. Therefore, the proposed project is not expected to indirectly induce population growth.

## E. AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

On August 7, 2019, the San Francisco Planning Department (department) published a Notice of Preparation of an Environmental Impact Report (NOP) (attached to this EIR as Appendix A), announcing the department's intent to prepare and distribute an EIR for the 447 Battery Street Project. The 30-day public review and comment period concluded on September 6, 2019. The NOP was posted on the department's website and distributed to interested parties and agencies as well as property owners within 300 feet of the project site.

Based on the comments received on the NOP, potential areas of controversy for the proposed project include:

- **Public services:** Concerns about potential impacts on the existing Sansome Street fire station as well as cumulative effects from reconstruction of the fire station.

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<sup>1</sup> Association of Bay Area Governments and Metropolitan Transportation Commission, *Jobs-Housing Connection Strategy*, revised May 16, 2012, p. 49, [http://www.planbayarea.org/pdf/JHCS/May\\_2012\\_Jobs\\_Housing\\_Connection\\_Strategy\\_Main\\_Report.pdf](http://www.planbayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf), accessed August 1, 2019.

- **Loading:** concerns about illegal parking and loading along Merchant Street.
- **Ingress/egress:** concerns that the current plans reflect the current location of the Sansome Street fire station and not the proposed location.
- **Shadow:** concerns about the social and public health impact of shadow cast on Maritime Plaza.
- **Project description/design:** concerns about the number of rooms analyzed and the necessity of the proposed project, with an expressed a preference for housing.
- **Impact on public transportation:** concerns about the impacts of the project on public transit.
- **Worker safety:** concerns about floor-to-ceiling glass and the potential for worker injuries.
- **Impacts from Transportation Network Companies:** concerns about the impact of transportation network companies on public transit as well as loading and pickup/drop-off locations.
- **Air quality from construction:** concerns about pollution during construction.
- **Noise from construction:** concerns about noise from construction and the construction schedule.
- **Traffic:** concerns about increased traffic on Battery Street, idling cars, and traffic noise.
- **Parking:** concerns about where project users would park, how many parking spaces would be provided, and the lack of parking included in the design.

## 5. ALTERNATIVES

This chapter is divided into four main sections. The first section, “Introduction,” describes the California Environmental Quality Act (CEQA) requirements for alternatives analysis, project objectives, summary of significant impacts, and alternatives screening and selection. The next section, “Description of Alternatives Selected,” provides a detailed description of each of the selected alternatives. The next section, “Alternatives Analysis,” presents a detailed analysis and evaluation of the environmental impacts of each of the alternatives, then compares them to existing conditions and the impacts of the proposed project. The section is organized by alternative. The relationship of the alternatives to the project objectives is also identified. Based on the analysis, the environmentally superior alternative is identified. The last section, “Alternatives Considered but Rejected,” discusses alternative concepts that were considered but rejected from further study and the reasons for elimination.

### A. INTRODUCTION

This section presents the alternatives analysis, as required by CEQA, for the 447 Battery Street Project (proposed project). The discussion includes the methodology used to select alternatives to the proposed project for detailed CEQA analysis, with the intent of developing potentially feasible alternatives that could avoid or substantially lessen the significant impacts identified while still meeting most of the project’s basic objectives. Because the proposed project would adversely affect a historic architectural resource, preservation alternatives have been developed to consider strategies that would lessen such impacts. This section identifies a reasonable range of historic preservation alternatives that fulfill CEQA criteria and evaluates the alternatives for their comparative merits with respect to minimizing adverse environmental effects, including those on historic architectural resources that would occur with the proposed project as designed.

### CEQA REQUIREMENTS FOR ALTERNATIVES ANALYSIS

The CEQA Guidelines, section 15126.6(a), state that an environmental impact report (EIR) must describe and evaluate a reasonable range of alternatives to the proposed project that would feasibly attain most of the project’s basic objectives but avoid or substantially lessen any identified significant adverse environmental effects of the project. An EIR is not required to consider every conceivable alternative to a proposed project. Rather, it must consider a reasonable range of potentially feasible alternatives to foster informed decision-making and public participation.

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a range of factors and influences. CEQA Guidelines, section 15364, defines “feasibility” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” CEQA Guidelines

section 15126.6(f)(1) states that the factors that may be taken into account when addressing the feasibility of alternatives include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (if the site is not already owned by the proponent).

The EIR must evaluate the comparative merits of the alternatives and include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. Specifically, the CEQA Guidelines set forth the following criteria for selecting and evaluating alternatives:

- "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible." (section 15126.6[a])
- "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (section 15126.6[b])
- "The range of potential alternatives shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects." (section 15126.6[c])
- "The specific alternative of 'no project' shall also be evaluated along with its impact." (section 15126.6[e][1])
- "The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making." (section 15126.6[f])

## ALTERNATIVES SELECTION

### *Project Objectives*

As presented in Chapter 2, Project Description, the project sponsor has identified nine objectives for the project, which are reiterated, below, for use in the identification, selection, and evaluation of alternatives. As noted above, an EIR need only consider alternatives that would feasibly attain most of the basic project objectives.

The project sponsor's objectives for the proposed project are:

- Add a well-designed building to an underutilized parcel in an area with a demonstrated demand for hotel rooms;
- Construct a four-star hotel with enough rooms to make hotel use feasible for an operator, which generally requires approximately 200 or more hotel rooms as well as meeting space and a ballroom;
- Provide a basement for vehicle parking and mechanical equipment as well as the bicycle parking, employee showers, and lockers required by the planning code;
- Conduct structural and seismic upgrades to the existing building to allow construction of a multi-story addition above;
- Construct a well-designed building that balances the architectural elements of the existing façade and an addition;
- Provide employment during construction and operation that benefits the city economically;
- Improve Merchant Street by providing a privately owned public open space and a partially shared street that includes trees, seating areas, bicycle parking, and special paving, as well as active bar/restaurant and lobby uses in the ground floor or the hotel, thereby bringing more pedestrian life to the neighborhood;
- Improve Battery Street by adding street trees and bicycle parking as well as street life from hotel and restaurant patrons;
- Provide active restaurant uses to the site, including a full-service restaurant, café/bar, and rooftop bar/lounge.

### *Summary of Significant Impacts*

As stated in the CEQA Guidelines, alternatives to a project selected for analysis in an EIR must substantially lessen or avoid any of the significant environmental impacts associated with the project. The discussion below summarizes the conclusions for potentially significant and significant impacts identified in Chapter 4 of this EIR and in the initial study (see Appendix B).

### ***Significant and Unavoidable Impacts***

The following impact would be significant and unavoidable after implementation of mitigation measures.

#### ***Historic Architectural Resources***

- The proposed project would cause a substantial adverse change in the significance of onsite historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Impact CR-1)

### ***Significant Impacts that Can Be Mitigated to Less than Significant***

The proposed project was determined to have the following potentially significant impacts, all of which could be mitigated to a less-than-significant level with implementation of identified mitigation measures, as described in detail Chapter 3 of this EIR and in the initial study (see Appendix B).

#### ***Archaeological Resources***

- The proposed project could cause a substantial adverse change in the significance of an archaeological resource, as defined in section 15064.5. (Impact CR-3)
- The proposed project could disturb human remains, including those interred outside of formal cemeteries. (Impact CR-4)
- The proposed project in combination with past, present, and reasonably foreseeable future projects could result in a cumulatively considerable contribution to cumulative impacts on archaeological resources and human remains. (Impact C-CR-2)

#### ***Tribal Cultural Resources***

- The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource. (Impact TCR-1)
- The proposed project in combination with past, present, and reasonably foreseeable future projects could result in a cumulatively considerable contribution to cumulative impacts on tribal cultural resources. (Impact C-TCR-1)

#### ***Noise***

- Construction of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity. (Impact NOI-1)
- The proposed project in combination with past, present, and reasonably foreseeable future projects would not result in a cumulatively considerable contribution to cumulative noise and vibration impacts. (Impact C-NOI-1)

***Air Quality***

- The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations. (Impact AQ-2)
- During project operations, the proposed project would not generate toxic air contaminants, including diesel particulate matter, and expose sensitive receptors to substantial air pollutant concentrations. (Impact AQ-4)
- The proposed project in combination with past, present, and reasonably foreseeable future projects would not result in a cumulatively considerable contribution to cumulative air quality impacts. (Impact C-AQ-1)

***Paleontological Resources***

- The proposed project could directly or indirectly destroy a unique paleontological resource or site. (Impact GE-5)

***Alternatives Screening and Selection***

In accordance with CEQA Guidelines section 15126.6(a), this EIR examines a reasonable range of alternatives to the proposed project or to the location of the project. An alternative selected for analysis must meet three criteria: (1) the alternative would attain most of the project's basic objectives, (2) the alternative would avoid or substantially lessen the significant environmental impacts of the proposed project, and (3) the alternative would be potentially feasible. An EIR need not consider an alternative whose impact cannot be reasonably ascertained and whose implementation is remote and speculative. Furthermore, an EIR need not consider every conceivable alternative but must consider a reasonable range of alternatives to foster informed decision-making and public participation.

***Screening Process***

The alternatives selection process for the proposed project first identified strategies that would avoid or lessen the significant impacts identified above, with a focus on strategies that would address the significant and unavoidable impacts of the proposed project. In most cases where impacts were determined to be less than significant with mitigation, alternative strategies were not warranted because feasible and effective mitigation measures have been identified for avoiding or substantially lessening those impacts. The alternative strategies were then reviewed for their feasibility, and the potentially feasible strategies were then screened for their ability to meet most of the project objectives. This process resulted in development of the final project alternatives, which were determined to represent a reasonable range of alternatives, as described and analyzed in this EIR. As described below, the alternatives selected for detailed analysis included a comprehensive range of historic preservation alternatives, including a full preservation alternative and partial preservation alternative.

## ***Strategies to Avoid or Lessen Significant Impacts***

The only significant and unavoidable impact identified for the proposed project, as summarized above, is related to demolition of a historic building. Impacts on historic architectural resources would be avoided or substantially lessened by retaining all or some of the historic resources proposed for demolition and rehabilitating them consistent with the Secretary of the Interior's Standards for Rehabilitation. In August 2020, Page & Turnbull prepared the *447 Battery – Preservation Alternatives Memorandum*,<sup>1</sup> which developed and analyzed a range of project alternatives that would either fully or partially preserve the historic architectural resources on the project site. Based on information in that report, this chapter analyzes one full preservation alternative and one partial preservation alternative, which are described and analyzed in detail below.

## **B. DESCRIPTION OF ALTERNATIVES SELECTED**

Based on the screening process described above, the following three alternatives were selected for detailed analysis in this EIR:

- Alternative A – No Project Alternative
- Alternative B – Full Preservation Alternative
- Alternative C – Partial Preservation Alternative

These three alternatives were determined to adequately represent the range of potentially feasible alternatives required under CEQA for this project. These alternatives would lessen and, in some cases, avoid the significant and unavoidable adverse impacts related to historic architectural resources that were identified for the proposed project. A "No Project Alternative" is included as Alternative A, as required by CEQA, even though it would not meet the basic project objectives. Alternatives B and C are potentially feasible options that would meet most of the basic project objectives to varying degrees; these two alternatives are the Full Preservation Alternative and Partial Preservation Alternative. The descriptions and assumptions are based on the alternatives presented in the *447 Battery – Preservation Alternatives Memorandum* prepared by Page & Turnbull.<sup>2</sup>

**Table 5-1** summarizes the primary differences between the proposed project and the three alternatives. The selected alternatives are described in further detail below. For each alternative, the descriptions include the land use plan, historic resource features, and construction assumptions.


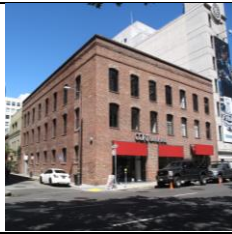


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<sup>1</sup> Page & Turnbull, *447 Battery – Preservation Alternatives Memorandum*, August 25, 2020.

<sup>2</sup> Ibid.



**Table 5-1. Alternatives Summary Table**

Data	Project	No Project	Full Preservation	Partial Preservation
				
Height	200 feet (220 feet inclusive of mechanical penthouse)	45 feet	60.3 feet (74 feet inclusive of mechanical penthouse)	128.16 feet (140.66 feet inclusive of mechanical penthouse)
Floor count	18	3	5	12
Gross square feet (gsf)	143,449 gsf	7,178 gsf	31,419 gsf	110,615 gsf
Office/retail	0 square feet (sf)	7,178 sf	0 sf	0 sf
Restaurant	7,486 sf	0 sf	2,630 sf	7,394 sf
Hotel	114,662 sf	0 sf	27,261 sf	80,869 sf
Hotel room count	198	0	42	130
Vehicle parking spaces	24	0	0	24

## ALTERNATIVE A – NO PROJECT ALTERNATIVE

Under Alternative A (No Project Alternative), no modifications to the existing historical resource would be completed. No additional commercial or hotel units would be added. The historic character-defining features of the building at 447 Battery Street would be retained; no modifications, repairs, or restoration activities would be conducted. The historical resource would retain its approximately 45-foot height and approximately 7,178 square feet of office and retail space on the first through third floors.

## ALTERNATIVE B – FULL PRESERVATION ALTERNATIVE

Alternative B (Full Preservation Alternative), shown in **Figure 5-1**, would retain all of the character-defining features of the historical resource at 447 Battery Street. A portion of the interior structure would be retained; spatial relationships with the site and environment would be somewhat altered.

Source: Heller Manus  
Architects 2020.



447 Battery Street Project  
Case No: 2014.1036E

**Figure 5-1**  
**Alternative B – Full Preservation Alternative**

This alternative would feature a two-story addition and mechanical penthouse above the existing three-story building, for a total of 31,419 square feet, including 2,630 square feet for a ground-floor restaurant and kitchen and 28,789 square feet for hotel use, including guest and service lobbies on the ground floor and four floors with 42 hotel rooms above, which would be accessed from U-shaped corridors on the upper floors. There would be a center stairwell as well as a stair and elevator core in the northwest corner.

Under Alternative B, the existing building's approximate height and roughly rectangular footprint would be retained; the existing brick exterior walls and slightly projecting brick sills and segmental arch heads at the window openings would also be retained. Existing rectangular ground-floor openings on the primary (east) façade would be maintained but extended to the ground to create two entries and a center full-height window system. The glazed entries would be protected by flat glass awnings. All other segmental arched window openings on the primary (east) and south façades would be retained and restored with new two-light, double-hung wood-sash units.

A portion of the internal wood structure (floors, ceilings, and posts) would be retained under Alternative B. Approximately the front (eastern) 20 feet and southern 30 feet of the interior wood structure would be retained; however, interior materials would need to be removed for the northwest circulation core. There would also need to be a number of interior interventions in order to support the rooftop addition, including the insertion of new columns. Windows would be regularly spaced on the first story facing Merchant Street and on the second and third stories facing Merchant Street and Battery Street. The two westernmost bays on Merchant Street would be slightly closer together. Openings for the storefront and the entry would be located on Battery Street.

Unlike under the proposed project, Alternative B would not require excavation. The two-story addition (fourth and fifth floors) would be set back 15 feet from both the east and south façades of the historic building, providing a 2,048-square-foot balcony. A three-sided light well would angle inward at the north façade. The addition would be designed in a contemporary architectural style, with extensive glazing. The mechanical penthouse would be situated in the northwest corner and set back from the roofline of the fifth floor.

## **ALTERNATIVE C – PARTIAL PRESERVATION ALTERNATIVE**

Alternative C (Partial Preservation Alternative), shown in **Figure 5-2**, would retain the majority of the character-defining features of the historical resource at 447 Battery Street, which are mostly on the east and south façades. However, the north and west façades and the interior structure would not be retained. The historical resource's spatial relationships with its site and environment would be altered.



Source: Heller Manus Architects 2020.

Alternative C would feature four basement stories (the same as the proposed project), three stories within the façades of the existing building, nine additional stories, and a mechanical penthouse, totaling 110,615 square feet. This would include 7,384 square feet for restaurant space on two floors and 80,869 square feet for hotel use. Uses per floor, from bottom to top, would include 24 hotel/valet and accessible parking spaces on Basement Level 4; a fire pump room, loading dock, and car elevator on Basement Level 3; mechanical, electrical, storage, and maintenance space, as well as bike parking, on Basement Level 2; meeting rooms and a fitness room on Basement Level 1; guest and service foyers, hotel lobby and reception area, bar/restaurant, back-of-house area, and off-street car elevator on the ground floor; hotel rooms on the second through 11<sup>th</sup> floors; and a restaurant and kitchen at the 12<sup>th</sup> floor. There would be a center stairwell as well as a stair and elevator core in the northwest corner. Alternative C would provide a total of 130 hotel rooms, which would be accessed from U-shaped corridors on the upper floors. Alternative C would require excavation to construct the four basement levels (the same number as the proposed project). None of the internal structure would be retained.

The Partial Preservation Alternative would retain the primary (east) and south street-facing façades. The rectangular ground-floor openings on the primary (east) façade would be maintained but extended to the ground to create two entries and a center full-height window system. The glazed entries would be protected by flat glass awnings. Five of the six extant segmental arched window openings on the ground floor of the south façade, facing Merchant Street, would be replaced with a glazed roll-up garage door, a single glazed door within an existing segmental arch, and two rectangular glazed storefront entry systems with flat awnings. The segmental arch window openings on the second and third stories of the primary (east) and south façades would be retained and restored with new metal one-over-one double-hung windows.

The upper nine floors would have the same floor area as the first three floors. A three-sided light well would angle inward at the north façade of the addition. The addition would be designed in a contemporary architectural style. Floors four and 12 would feature extensive glazing, while floors five through 11 would feature large panels of glazing within canted stone frames that would be set within a larger metal frame. The 12<sup>th</sup> story would be topped with a projecting cornice. The mechanical penthouse would be situated in the northwest corner and set back from the roofline of the 12<sup>th</sup> floor.

## **C. ALTERNATIVES ANALYSIS**

Under CEQA, projects that comply with the Secretary of the Interior's Standards for Rehabilitation are considered to have a less-than-significant adverse impact on historical resources. Projects that do not comply with all of the rehabilitation standards may cause either a substantial or less-than-substantial adverse change in the significance of a historical resource. Thus, in some circumstances, a project may not be required to comply with all 10 rehabilitation

standards for the historical resource's material integrity to be retained, with the property continuing to convey its historic significance and retain its eligibility for listing in the California register.

During review of the full and partial preservation alternatives, the standards outlined in **Table 5-2**, from the Secretary of the Interior's Standards for Rehabilitation, were reviewed. The 10 rehabilitation standards, as well as the potential for the project and its alternatives to comply with the standards, are described in **Table 5-2**. In **Table 5-2**, a "+" indicates that the standard is met and a "-" indicates that the standard is not met.

**Table 5-2. Summary of Rehabilitation Standards Met by the Project and Its Alternatives**

Standard for Rehabilitation	Proposed Project	Alternative A – No Project Alternative	Alternative B – Full Preservation Alternative	Alternative C – Partial Preservation Alternative
<b>Rehabilitation Standard 1:</b> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.	-	N/A	+	-
<b>Rehabilitation Standard 2:</b> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.	-	N/A	+	-
<b>Rehabilitation Standard 3:</b> Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.	+	N/A	+	+
<b>Rehabilitation Standard 4:</b> Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.	+	N/A	+	+
<b>Rehabilitation Standard 5:</b> Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.	-	N/A	+	-
<b>Rehabilitation Standard 6:</b> Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design,	N/A	N/A	+	+



<b>Standard for Rehabilitation</b>	<b>Proposed Project</b>	<b>Alternative A – No Project Alternative</b>	<b>Alternative B – Full Preservation Alternative</b>	<b>Alternative C – Partial Preservation Alternative</b>
color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.				
<b>Rehabilitation Standard 7:</b> Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.	N/A	N/A	+	+
<b>Rehabilitation Standard 8:</b> Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.	+	N/A	+	+
<b>Rehabilitation Standard 9:</b> New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.	-	N/A	+	-
<b>Rehabilitation Standard 10:</b> New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.	-	N/A	+	-
Note: N/A = not applicable; + = standard met; - = standard not met Source: Page & Turnbull, <i>447 Battery – Preservation Alternatives Memorandum</i> , August 25, 2020. San Francisco Planning Department, <i>447 Battery Street, San Francisco Historic Resource Evaluation Response Part 2</i> , 2020.				

In addition, **Table 5-3**, below, identifies whether the impacts anticipated under any of the three alternatives would be similar to, greater than, or less than the impacts that would occur with proposed project implementation for all resource areas.

**Table 5-3. Comparison of the Environmental Impacts of the Proposed Project to the Impacts of the Alternatives**

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Land Use and Planning</b>					
<b>Physical Division of Community</b>	Impact LU-1: The proposed project would not physically divide an established community.	NI	Same as the proposed project. (NI)	Same as the proposed project. (NI)	Same as the proposed project. (NI)
<b>Conflict with Land Use Plans</b>	Impact LU-2: The proposed project would not 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.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative Land Use</b>	Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative land use impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Population and Housing</b>					
<b>Population Growth</b>	Impact PH-1: The proposed project would not induce substantial unplanned population growth, either directly or indirectly.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Housing Demand</b>	Impact PH-2: The proposed project would not displace a substantial number of existing housing units, people, or employees or create demand for additional housing elsewhere.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative Population and Housing</b>	Impact C-PH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative population and housing impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)



Topic	Impact	Proposed Project	Alternative A: No Project Alternative	Alternative B: Full Preservation Alternative	Alternative C: Partial Preservation Alternative
<b>Cultural Resources</b>					
<b>Historical Resources – Onsite</b>	Impact CR-1: The proposed project would cause a substantial adverse change in the significance of onsite historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	SUM	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Similar to the proposed project. (SUM)
<b>Historical Resources – Offsite</b>	Impact CR-2. The proposed project would not cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	NI	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)
<b>Archaeological Resources</b>	Impact CR-3: The proposed project could cause a substantial adverse change in the significance of an archaeological resource, as defined in section 15064.5.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Human Remains</b>	Impact CR-4. The proposed project could disturb human remains, including those interred outside of formal cemeteries.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Cumulative Historical Resources</b>	Impact C-CR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in demolition and/or alteration of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Cumulative Archaeological Resources</b>	Impact C-CR-2. The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on archaeological resources and human remains.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Tribal Cultural Resources</b>					
<b>Change in Significance</b>	Impact TCR-1. The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Cumulative Tribal Consultation Resources</b>	Impact C-TCR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on tribal cultural resources.	LTSM	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTSM)
<b>Transportation and Circulation</b>					
<b>Circulation Interference</b>	Impact TR-1. The proposed project would not involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Hazardous Conditions</b>	Impact TR-2. The proposed project would not create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations, nor would it interfere with accessibility for people walking or bicycling to and from the project site and adjoining areas or result in inadequate emergency access.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Transit Delay</b>	Impact TR-3. The proposed project would not substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>VMT</b>	Impact TR-4: The proposed project would not cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or adding new roadways to the network.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Loading</b>	Impact TR-5. The proposed project would not result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative</b>	Impact C-TR-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative transportation impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

Topic	Impact	Proposed Project	Alternative A: No Project Alternative	Alternative B: Full Preservation Alternative	Alternative C: Partial Preservation Alternative
<b>Noise</b>					
<b>Construction Noise</b>	Impact NOI-1. Construction of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Operational Noise</b>	Impact NOI-2. Operation of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Vibration</b>	Impact NOI-3. Construction and operation of the proposed project would not generate excessive ground-borne vibration or ground-borne noise levels.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative</b>	Impact C-NOI-1. The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative noise and vibration impacts.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Air Quality</b>					
<b>Fugitive Dust (Construction)</b>	Impact AQ-1. The proposed project's construction activities would not generate fugitive dust or criteria air pollutants, violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>PM2.5 and TACs (Construction)</b>	Impact AQ-2. The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Criteria Air Pollutants</b>	Impact AQ-3. During operations, the proposed project would not result in emissions of criteria air pollutants at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>PM2.5 and TACs (Operations)</b>	Impact AQ-4. During operations, the proposed project would not generate toxic air contaminants, including diesel particulate matter, and expose sensitive receptors to substantial air pollutant concentrations.	LTSM	Less than the proposed project. (LTS)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
<b>Conflict with Clean Air Plan</b>	Impact AQ-5. The proposed project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)
<b>Other Emissions</b>	Impact AQ-6. The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative</b>	Impact C-AQ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative air quality impacts.	LTSM	Less than the proposed project. (LTS)	Less than the proposed project. (LTSM)	Less than the proposed project. (LTSM)
<b>Greenhouse Gas Emissions</b>					
<b>Cumulative GHG</b>	Impact C-GG-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not generate greenhouse gas emissions at levels that would result in a significant impact on the environment or conflict with any policy, plan, or regulation adopted for the purpose of reducing greenhouse gas emissions.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

Topic	Impact	Proposed Project	Alternative A: No Project Alternative	Alternative B: Full Preservation Alternative	Alternative C: Partial Preservation Alternative
<b>Wind</b>					
<b>Wind in Outdoor Public Areas</b>	Impact WI-1: The proposed project would not alter wind hazards in publicly accessible areas of substantial pedestrian use.	LTS	Greater than the proposed project. (LTS)	Greater than the proposed project. (LTS)	Greater than the proposed project. (LTS)
<b>Cumulative Wind</b>	Impact C-WI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative wind impacts.	LTS	Greater than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Shadow</b>					
<b>Outdoor Public Areas</b>	Impact SH-1. The proposed project would not create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative Shadow</b>	Impact C-SH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative shadow impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Recreation</b>					
<b>Use of Facilities</b>	Impact RE-1: The proposed project would not result in a substantial increase in the use of existing parks and recreational facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated, nor would it include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Cumulative Recreation Impacts</b>	Impact C-RE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative recreation impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Utilities and Service Systems</b>					
<b>Expansion of Utilities</b>	Impact UT-1: The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, would not exceed the capacity of the wastewater treatment provider serving the project site, or require construction of new stormwater drainage facilities, wastewater treatment facilities, or electric power, natural gas, or telecommunications facilities or expansion of existing facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Water Supplies</b>	Impact UT-2: The SFPUC has adequate water supplies available to serve the project from existing entitlements and resources, and the proposed project would not require expansion or construction of new water supply resources or facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Solid Waste Disposal and Landfill Capacity</b>	Impact UT-3: The proposed project would be served by a landfill with adequate permitted capacity to accommodate the project's solid waste disposal needs and comply with all applicable statutes and regulations related to solid waste.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Cumulative Utilities</b>	Impact C-UT-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative utility or service systems impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Public Services</b>					
<b>Demand for Services</b>	Impact PS-1: The proposed project would not result in an increase in demand for police protection, fire protection, schools, or other services to an extent that would result in substantial adverse physical impacts associated with the construction or alteration of governmental facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative Demand</b>	Impact C-PS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts on public service facilities.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Biological Resources</b>					
<b>Sensitive Species</b>	Impact BI-1: The proposed project would not 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)



<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Migration</b>	Impact BI-2: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Conflict with Local Tree Ordinance</b>	Impact BI-3: The proposed project would not conflict with the City's local tree ordinance.	LTS	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)
<b>Cumulative Biological Resources</b>	Impact C-BI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative biological resources impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Geology and Soils</b>					
<b>Seismic and Geologic Hazards</b>	Impact GE-1: The proposed project would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or death involving rupture, ground shaking, liquefaction, or landslides.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)
<b>Erosion</b>	Impact GE-2: The proposed project would not result in substantial loss of topsoil or erosion.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Geologic Unit/Unstable Soil</b>	Impact GE-3: The proposed project would not be located on a 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.	LTS	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)
<b>Expansive Soil</b>	Impact GE-4: The proposed project would not be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property.	LTS	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)	Same as the proposed project. (LTS)
<b>Paleontological Resources</b>	Impact GE-5: The proposed project could directly or indirectly destroy a unique paleontological resource or site.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (NI)	Similar to the proposed project. (LTS)
<b>Damage to Unique Geologic Features during Construction</b>	Impact GE-6: Construction activities for the proposed project would not directly or indirectly result in damage to, or destruction of, unique geologic features.	LTS	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)	Similar to the proposed project. (NI)
<b>Cumulative Geology and Soils</b>	Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative geology and soil impacts.	LTS	Less than the proposed project. (LTS)	Similar to the proposed project. (LTS)	similar to the proposed project. (LTS)

Topic	Impact	Proposed Project	Alternative A: No Project Alternative	Alternative B: Full Preservation Alternative	Alternative C: Partial Preservation Alternative
<b>Hydrology and Water Quality</b>					
<b>Water Quality Standards</b>	Impact HY-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Groundwater</b>	Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Drainage</b>	Impact HY-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or the addition of impervious surfaces that would result in substantial erosion, siltation, or flooding; substantially increase the rate or amount of surface runoff and result in flooding onsite or offsite; or 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.	LTS	Similar to the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Groundwater Management Plan</b>	Impact HY-4: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)	Similar to the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Cumulative Hydrology</b>	Impact C-HY-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative hydrology and water quality impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Hazards and Hazardous Materials</b>					
<b>Transit and Disposal</b>	Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Create Public Hazard</b>	Impact HZ-2: The proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable conditions involving the release of hazardous materials into the environment.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Schools</b>	Impact HZ-3: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Emergency Response Plan</b>	Impact HZ-4: The proposed project would not interfere with implementation of an adopted emergency response plan or evacuation plan.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

<b>Topic</b>	<b>Impact</b>	<b>Proposed Project</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
<b>Cumulative</b>	Impact C-HZ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts related to hazards and hazardous materials.	LTS	Less than the proposed project. (NI)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Energy</b>					
<b>Wasteful or Inefficient Energy Consumption</b>	Impact EN-1: The proposed project 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.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)
<b>Cumulative Energy</b>	Impact C-EN-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative energy impacts.	LTS	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)	Less than the proposed project. (LTS)

## ALTERNATIVE A – NO PROJECT ALTERNATIVE

### ***Historic Architectural Resources***

Because Alternative A (No Project Alternative) would not demolish or make any modifications to the historical resource, it would not cause material impairment. Compared to the proposed project, which would effectively demolish the building, retaining only the historic Battery and Merchant street façades, resulting in material impairment to the historical resource, Alternative A would not result in any project-level impacts and would not contribute to any cumulative impacts related to historic architectural resources.

### ***Other Topics***

Under Alternative A, the project site would remain in its existing condition, with no new construction. Because no construction would occur under Alternative A and 447 Battery Street would continue to operate in its current condition, it would not have any impacts on any of the topics analyzed in the initial study (see Appendix B), as shown in **Table 5-3**, p. 5-14. Therefore, impacts under Alternative A related to land use and land use planning, population and housing, archaeological resources, tribal cultural resources, transportation and circulation, noise, air quality, greenhouse gases, shadow, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, and energy would be less than those anticipated with implementation of the proposed project because no construction, ground-disturbing activities, or changes to operations would occur. Because all of these impacts would be avoided, none of the mitigation measures identified for the proposed project would be required under Alternative A.

The only environmental topic that could experience greater impacts under Alternative A compared to the proposed project is wind. Under existing conditions (Alternative A), the 11 mph comfort criterion is exceeded 14 percent of the time. With the proposed project, the 11 mph comfort criterion would be exceeded 13 percent of the time, 1 percent less than under existing conditions. In addition, under existing conditions (Alternative A), the planning code wind hazard criterion is currently exceeded at three locations on Washington Street; the duration of the existing wind hazard is 43 hours per year. With the proposed project, the wind hazard criterion would be exceeded at three locations on Washington Street, the same number of locations as occurs under existing conditions, except one existing hazard would be removed, while one new hazard would occur. The total duration of the wind hazard exceedances would be five hours per year, a decrease of 38 hours per year from the existing wind hazard exceedances.<sup>3</sup> Therefore, under Alternative A, existing wind conditions would remain, which would result in a greater wind impact compared with the project.

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<sup>3</sup> Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

## ALTERNATIVE B – FULL PRESERVATION ALTERNATIVE

### *Historic Architectural Resources*

Section 3.A, Historic Architectural Resources, concluded that demolition of the 447 Battery Street building would cause a substantial adverse change in the significance of a historical resource. As shown above in **Table 5-2**, p. 5-12, Alternative B would be in compliance with all 10 of the Secretary of the Interior's Standards for Rehabilitation.

Under Alternative B (Full Preservation Alternative), the existing building at 447 Battery Street would be altered, but most of its original historical character would be retained. Alternative B would involve two changes to the defining characteristics of the historical resource, the addition of two stories and a mechanical penthouse to the historic building's three-story massing and the extension of an existing ground-floor window opening on the primary (east) façade down to the ground level. However, the majority of the character-defining features would not be changed. Alternative B would slightly change the physical appearance of the historical resource's site and environment, but the character of the historical resource would remain evident.

Alternative B would not apply conjectural features or architectural elements from other buildings to the historical resource in a way that would create a false sense of historical development, and the new addition would be clearly differentiated from the historic building by location (setback), materiality (glass and steel), and design. Non-original windows in the arched openings would be replaced with compatible new double-hung replacement windows, based on available historic documentary evidence. Two original openings that were previously converted to doorways, one of which has since been infilled with brick at the west end of the south façade, would be restored back to window openings with compatible windows. A non-original doorway at the westernmost end of the south façade would be infilled with brick. These alterations would not create a false sense of historical development because they would restore character-defining features, based on available historic evidence.

Although there would be a slight change to the historical resource's environment, the historical resource would still retain its presence along Battery Street and its integrity as a multi-story, brick masonry-constructed post-earthquake industrial/commercial building. The majority of the character-defining features of the historical resource would be retained in whole. Although one previously expanded storefront window opening would be further expanded, all other character-defining features and spatial relationships would be fully retained. Therefore, Alternative B would retain the historic building's character-defining interior and exterior features. As such, the historic building would retain its ability to convey its historic and architectural significance. Alternative B would not cause material impairment and, unlike the proposed project, would not result in a significant and unavoidable impact related to demolition of a historical resource. Mitigation Measures M-CR-1a through M-CR-1c would not be applicable under this alternative.

## ***Other Topics***

Alternative B would occupy the same building site as the proposed project and have a similar, though less intensive, land use development program overall (143,449 gross square feet of development under the proposed project and 31,419 gross square feet under this alternative). As a result, the construction and operational impacts of Alternative B under each of the initial study environmental topics would be similar to those of the proposed project but reduced, as shown in **Table 5-3**, p. 5-14. Specifically, impacts related to land use and planning, utilities and service systems, public services, population and housing, greenhouse gas emissions, and recreation (discussed in the initial study [see Appendix B]) would be less substantial than those of the proposed project, given the reduced development intensity. These impacts would be less than significant, as with the proposed project.

Because Alternative B would be only five stories, as opposed to the proposed project's 18 stories, it is expected that pedestrian comfort and wind hazards would be improved compared to existing conditions because a taller building at the project site would help to improve wind conditions compared with existing conditions.<sup>4</sup> However, pedestrian comfort and wind hazards under Alternative B would be greater than those of the proposed project because the building height under Alternative B would not be enough to provide as much improvement as under the proposed project. In addition, Alternative B would cast a smaller shadow than that anticipated with the proposed project. Impacts would be less than significant, as with the proposed project.

The impacts of Alternative B related to site-specific conditions, such as those related to transportation and circulation, noise, air quality, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials, would be similar to those of the proposed project but reduced because development pursuant to Alternative B would reduce the height of the building and the number of hotel rooms. This would result in less overall construction, shorter construction time periods, less excavation, and less development intensity. These impacts would be less than significant, as with the proposed project. To address construction noise, mitigation measure M-NOI-1 would still apply to Alternative B; this impact would be less than significant with mitigation. To address air quality impacts during construction and operation, mitigation measures M-AQ-2 and M-AQ-4 would still apply to Alternative B; this impact would also be less than significant with mitigation. However, because excavation would not be required for Alternative B, impacts related to archaeological resources, tribal cultural resources, and paleontological resources would be less than they would be under the proposed project. Therefore, the mitigation measures presented in the initial study for the proposed project (Mitigation Measures M-CR-3, M-TCR-1, and M-GE-5) would not be applicable to this alternative. Therefore, there would be no impacts related to archaeological resources, tribal cultural resources, and paleontological resources under Alternative B.

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<sup>4</sup> Ibid.



As with the proposed project, Alternative B would have less-than-significant impacts related to energy and no impacts on mineral resources or agricultural or forestry resources because none are present within the project site.

## **ALTERNATIVE C – PARTIAL PRESERVATION ALTERNATIVE**

### ***Historic Architectural Resources***

The purpose of a partial preservation alternative is to consider a plan that would lessen the significant impacts of the proposed project on the existing historic resource. As shown above in **Table 5-2**, p. 5-12, Alternative C would be in full compliance with only five of the 10 Secretary of the Interior's Standards for Rehabilitation.

Alternative C would retain the street façades of the existing historic resource and construct a new hotel behind and above. Although the street façades contain some of the historic resource's character-defining features that would be preserved, the demolition of the remainder of the building would destroy a fair amount of the resource's historic materials and spaces and it would significantly change the physical appearance of the historic resource's site and environment.

Alternative C would also remove large sections of the ground story of the south facade in order to allow for the installation of two storefronts, an exit door, and a loading bay. On the ground story of the east façade, the sill would be removed from the central display window. The building's roof and entire internal structure—including all walls, vertical supports, and floor plates—would be removed in order to allow for excavation and new construction. Although the interior does not contribute to the building's historic significance, the complete removal of the interior, along with the roof, effectively negates the property's status as a building, which is integral to its historic significance.

Although the proposed nine-story addition would be compatible with the historic building in its use of stone, rhythm of the bays, and alignment of the vertical elements, as well as its horizontal organization, which would reference the traditional organization of taller buildings from the era in which the existing building was constructed, its scale would not be compatible with the three-story historic resource because, given its height difference, it would overshadow the historic façade. The additional stories would create a significant change in the overall visual impression of the property and its environment. It would damage the historic character, which is tied to the building's existing massing and scale. The addition and the related new construction would partially destroy historic materials that characterize the property. Therefore, Alternative C would cause material impairment to the historic resource, resulting in an impact that would be significant and unavoidable with mitigation, as under the proposed project. Mitigation Measures M-CR-1a through M-CR-1c would be applicable under this alternative.

## ***Other Topics***

Alternative C would occupy the same building site as the proposed project and have a similar, though less intensive, land use development program overall (143,449 gross square feet of development under the proposed project and 81,540 gross square feet under this alternative). Alternative C proposes the same amount of excavation as the proposed project. As a result, the construction and operational impacts of Alternative C for each of the initial study environmental topics would be similar to those of the proposed project but reduced, as shown in **Table 5-3**, p. 5-14. Specifically, impacts related to land use and planning, utilities and service systems, public services, population and housing, greenhouse gas emissions, and recreation (discussed in the initial study [see Appendix B]) would be less substantial than those of the proposed project, given the reduced development intensity. These impacts would be less than significant, as with the proposed project.

Because Alternative C would be only eight stories, as opposed to the proposed project's 18 stories, it is expected that pedestrian comfort and wind hazards would be reduced compared to existing conditions<sup>5</sup> because a taller building at the project site would help to improve wind conditions compared with existing conditions. However, pedestrian comfort and wind hazards under Alternative C would be greater than those of the proposed project because the building height under Alternative C would not be enough to provide as much improvement as under the proposed project. In addition, Alternative B would cast a smaller shadow than that anticipated with the proposed project. Impacts would be less than significant, as with the proposed project.

The impacts of Alternative C related to site-specific conditions, such as those related to transportation and circulation, noise, air quality, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials, would be similar to those of the proposed project but reduced because development pursuant to Alternative C would reduce the height of the building and the number of hotel rooms. This would result in less overall construction, shorter construction time periods, and less development intensity. These impacts would be less than significant, as with the proposed project. To address construction noise, mitigation measure M-NOI-1 would still apply to Alternative C; this impact would be less than significant with mitigation. To address air quality impacts during construction and operation, mitigation measures M-AQ-2 and M-AQ-4 would still apply to Alternative C; this impact would also be less than significant with mitigation.

Alternative C would involve the same amount of excavation, foundation system, and ground-disturbing activities. Therefore, the impacts of Alternative C on archaeological resources, tribal cultural resources and paleontological resources would be the same as they would be under the proposed project. The following mitigation measures, included in the initial study, would be applicable to Alternative C, as with the proposed project: Mitigation Measures M-CR-3, M-TCR-1,

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<sup>5</sup> Ibid.

M-NOI-1, and M-GE-5. This would result in less-than-significant impacts with implementation of the mitigation measures.

As with the proposed project, Alternative C would have less-than-significant impacts related to energy and no impacts on mineral resources or agricultural or forestry resources because none are present within the project site.

## RELATIONSHIP TO PROJECT OBJECTIVES

**Table 5-4**, below, identifies the project sponsor's objectives and whether or not the three alternatives to the proposed project would fulfill the objectives. Overall, Alternative A would not meet the project objectives, and Alternatives B and C would partially meet the project objectives.

**Table 5-4. Ability of Alternatives to Meet Project Objectives**

<b>Project Objective</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Add a well-designed building to an underutilized parcel in an area with a demonstrated demand for hotel rooms.	No – would not meet project objective	Yes – would meet project objective	Yes – would meet project objective
Construct a four-star hotel with enough rooms to make hotel use feasible for an operator, which generally requires approximately 200 or more hotel rooms as well as meeting space and a ballroom.	No – would not meet project objective	No – would not meet project objective; would result in 42 hotel rooms, roughly one-fifth the number stated in the project objective	No – would not meet project objective; would result in 130 hotel rooms, roughly 65 percent of the number stated in the project objective
Provide a basement for vehicle parking and mechanical equipment as well as the bike parking and employee showers and lockers required by the San Francisco Planning Code.	No – would not meet project objective	No – would not meet project objective; does not propose a basement	Yes – would meet project objective
Conduct structural and seismic upgrades to the existing building to allow construction of a multi-story addition above.	No – no structural or seismic upgrades would occur	Yes – would meet project objective	Yes – would meet project objective

<b>Project Objective</b>	<b>Alternative A: No Project Alternative</b>	<b>Alternative B: Full Preservation Alternative</b>	<b>Alternative C: Partial Preservation Alternative</b>
Construct a well-designed building that balances the architectural elements of the existing façade and an addition.	No – no construction would occur	Yes – would meet project objective	Yes – would meet project objective
Provide employment during construction and operation and benefit the city economically.	No – no construction would occur	Yes – would meet project objective but to a lesser degree than the proposed project	Yes – would meet project objective but to a lesser degree than the proposed project
Improve Merchant Street by providing privately owned public open space and a partially shared street that includes trees, seating areas, bicycle parking, and special paving, as well as active bar/restaurant and lobby uses in the ground floor or the hotel, thereby bringing more pedestrian life to the neighborhood.	No – would not meet project objective	Yes – would meet project objective	Yes – would meet project objective
Improve Battery Street by adding street trees and bicycle parking as well as street life from hotel and restaurant patrons.	No – would not meet project objective	Yes – would meet project objective but to a lesser degree than the proposed project	Yes – would meet project objective
Provide active restaurant uses to the site, including a full-service restaurant, café/bar, and rooftop bar/lounge.	No – would not meet project objective	Yes – would meet project objective but to a lesser degree than the proposed project	Yes – would meet project objective

## ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines section 15126(c) requires an EIR to identify the alternative to the proposed project that would have the least adverse environmental impacts (i.e., the “environmentally superior alternative”). Alternative A (No Project Alternative) is considered the environmentally superior alternative because it would not result in any changes to the historic building. Although Alternatives B (Full Preservation Alternative) and C (Partial Preservation Alternative) both contain numerous design strategies that would help preserve many of the property’s historic characteristics, they would still involve some construction activities that would alter its character.

None of the significant or less-than-significant impacts that would occur with proposed project implementation would occur with implementation of Alternative A. However, if it is found that the environmentally superior alternative is the No Project Alternative, CEQA requires another alternative to be identified as the environmentally superior alternative.

Because Alternative B would preserve more components of the historic property than the proposed project or Alternative C and would not require excavation, Alternative B is considered the environmentally superior alternative.

## **D. ALTERNATIVES CONSIDERED BUT REJECTED**

CEQA Guidelines section 15126(c) requires an EIR to identify alternatives that were considered by the lead agency throughout the planning process but rejected due to infeasibility.

In preparing the preservation alternatives, an Increased Height Full Preservation Alternative was considered, which included all the shared characteristics of Alternative B but with more than two stories above the existing building. The Increased Height Full Preservation Alternative was considered but rejected because the existing, unaltered historic structure could not support more stories than the two stories presented in Alternative B while maintaining the desired degree of preservation. In addition, life safety codes require all wood structures to be removed from a building with occupiable floors more than 75 feet in height. Taller and shorter partial preservation alternatives were also considered and ultimately discarded in favor of an alternative that matched the adjacent building's height.

The project sponsor also considered a version of the proposed project that included eight for-sale condominium dwelling units on the top five floors of the building. This alternative would have also included three basement levels with a conference center, gym, spa, 24 valet parking spaces, and a minimum of 15 class 1 bicycle spaces. The condominiums on floors 15 through 19 would have consisted of approximately four units with two bedrooms, two units with three bedrooms, one unit with four bedrooms, and one unit with five bedrooms, all with private terraces. This alternative would not have preserved the historic façades and would have been designed in a contemporary architectural style, employing glass and limestone as the primary building materials. For the primary façades on Merchant Street and Battery Street, the proposed design would have featured large glass storefronts that would be articulated by a glass overhang. This alternative was considered but rejected because it failed to incorporate any preservation features for the historical resource. In addition, this alternative was rejected for failure to fulfill the project objective of constructing a well-designed building that balances the architectural elements of the existing façade because it would include demolition of the existing historic façade and replacement with a modern design. It was also determined by the department that including eight for-sale condominiums in the proposed project would not have been appropriate at this location.

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## **APPENDIX A: NOTICE OF PREPARATION**

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# SAN FRANCISCO PLANNING DEPARTMENT

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## Notice of Preparation of an Environmental Impact Report

*Date:* August 7, 2019  
*Case No.:* **2014.1036E**  
*Project Title:* **447 Battery Street**  
*Zoning:* Downtown Office (C-3-O)  
200-S Height and Bulk District  
*Plan Area:* Downtown Plan  
*Block/Lot:* 0206/002  
*Lot Size:* 7,178 square feet [0.16-acre]  
*Project Sponsor* 447 Partners, LLC  
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## INTRODUCTION

The project sponsor, 447 Partners, LLC, proposes to redevelop a 7,178-square-foot (0.16-acre) rectangular property at the northwest corner of Battery and Merchant streets, within San Francisco's Financial District neighborhood, with a large hotel and ground-floor retail. The project site is currently occupied by an approximately 144,000-square-foot, three-story building with five commercial tenants. The building's office and retail uses include a furniture rental store and wine bar. The 447 Battery Street Project (proposed project) would involve demolishing the existing building while retaining the existing building façade, as seen by the public; replacing the internal structure to bring it up to building and structural codes; and building an addition to create a new 18-story, 200-foot-tall hotel with a ground-floor lobby and restaurant (see Table 1). The hotel would have a total of 198 hotel rooms on 16 floors, with another restaurant on the 18<sup>th</sup> floor. Four below-grade basement levels would contain conference rooms, mechanical equipment, a loading area, and vehicle and bicycle parking. A new privately owned, publicly accessible open space (POPOs) would be provided along Merchant Street, in addition to private terraces for hotel guests and restaurant patrons. The proposed project would also include improvements to Merchant Street, as discussed below.

## PROJECT DESCRIPTION

This section provides a description of the project location and site characteristics, the existing conditions, and the proposed project characteristics.

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Revised 8/8/17

**Table 1 Proposed Project Characteristics**

<b>Project Component</b>	<b>Area (gross square feet)</b>
Commercial (hotel, lobbies, conference, restaurant)	122,148
Vehicle Parking <sup>a</sup>	13,680
Bicycle Parking	404
TOTAL <sup>b</sup>	143,449
Publicly-accessible Open Space	2,720
Common Open Space	2,203
Private Open Space	3,934
<b>Project Component</b>	<b>Amount</b>
<b>Hotel Rooms (total)</b>	198
<b>Parking Spaces</b>	
Auto <sup>c</sup>	24
Bicycle (class 1)	8
Bicycle (class 2)	19
Height of Building	200 feet (up to 220 feet inclusive of elevator/stair penthouse, parapet, and various rooftop elements) <sup>d</sup>
Number of Stories	18
Source: Heller Manus Architects, 2019. <sup>a</sup> . Includes garage circulation space in the basement levels. <sup>b</sup> . Includes mechanical uses not listed in this table. <sup>c</sup> . Includes two Americans with Disabilities Act-compliant accessible spaces. <sup>d</sup> . Consistent with the Planning Code Height and Bulk designations for the project site, the building height is 200 feet, with up to 20 feet for allowed for rooftop appurtenances.	

### ***Project Location***

The approximately 7,178-square-foot (0.16-acre) project site (Assessor's Block 0206, Lot 002) is at the northwest corner of Battery and Merchant streets, on a block bounded by Washington Street to the north, Battery Street to the east, Clay Street to the south, and Sansome Street to the west (see Figure 1). Merchant Street, an east-west street that divides the block in two, forms the southern boundary of the project site.

Streets surrounding the project site include one or two lanes and are not considered major arterials. Battery, Washington, and Sansome streets are all two lane-roadways; Merchant Street is a one-lane road. The nearest major thoroughfares are Columbus Avenue to the west, Market Street to the south, and The Embarcadero to the west. However, both Battery Street and Sansome Street support important functions related to circulation by serving as major routes for regional traffic into and out of the Financial District

(particularly commuters residing in the East Bay and North Bay) as well as local traffic from residents living in neighborhoods northwest of downtown. Regional roadways that serve the project site are I-80, I-280, and U.S. 101, all three of which have on- and off-ramps within 0.5 mile of the project site.

The project site is connected to the transit network by numerous San Francisco Municipal Railway (Muni) stations. Muni bus routes 1, 10, 12, 30X, 41, and 82X all operate within a couple blocks of the project site. In addition, subsurface Muni lines have entrances along Market Street, the closest of which are the Embarcadero (0.3 mile south) and Montgomery (0.4 mile south) stations; these are served by the J, K, T, L, M, and N Muni Metro light-rail lines. Bay Area Rapid Transit, which provides regional public transit service, is also at the Embarcadero and Montgomery stations on Market Street. Regional public transit service is also provided by the Alameda–Contra Costa Transit District; the Golden Gate Bridge, Highway & Transportation District; the San Mateo County Transit District; and Caltrain.

### *Existing Conditions*

The project site is generally flat, with an elevation of approximately 1 to 2 feet, San Francisco City Datum.<sup>1</sup> The site is rectangular in shape, with approximately 74 feet of frontage on Battery Street and approximately 97 feet of frontage on Merchant Street.

The project site is currently developed with an approximately 144,000-square-foot, three-story, 45-foot-tall building that occupies the entire lot. The building was constructed in 1907 and is considered to be an historic resource.<sup>2</sup> The building was originally occupied by a small Bay Area coffee producer, the Jones-Thierbach Company (1912 to 1966).<sup>3</sup> After the company vacated, the property was converted to an office and retail building in 1967. The building's current office and retail uses include a furniture rental store and wine bar on the ground floor. The second and third floor tenants are technology companies.

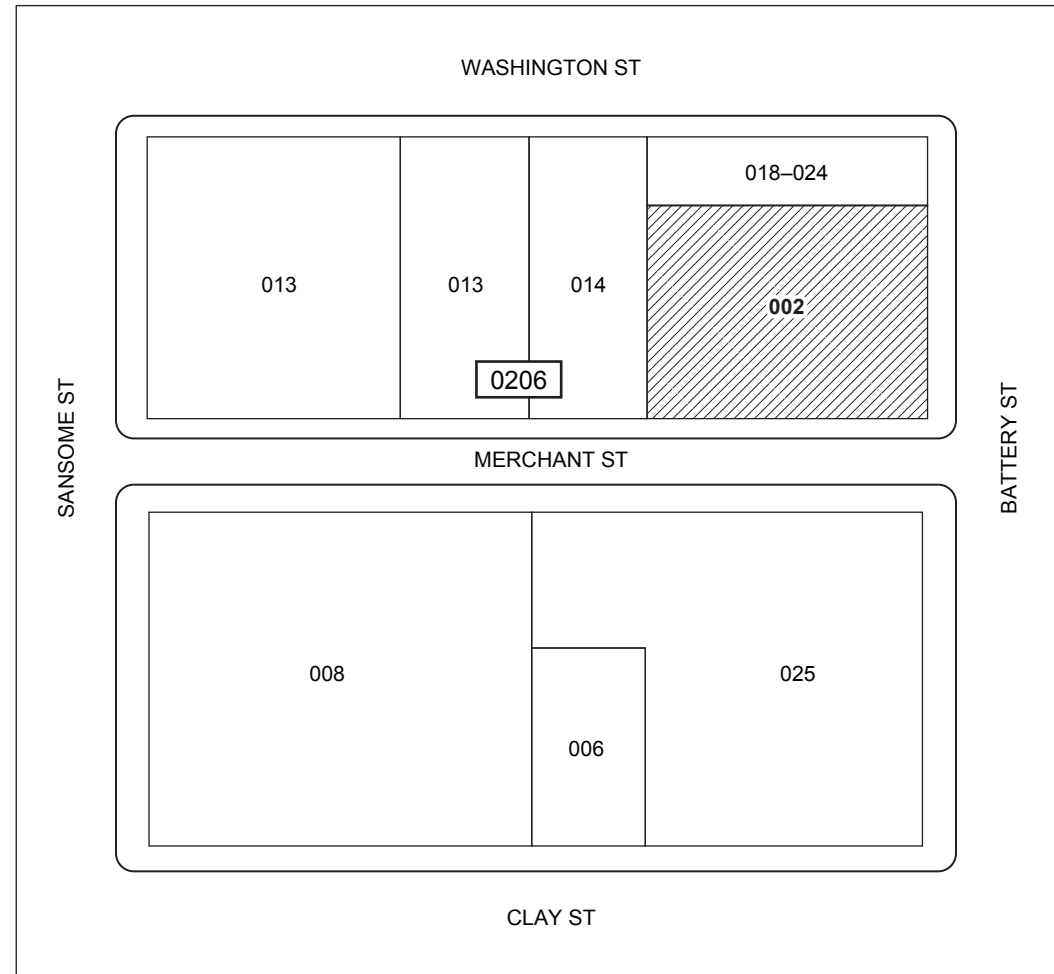
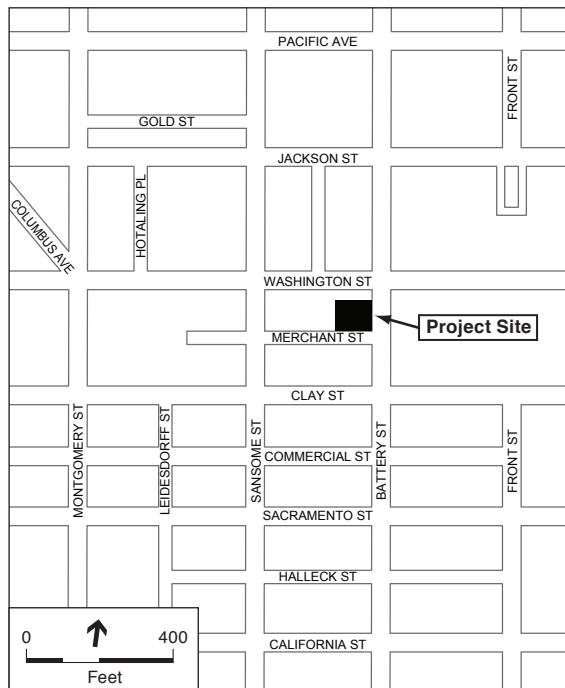
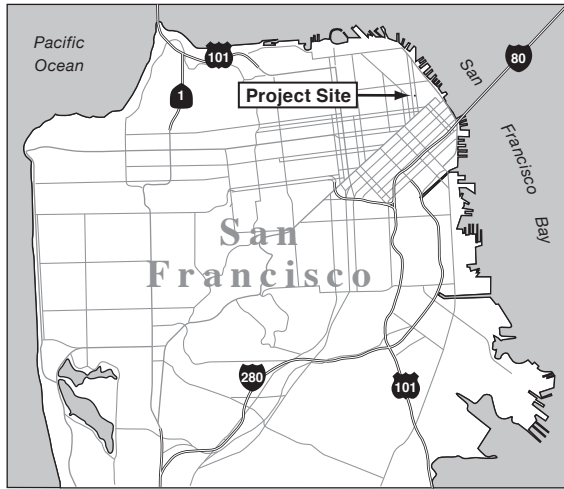
Two buildings adjoin the project site: a seven-story office building to the north with ground-floor retail space (401–423 Washington Street) and a three-story building to the west with a ground-floor restaurant (424 Merchant Street). Adjacent to the project site, across Merchant Street, is an 11-story hotel with ground-floor commercial uses (424 Clay Street and 425 Battery Street). To the east, across Battery Street, is an adjacent two-story parking garage and Maritime Plaza. West of the project site, at Sansome and Merchant streets, is San Francisco Fire Department Station 13.


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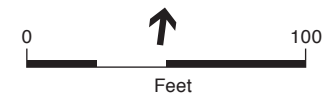
<sup>1</sup> San Francisco City Datum establishes the city's zero point for surveying purposes at approximately 11.3 feet above the current 1988 North American Vertical Datum. Because tides are measured from mean lower low water (about 3.1 feet below mean sea level), an elevation of 0 feet San Francisco City Datum is approximately 8.2 feet above mean sea level.

<sup>2</sup> San Francisco Planning Department, *447 Battery Street Historic Resource Evaluation Response*, December 17, 2017.

<sup>3</sup> Page & Turnbull, *447 Battery Street, San Francisco Historic Resource Evaluation, Part I*, August 19, 2016.



-  Project Site
- 002** Lot Numbers
- 0206** Assessor's Block



Source: Heller Manus Architects 2019.



The area surrounding the project site is a densely built area with land uses primarily consisting of neighborhood-serving retail uses on the ground level, with commercial space above. Parking, residential, hotel, office, and institutional facilities are also present in the area. The nearest residential buildings include the 21-story mixed-use building at 550 Battery Street (the Gateway apartments and townhomes) and a 23-story mixed-use residential building northeast of the project site. The nearest hotels are the Club Quarters Hotel at 424 Clay Street and Le Méridien at 333 Battery Street, immediately south of the project site, and the Hilton at 750 Kearny Street, two blocks west of the project site. Although the project site is adjacent to three- and seven-story buildings, the area includes high-rise buildings as well, such as the Transamerica Pyramid, the second tallest building in San Francisco, and the 21-story mixed-use building at 550 Battery Street.

Vegetation in the immediate vicinity of the project site is generally limited to street trees. Nearby public parks and open spaces include Maritime Plaza, Transamerica Redwood Park, Sydney G. Walton Square, Sue Bierman Park, Empire Park, Portsmouth Square Plaza, St. Mary's Square, Market/Battery Plaza, and One Bush Plaza.

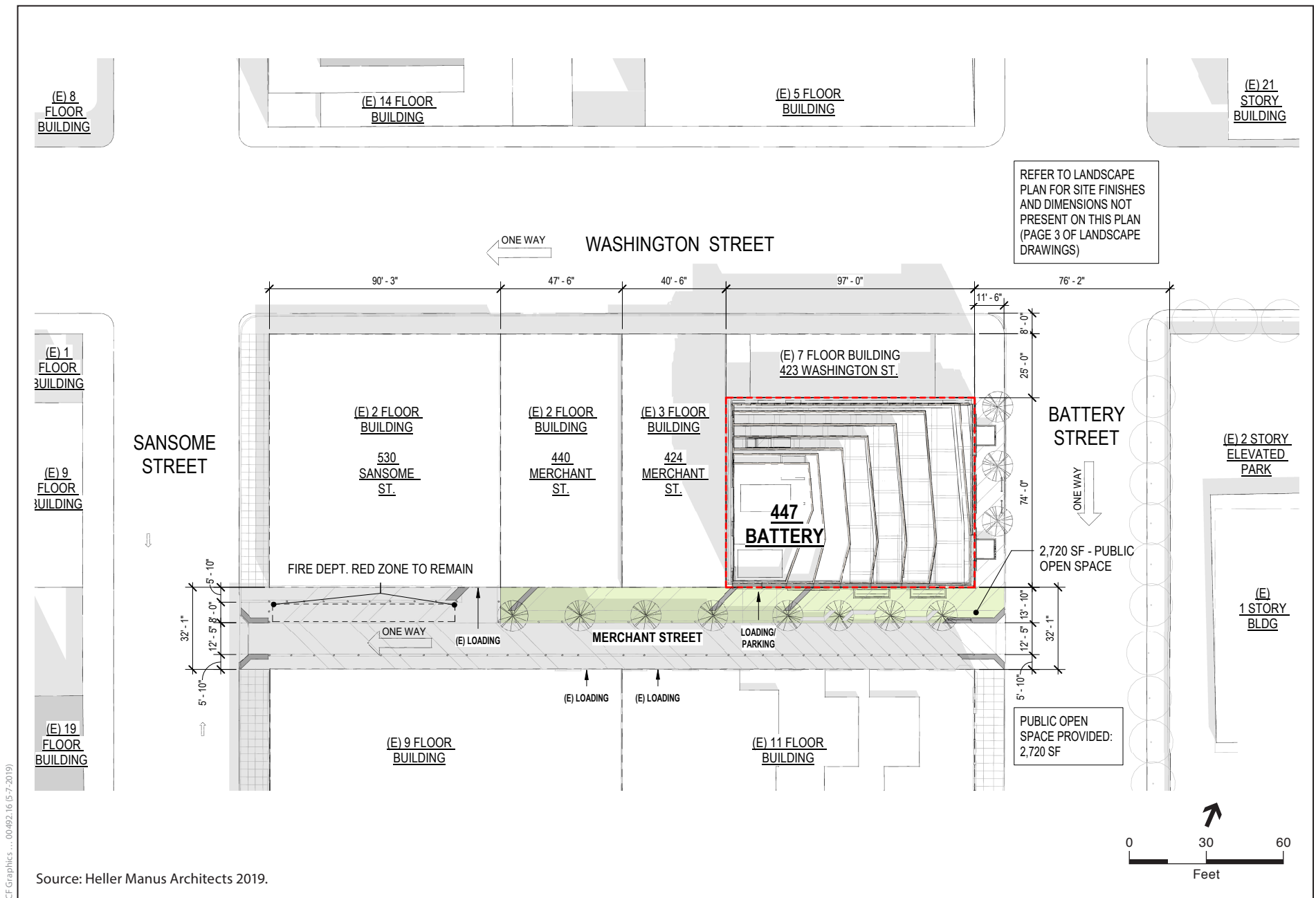
The proposed project is within San Francisco's Financial District neighborhood and the Downtown Area Plan area, as identified in the San Francisco General Plan. The project site is also within a C-3-O (Downtown Office) zoning district and a 200-S height and bulk district. This height district allows for a building height of 200 feet. Regarding this bulk district, the bulk controls for the lower tower are a maximum length of 160 feet, a maximum floor size of 20,000 square feet, and a maximum diagonal dimension of 190 feet. The bulk controls for the upper tower are a maximum length of 130 feet, a maximum average floor size of 12,000 square feet, a maximum floor size for any floor of 17,000 square feet, and a maximum average diagonal measure of 160 feet.

The project site is not within a historic district. The Washington-Broadway Special Use District and the Jackson Square Special Use District are directly north of the project site. Waterfront Special Use District 3 is three blocks north of the project site. In addition, the project site is one block southeast of the Jackson Square Historic District, two blocks northeast of the Commercial-Leidesdorff Conservation District, and two blocks north of the Front-California Conservation District.

### ***Proposed Project Characteristics***

The proposed project would involve retaining the existing building façade, as seen by the public. The interior would be reconfigured to comply with the current building code and accommodate an additional 143,449 gross square feet of space at the project site. Ultimately, the proposed project would consist of an 18-story, 200-foot-tall hotel. The hotel would have 198 rooms on 16 floors, with a lobby and restaurant on the ground floor and mezzanine and another restaurant on the 18<sup>th</sup> floor.

The proposed project would have frontages on Battery and Merchant streets, as shown in **Figure 2**. Landscaping would be provided on Battery and Merchant streets, while loading would be provided on Merchant Street.



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**Figure 2**  
**Proposed Site Plan**

The proposed project would be a total of 143,499 square feet of development, including 122,148 square feet of commercial uses (hotel, lobbies, conference, and restaurant), 13,680 square feet of vehicle parking uses, and 404 square feet of bicycle parking uses. The proposed project would provide 2,720 square feet of POPOs along Merchant Street, 2,203 square feet of required commercial open space, and 3,934 square feet of terrace space. In addition, 24 vehicle parking spaces, eight class 1 bicycle parking spaces, and 19 class 2 bicycle parking spaces would be provided.

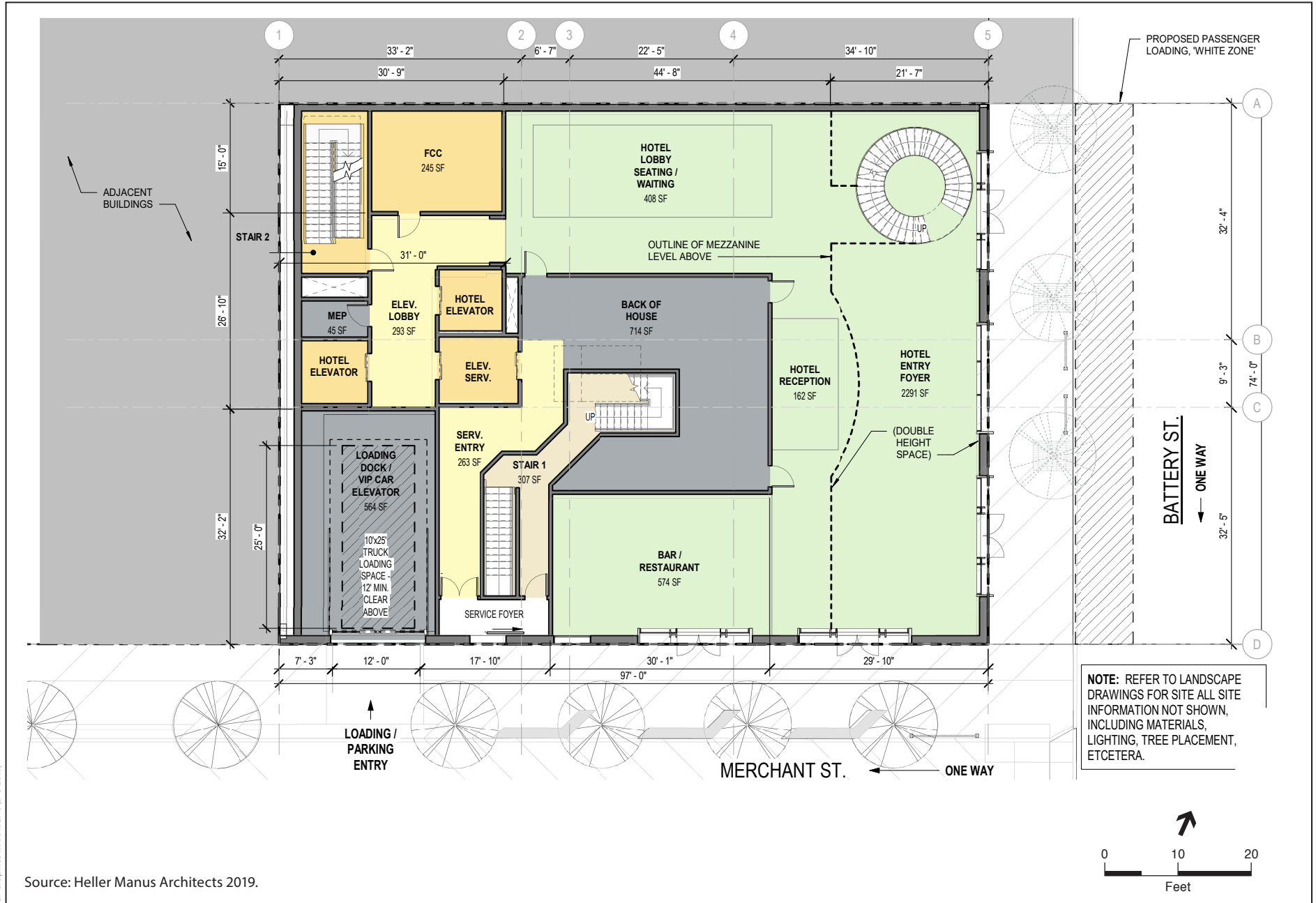
The ground floor would include the hotel lobby, a restaurant/bar, a loading dock/car elevator, and a fire command center (see **Figure 3**). Pedestrian access would be from Battery and Merchant streets. The mezzanine level would include a restaurant, a kitchen, and dining areas; the eastern portion of the mezzanine level would be open to the ground floor. For security, the building would include a camera system and valets for the entry.

The four basement levels would include one level for ancillary hotel uses, one level for mechanical uses, and two levels for loading or parking (see **Figures 4 through 7**). Basement Level 1 would include a conference center, gym, and spa areas for use by hotel guests. Basement Level 2 would include mechanical uses, such as electric generators, a fuel pump room, building storage, and maintenance areas as well as a room for bicycle parking, showers, and lockers. Basement Level 3 would be used for loading and accessed from the loading dock/car elevator at Merchant Street, discussed in more detail in the "Parking, Loading, and Bicycle Facilities" section, below. Basement Level 4, the parking level, would provide 22 valet parking spaces (in stackers), and two valet Americans with Disabilities Act– (ADA-) compliant accessible spaces, also accessed from the loading dock/car elevator at Merchant Street. The total depth of the basement would be approximately 50 feet.

Floors 2 through 17 of the building would contain 198 hotel rooms. Floors 2 through 8 would each contain 13 hotel rooms, Floors 9 through 14 would each contain 14 hotel rooms, Floor 15 would contain 11 hotel rooms, Floor 16 would contain eight hotel rooms, and Floor 17 would contain four hotel rooms (see **Figures 8 and 9**). The hotel rooms would vary in size from 300 square feet to 628 square feet, offering a mix of 157 regular rooms and 31 suites. Floor 18 would include a restaurant and bar. Floors 15 through 18 would each include a private terrace, facing either Battery Street or Washington Street or facing west toward Sansome Street.

The proposed structure would be approximately 200 feet in height to the roof, with a mechanical penthouse extending up to 20 feet above the roof height, for a total height of 220 feet (see **Figure 10**).

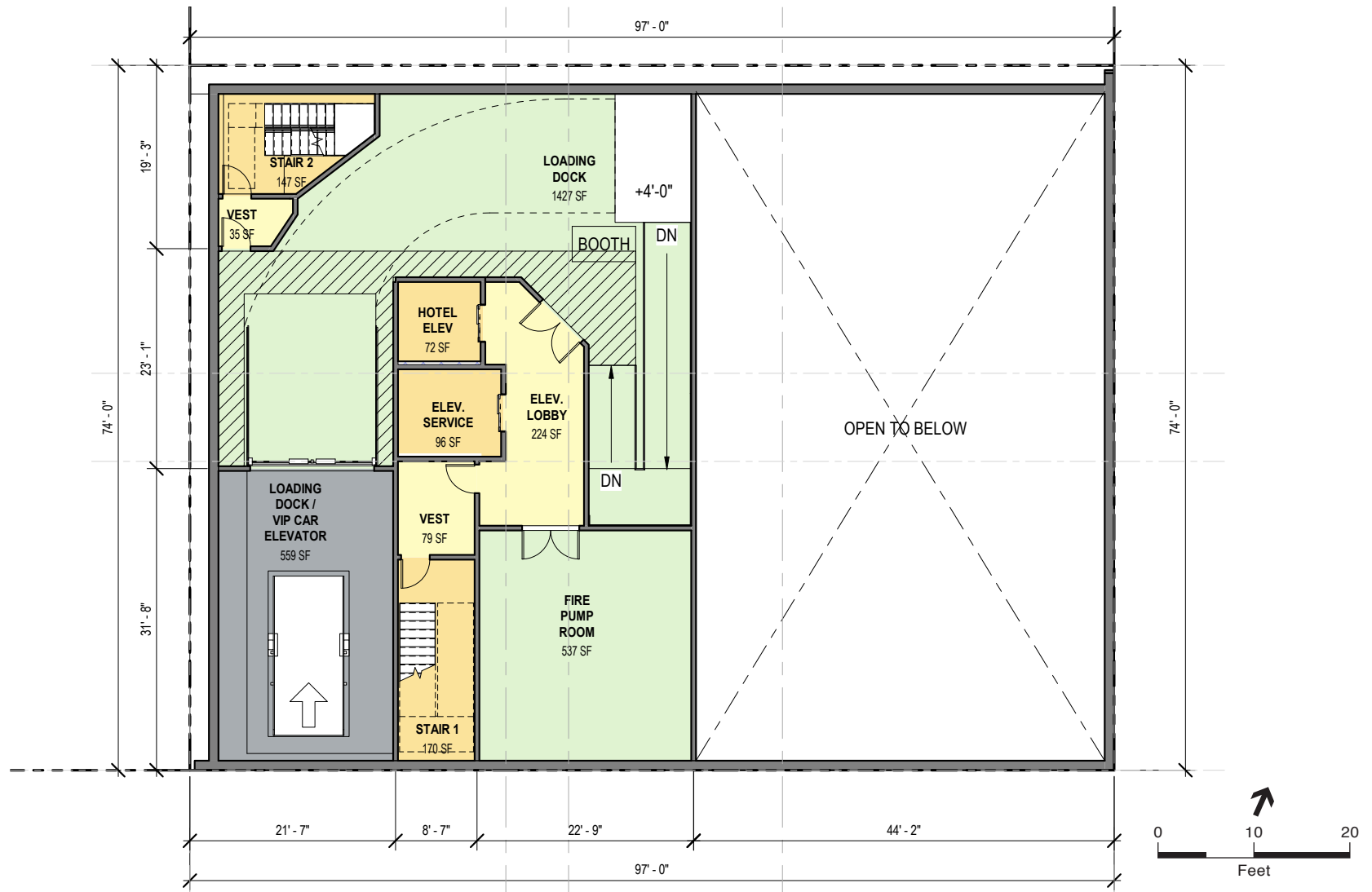
The building would be designed in a contemporary architectural style, employing glass and limestone as the primary building materials. For the primary façades on Merchant and Battery streets, the proposed design would feature large glass storefronts that would be articulated by a glass overhang. The existing brick façade would be retained for the ground floor and mezzanine, with a glass façade used for Floors 3 through 18.



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**Figure 3**  
**Proposed Ground Floor Plan**





Source: Heller Manus Architects 2019.

**Figure 5**  
**Proposed Basement Level 3 Plan**

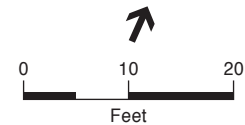


Source: Heller Manus Architects 2019.

**Figure 6**  
**Proposed Basement Level 2 Plan**

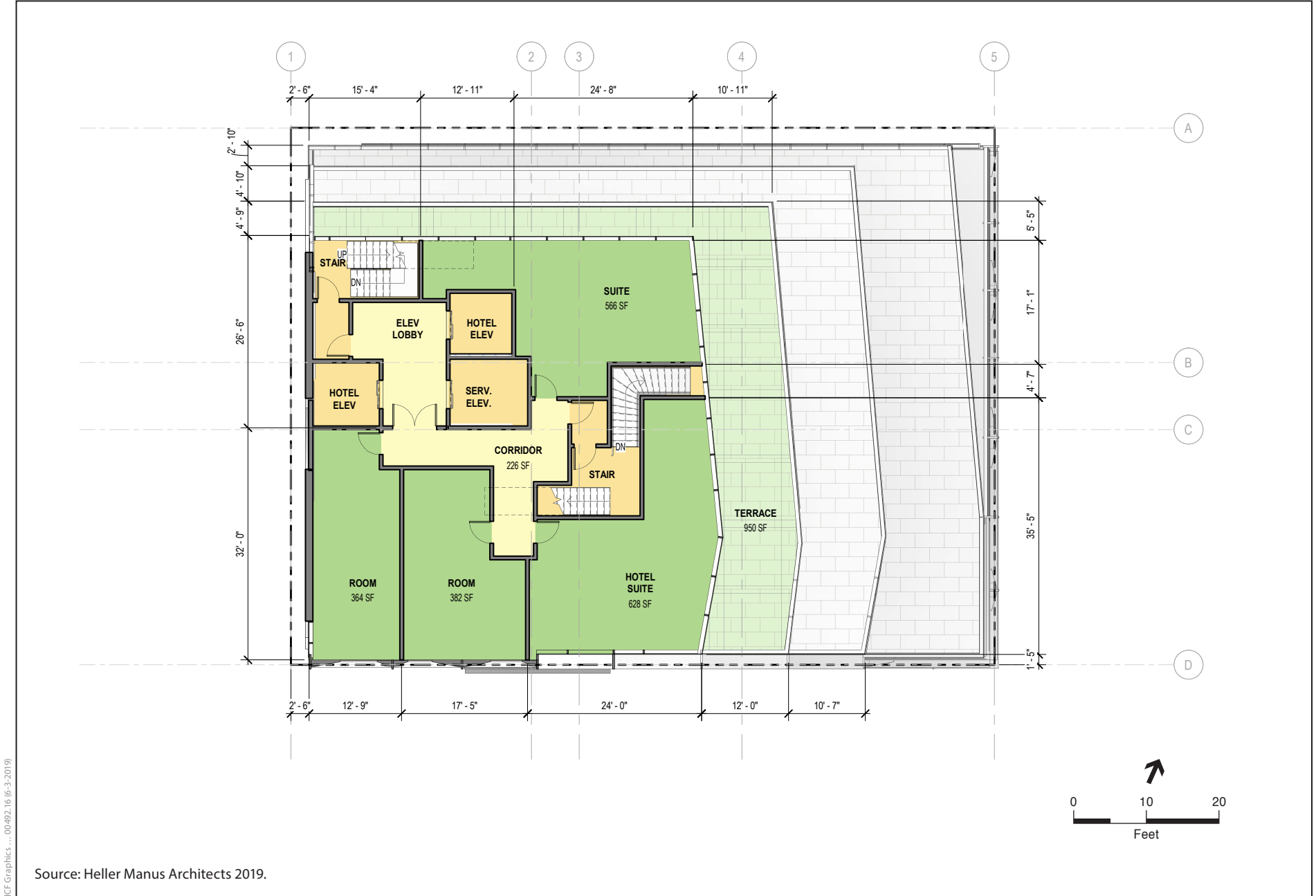






Source: Heller Manus Architects 2019.

**Figure 8**  
**Proposed Level 2 Hotel Plan**



**Figure 9**  
**Proposed Level 17 Hotel Plan**



The proposed project would comply with the City and County of San Francisco's (City's) Green Building Code and meet Leadership in Energy and Environmental Design Gold requirements. Conceptual renderings were prepared by the project architect to illustrate how the proposed project would appear from different vantage points (see **Figures 11** and **12**). The vantage point in **Figure 11** is from the southeast, across Battery Street, at the western edge of Maritime Plaza. The vantage point in **Figure 12**, is from the east, across Battery Street, also at the western edge of Maritime Plaza but from the height of the tower (approximately 150 feet).

**Open Space.** The proposed project would include approximately 2,720 square feet of POPOs along Merchant Street. Street furniture, such as tables and benches, would be placed along the Merchant Street sidewalk in front of the proposed building, along with stone paving and new street trees from Battery Street to Sansome Street. The proposed 2,720 square feet of privately owned public open space would exceed the planning code open space requirement for proposed hotel and restaurant uses (2,203 square feet). In addition, approximately 3,934 square feet of terrace space would be provided on floors 15 through 18 for hotel and restaurant guests.

**Parking, Loading, and Bicycle Facilities.** The existing building contains no off-street parking spaces. The proposed project would create one new curb cut and add an approximately 10-foot-wide garage door along Merchant Street for the loading dock/car elevator, which would provide access to the loading and parking levels. As shown in **Figure 4**, the proposed project would add 24 valet parking spaces in Basement Level 4; 22 of the spaces would be in stackers, and two would be individually accessible ADA-compliant spaces. Car-share parking spaces would not be provided. Vehicle parking spaces would be available to hotel guests and restaurant patrons. Access to the parking spaces would be from the loading dock/car elevator on Merchant Street. The loading dock/car elevator would be sized for both trucks and vehicles. A truck or service van would back up into the loading dock/car elevator and be transported down to Basement Level 3. Once in Basement Level 3, the truck or service van would back up to the loading dock. After unloading, the truck or service van would depart through the loading dock/car elevator and exit at Merchant Street. For vehicles, a valet driver would take the vehicle from patrons on Merchant Street, then enter the loading dock/car elevator and be transported down to Basement Level 4. The valet driver would put the vehicle in an open parking spot until the vehicle is needed again, at which point the valet would take the vehicle up the loading dock/car elevator and back to Merchant Street to deliver it to the driver.

Eight class 1 bicycle parking spaces would be provided on Basement Level 2 in code-complaint, lift-assisted double-deck bicycle racks, as shown in **Figure 6**. The bicycle racks would have a manually operated system that would stack the bicycles on two tiers, with lift-assist top trays that would slide down to within inches of the ground, requiring minimal lifting of the bicycle to the tray. As shown in **Figure 3**, access to the bicycle spaces would be from the ground-level foyer on Merchant Street, located between the stairs and the loading dock/car elevator, or from the hotel reception area on Merchant or Battery streets where patrons would take an elevator to Basement Level 2.

Nineteen class 2 bicycle parking spaces would be provided in bike racks. One bicycle rack would be on Battery Street, and one bicycle rack would be on Merchant Street, as shown in **Figure 3**. These bicycle parking spaces would be available to hotel guests, restaurant patrons, and building employees. Access to the bicycle spaces would be from the lobby entry on Merchant Street or Battery Street.



Source: Heller Manus Architects 2019.





Source: Heller Manus Architects 2019.

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**Figure 12**  
**Visual Simulation from East**

**Landscaping.** No trees would be removed as part of the proposed project because none currently exist at the project site. As part of the proposed project, three new street trees would be planted on Battery Street, and eight new street trees would be planted on Merchant Street, as shown in **Figure 3**. The proposed tree types are London plane for Battery Street and Fastigiata ginkgo for Merchant Street. The sidewalks adjacent to the proposed building along Merchant and Battery streets would be replaced with decorative paving and curbs.

**Foundation and Excavation.** The proposed project's deep foundation is anticipated to require the use of auger pressure-grouted displacement piles, drilled shafts, auger cast piles, fundex piles, or torque-down piles. The proposed project would include excavation to a maximum depth of approximately 55 feet to accommodate the four subterranean levels and the building's foundation; approximately 15,000 cubic yards of material would be excavated.

**Construction Schedule.** Demolition and construction are estimated to take approximately 28 months, with six overlapping phases, including demolition (1 month), site preparation (2 months), grading/excavation (6 months), building construction (16 months), paving (2 months), and architectural coating work (1 month). Construction is expected to commence in December 2020.

## REQUIRED APPROVALS

The proposed project would require approvals from several authorities, including those listed below.

### *Actions by the Planning Commission*

- Approval of conditional use authorization from the Planning Commission under Planning Code section 303 to permit hotel uses.
- Approval of Downtown Project Authorization from the Planning Commission, per Planning Code section 309 for projects within a C-3 zoning district greater than 50,000 square feet in area or 75 feet in height and for granting exceptions to the requirements of certain sections of the planning code.

### *Actions by Other City Departments*

- San Francisco Planning Department and Department of Building Inspection – Approval of the site permit.
- Department of Building Inspection – Approval of demolition, grading, and building permits for demolition of the existing building and construction of the new building and night noise permit for nighttime construction.
- Department of Public Health – Approval of compliance with Maher Ordinance.
- San Francisco Public Works – Approval of a street space permit from the Bureau of Street Use and Mapping if sidewalks are used for construction staging and pedestrian walkways are constructed in the curb lanes.

- San Francisco Public Works – Approval of construction within the public right-of-way (e.g., bulb-outs, sidewalk extensions) to ensure consistency with the Better Streets Plan.
- San Francisco Public Works – Approval of a permit to plant street trees adjacent to the project site.
- San Francisco Public Works – Approval of maintenance agreement for Merchant Street improvements, subject to major encroachment permit.
- San Francisco Municipal Transportation Agency – Approval of the placement of bicycle racks on the sidewalk, and other sidewalk improvements, by the Sustainable Streets Division.
- San Francisco Municipal Transportation Agency – Approval of a special traffic permit from the Sustainable Streets Division if sidewalks are used for construction staging and pedestrian walkways are constructed in the curb lanes.
- San Francisco Municipal Transportation Agency – Approval of construction within the public right-of-way (e.g., bulb-outs, sidewalk extensions) to ensure consistency with the Better Streets Plan.
- San Francisco Public Utilities Commission – Approval of any changes to sewer laterals (connections to the City sewer).
- San Francisco Public Utilities Commission – Approval of an erosion and sediment control plan, in accordance with article 4.1 of the San Francisco Public Works Code.
- San Francisco Public Utilities Commission – Approval of post-construction stormwater design guidelines, including a stormwater control plan that complies with the City’s 2016 Stormwater Management Requirements and Design Guidelines.
- San Francisco Board of Supervisors – Approval of major encroachment permit by board resolution for Merchant Street improvements.
- San Francisco Recreation and Parks – Approval of a joint resolution by the Planning Commission and San Francisco Recreation and Parks to raise the absolute cumulative shadow limit on Maritime Plaza.
- San Francisco Entertainment Commission – Determine if a hearing is required and possible noise attenuation conditions.

## SUMMARY OF POTENTIAL ENVIRONMENTAL ISSUES

The proposed project could result in potentially significant environmental impacts. This section describes how the San Francisco Planning Department (department) will prepare an initial study and environmental impact report (EIR) to evaluate the potential physical environmental impacts of the proposed project. An initial study will assess both project-specific and cumulative impacts for all topics required under the California Environmental Quality Act (CEQA). As required by CEQA, an EIR will further examine those issues identified in the initial study to have potentially significant impact, identify mitigation measures, and analyze whether the proposed mitigation measures would reduce potentially significant



environmental impacts to a less-than-significant level. The initial study will be published as an appendix to the EIR.

It is anticipated that the EIR will address cultural resources, specifically historic resources. Environmental impacts related to land use and land use planning, population and housing, cultural resources (specifically archaeological resources and human remains), tribal cultural resources, transportation and circulation, noise, air quality, greenhouse gas emissions, wind, shadow, utilities and service systems, recreation, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral resources, energy, agriculture and forest resources, and wildfire are anticipated to be analyzed in the initial study, unless significant impacts are identified that cannot be mitigated to a less-than-significant level, in which case, analysis of any such impacts will be included in the EIR. The environmental issues to be addressed in the initial study or EIR are described briefly below. For all topics, the analysis will consider the impacts of the proposed project individually as well as cumulative impacts resulting from other reasonably foreseeable projects.

Since the proposed project meets the requirements of a transit-oriented infill development project under Senate Bill 743, aesthetics and parking will not be considered in determining if the proposed project has the potential to result in potentially significant environmental impacts. Visual renderings may be included within the initial study and EIR project descriptions.

### ***Land Use and Land Use Planning***

The land use and land use planning initial study section will describe existing land uses on the project site and in the project vicinity and analyze whether the proposed project would physically divide an established community or result in a significant physical environmental impact due to a conflict with land use plans adopted for the purpose of avoiding or mitigating an environmental effect.

### ***Population and Housing***

The population and housing initial study analysis will analyze the potential for the proposed project to result in impacts related to direct or indirect population growth, employment and housing provision and balance, and residential displacement.

### ***Cultural Resources***

The cultural resources initial study analysis will address archeological resources and human remains. The building on the project site is considered a historic resource for the purpose of CEQA review. The proposed project would include demolition of the existing building with retention of portions of the façade. The EIR will describe the historic resources on the project site, summarize applicable portions of the Historic Resource Evaluation (HRE) report<sup>4</sup> and Historic Resource Evaluation Response (HRER),<sup>5</sup> and identify the potential impacts on historic resources.

### ***Tribal Cultural Resources***

The tribal cultural resources initial study analysis will address the potential for the proposed project to affect tribal cultural resources.

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<sup>4</sup> Page & Turnbull, 447 Battery Street, San Francisco Historic Resource Evaluation, Part I, August 19, 2016.

<sup>5</sup> San Francisco Planning Department, 447 Battery Street Historic Resource Evaluation Response, December 17, 2017.

### ***Transportation and Circulation***

The proposed project would generate new vehicle trips, generating additional vehicle miles traveled (VMT) to and from the project site. The proposed project would also generate new transit, pedestrian, and bicycle trips, and loading demand. A transportation impact study will be prepared in support of the transportation and circulation initial study analysis which will discuss trip generation, freight and passenger loading operations, site circulation, VMT impacts, transit service and capacity, code compliance, loading, hazards due to a project design feature, including to pedestrians and bicyclists, construction impacts, and emergency access.

### ***Noise***

The noise initial study analysis will evaluate noise impacts related to construction and operation of the proposed project, including the effect of construction noise on adjacent sensitive noise receptors.

### ***Air Quality***

The air quality initial study analysis will discuss construction and operational emissions of criteria pollutants and toxic air contaminants, as appropriate, as well as compliance with the City's Construction Dust Control Ordinance.

### ***Greenhouse Gas Emissions***

The greenhouse gas emissions initial study analysis will refer to the Greenhouse Gas (GHG) checklist and disclose the anticipated consistency finding with the City's GHG Reduction Strategy.

### ***Wind***

At 200 feet in height, the proposed project could change wind conditions near the project site in a way that could affect public areas. A wind study will be prepared for the proposed project to evaluate the existing wind conditions near the project site and the extent to which the proposed project would affect ground-level wind. The initial study will summarize the results of the wind analysis, including a summary of ground-level wind impacts, and determine if mitigation measures for wind impacts are required.

### ***Shadow***

The preliminary shadow fan prepared by the department indicates that the proposed project could cast new shadows on properties under the jurisdiction of the Recreation and Park Commission, including Maritime Plaza. The initial study section will summarize the results of a shadow analysis, and will evaluate the extent to which shadows cast by the proposed project could adversely affect the use and enjoyment of publicly-accessible open spaces.

### ***Recreation***

The recreation section of the initial study will analyze whether the proposed project would physically degrade existing parks and recreational facilities or require the construction or expansion of parks and recreational facilities that could have a physical effect on the environment.

### ***Utilities and Service Systems***

This initial study analysis of utilities and service systems will examine the proposed project's effect on water supply, wastewater treatment, solid waste disposal, and energy generation and transmission. It will describe existing utility providers, system capacity, and improvement plans; evaluate the net change in the

demand for water, wastewater, solid waste, and energy, relative to existing and planned capacity for the utilities; consider stormwater generation associated with the proposed project and how the City's Stormwater Management Ordinance will apply; and discuss whether implications of the proposed project trigger the expansion or construction of new infrastructure or facilities. In addition, the analysis will evaluate the proposed project's consistency with the Recycled (or Reclaimed) Water Use Ordinance.

### ***Public Services***

The public services initial study analysis will analyze whether existing public service providers (e.g. police and fire protections, schools, etc.) would be adversely affected by the proposed project so as to require new or physically altered public facilities, the construction of which could result in physical environmental effects.

### ***Biological Resources***

The biological resources initial study analysis will discuss the existing biological resources or habitats that could be effected by the proposed project, such as trees or the movement of any native resident or migratory bird species, and the potential for the proposed project to result in a substantial adverse effect on these biological resources or habitats.

### ***Geology and Soils***

The geology and soils initial study section will summarize the findings of the geotechnical investigation and will evaluate the susceptibility of the project site to seismic activity, liquefaction, landslides, erosion, soil stability, and risks to life or property. The analysis will also include whether or not the proposed project would substantially change the topography or any unique geologic or physical features of the site, or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

### ***Hydrology and Water Quality***

The hydrology and water quality initial study analysis will evaluate the proposed project's potential to violate water quality standards or waste discharge requirements or result in adverse effects to groundwater supplies. The analysis will also consider any effects to drainage patterns resulting from the proposed project and evaluation the potential to result in runoff that could affect stormwater drainage systems.

### ***Hazards and Hazardous Materials***

The hazards and hazardous materials initial study analysis will evaluate the potential for the proposed project to create a significant hazard to the public or the environment related to hazards and hazardous materials through location on a hazardous materials site, the routine transport, use, or disposal of hazardous materials, the emission or release of hazardous soils or groundwater, or interference with an emergency response plan.

### ***Mineral Resources***

The mineral resources initial study analysis will analyze potential impacts of the proposed project related to existing mineral resources.

### *Energy Resources*

The energy resources initial study analysis will analyze potential impacts of the proposed project related to existing energy resources.

### *Agricultural/Forest Resources*

The agriculture and forest resources initial study analysis will analyze potential impacts of the proposed project related to existing agricultural and forest resources.

### *Wildfire*

The wildfire initial study analysis will analyze potential impacts of the proposed project related to potential impacts from wildfires.

## **FINDING**

**This project may have a significant effect on the environment and an EIR is required.** This determination is based upon the criteria of the State CEQA Guidelines, Sections 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance). The purpose of the EIR is to provide information about potential physical environmental impacts of the proposed project, to identify possible ways to minimize the potentially significant impacts, and to describe and analyze possible alternatives to the proposed project. Preparation of an EIR notice of preparation, initial study, or EIR does not indicate a decision by the City to approve or disapprove a proposed project. However, prior to making any such decision, the decision makers must review and consider the information contained in the EIR.

## **ALTERNATIVES**

Alternatives to be evaluated in the EIR for the proposed project will include, but not be limited to, a No Project Alternative, which will assume no change to the existing conditions on the project site, one or more alternatives that preserve all or most of the historic resources on the project site, and additional alternatives to address other significant effects of the proposed project that are identified in the EIR. The alternatives considered and the analysis thereof is based upon the criteria of the State CEQA Guidelines, Section 15126.6 (Consideration and Discussion of Alternatives to the Proposed Project).

## **PUBLIC SCOPING PROCESS**

Written comments will be accepted until 5:00 p.m. on **Friday, September 6<sup>th</sup>, 2019**. Written comments should be sent to **Rachel Schuett**, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, [rachel.schuett@sfgov.org](mailto:rachel.schuett@sfgov.org).

If you work for a responsible State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

Members of the public are not required to provide personal identifying information when they communicate with the commission or the department. All written or oral communications, including

Notice of Preparation of an EIR  
August 7, 2019

Case No. 2014.1036E  
447 Battery Street

submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the department's website or in other public documents.

August 7, 2019

Date



for

Lisa Gibson  
Environmental Review Officer

Name	Organization/Affiliation	Date	Topic	Comment
Neighborhood Groups				
Cynthia Gómez	Unite Here, Local 2	9/5/2019	Public Service (Fire)	Request to analyze the impacts on Sansome Street Fire station.
			Public Service/Loading/Traffic	Concern that Merchant Street as a one-way and only two-lane street would be used for loading, and would likely lead to illegal stopping and parking. Loading will lead to traffic backups. Public services analysis should analyze possible impacts of blocked Merchant Street due to loading
			Public Service/Cumulative	Consider the two proposed projects: reconstruction of Fire Station 13 to a four-story 22,000 sf building at Washington Street and construction of a mixed-use high-rise building at the southeast corner of Sansome and Washington that would contain a health club, hotel, and condos. Consider cumulative impact on fire service during these constructions
			Ingress/Egress	Current ingress/egress plans reflects current location of the Sansome Street fire station only and not the future proposed station
			Shadow	Consider the social and public health impact of shadow cast on Maritime Plaza
			Project Description	Consider worker safety in design of the project. Floor-to-ceiling glass leads to housekeeper injuries.
			Transportation	Plan to analyze impacts of the Project on public transit? Study TNCs impact on public transit.
			Project Description	Analysis on hotels should always assume maximum number of rooms physically possible at the site location.
			Public/Individual Comments	
Deborah Morris	Neighborhood Resident	8/9/2019	AQ	Concerned about months of pollution from construction
			Hazards	Concerned about unearthing of rats during construction
			Noise	Concerned about months of noise from construction and construction hour schedule.
			General	Expressed sadness regarding how SF has changed to foster the "wealthy" and "large corporations"
Jonathan Franke	Neighborhood Resident	8/10/2019	Noise	Concerned about noise from construction
			Project Description	Unclear as to why the project is necessary

447 Battery Street Project  
Written Comments

Name	Organization/Affiliation	Date	Topic	Comment
			Transportation	Impact of increased local traffic to Battery street which is already clogged
			Project Description	Would prefer housing project with affordable housing in project's place
Mary Rakow	Neighborhood Resident	8/9/2019	Parking	Where will users of the Project park, how many parking units will be included? Battery Street is a parking lot after 2 PM.
			Transportation	Dislikes increased idling cars, angry drivers, street noise, increased TNCs and pollution.
			Parking	How many car spots for employees, hotel guests, and retail shoppers?
			Loading	TNC pick up/drop-off
			Project Description	Innovative design of how to avoid traffic, parking, and loading problems and privileges bike/ped/shared transportation
			Parking	Lack of parking in design when on a busy traffic corridor





## **APPENDIX B: INITIAL STUDY**

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# INITIAL STUDY

(2014.1036E: 447 Battery Street Project)

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## **A. PROJECT DESCRIPTION**

The project description for the 447 Battery Street Project (proposed project) is included as Chapter 2, Project Description, in the draft environmental impact report (EIR) to which this initial study is appended.

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## B. PROJECT SETTING

The approximately 7,178-square-foot (0.16-acre) project site (Assessor's Block 0206, Lot 002) is at the northwest corner of Battery and Merchant streets, on a block bounded by Washington Street to the north, Battery Street to the east, Clay Street to the south, and Sansome Street to the west (see **Figure 2-1**, p. 2-3, in Chapter 2, Project Description). Merchant Street, an east–west street that divides the block in two, forms the southern boundary of the project site.

Two buildings adjoin the project site, a seven-story office building to the north with ground-floor retail space (401–423 Washington Street) and a three-story building to the west with a ground-floor restaurant (424 Merchant Street). Adjacent to the project site, across Merchant Street, is an 11-story hotel with ground-floor commercial uses (424 Clay Street and 425 Battery Street). To the east, across Battery Street, is a two-story parking garage and Maritime Plaza. West of the project site, at Sansome and Merchant streets, is San Francisco Fire Department Station 13.

The area surrounding the project site is a densely built area, with land uses consisting primarily of neighborhood-serving retail on the ground level and commercial uses above. Parking facilities, residences, hotels, offices, and institutional uses are also present in the area. The nearest residential buildings are a 21-story, mixed-use building at 550 Battery Street (the Gateway apartments and townhomes) and a 23-story, mixed-use residential building northeast of the project site. The nearest hotels are the Club Quarters at 424 Clay Street and Le Méridien at 333 Battery Street, immediately south of the project site; the Hilton, at 750 Kearny Street, is two blocks west of the project site. Although the project site is adjacent to three- and seven-story buildings, the area includes high-rise buildings as well, such as the Transamerica Pyramid, the second-tallest building in San Francisco, and the 21-story, mixed-use building at 550 Battery Street.

Vegetation in the immediate vicinity of the project site is generally limited to street trees. Nearby public parks and open spaces include Maritime Plaza, Transamerica Redwood Park, Sydney G. Walton Square, Sue Bierman Park, Empire Park, Portsmouth Square Plaza, St. Mary's Square, Market/Battery Plaza, and One Bush Plaza.

The project site is within San Francisco's Financial District neighborhood and the Downtown Area Plan area, as identified in the San Francisco General Plan. The project site is also within a C-3-O (Downtown Office) zoning district and a 200-S height and bulk district. This height district allows for a building height of 200 feet. Regarding this bulk district, the bulk controls for the lower tower are a maximum length of 160 feet, a maximum floor size of 20,000 square feet, and a maximum diagonal dimension of 190 feet. The bulk controls for the upper tower are a maximum length of 130 feet, a maximum average floor size of 12,000 square feet, a maximum floor size for any floor of 17,000 square feet, and a maximum average diagonal dimension of 160 feet.

The project site is not within a historic district. The Washington-Broadway Special Use District and the Jackson Square Special Use District are directly north of the project site. Waterfront Special Use

District 3 is three blocks north of the project site. In addition, the project site is one block southeast of the Jackson Square Historic District, two blocks northeast of the Commercial-Leidesdorff Conservation District, and two blocks north of the Front-California Conservation District.

## 1. CUMULATIVE SETTING

Cumulative analysis under the California Environmental Quality Act (CEQA) may use a list-based or projections-based approach, depending on the environmental topic and resources addressed. Past, present, and reasonably foreseeable cumulative development projects within the vicinity of the project site are listed below in **Table B-1** and mapped in **Figure B-1**, p.B-4. These cumulative projects are either under construction or the subject of an environmental evaluation application that is on file with the San Francisco Planning Department (department). As shown in **Table B-1**, up to 283 dwelling units, 200 hotel rooms, 64,611 square feet of retail space, and 74,697 square feet of office space may be developed in the vicinity of the project site.

**Table B-1. Cumulative Development Projects**

Address	Case File No.	Dwelling Units	Hotel Rooms	Uses (gross square feet)		Other/Notes
				Retail	Office	
3 Stark Street	2018-012758E					Change of use from office to preschool.
1020–1028 Kearny Street	2017-000282E	24				Change of use from office to group housing.
425 Broadway	2017-015678E	48		4,529	26,840	Six-story, 64-foot-tall mixed-use building
17 Osgood Place	2017-001423E					Renovation of and addition to existing building to convert ground-floor commercial space to one-bedroom residential unit and merge two existing residential units into a single two-bedroom residential unit. No change to unit count or height of the building.
875 Sansome Street	2017-003622E	9		3,110	5,700	Six-story, 65-foot-tall mixed-use building.
88 Broadway	2016-007850E	178		10,572	1,562	Two six-story buildings containing affordable family and senior housing.



Address	Case File No.	Dwelling Units	Hotel Rooms	Uses (gross square feet)		Other/Notes
				Retail	Office	
838 Grant Avenue	2016-015777E					Interior tenant improvements, such as remodeling front façade, enlarging the commercial space, and converting basement from retail to restaurant use.
733 Kearny Street (Portsmouth Square)	2018-013597E					Improvement of almost all existing park features, including plazas, children's play areas, clubhouse, and landscaping as well as associated waterproofing, structural upgrades, and site work.
700 Montgomery Street (Academy of Art University)	2008.0586 E					Change of use from office and retail to office and post-secondary educational institution and retail.
530 Sansome Street	2019-017481		200	46,400	39,800	A 200-room visitor-serving hotel, plus office, gym, and restaurant uses, and a new fire station.
809 Sacramento Street	2016-010671E	1			795	Vertical addition of two stories; addition of office use on the first floor.
650 Sacramento Street	2017-009472E	19				Adaptive re-use/conversion of three-story building to four-story group housing facility.
220 Battery Street	2015-009783E	4				Vertical addition of two stories on top of a two-story building.
<b>TOTAL</b>		<b>283</b>	<b>200</b>	<b>64,611</b>	<b>74,697</b>	

Sources: San Francisco Planning Department, *San Francisco Property Information Map*, 2019, <http://sfplanninggis.org/pim/>, accessed June 7, 2019.



447 Battery Street Project  
Case No: 2014.1036E

**Figure B-1**  
**Cumulative Development Projects**

In addition to these cumulative development projects, several transportation network changes would occur in the project vicinity. The Transit Effectiveness Project was designed to implement systemwide changes to San Francisco Municipal Railway (Muni) service and streamline operations, adapt to changes in travel patterns, and improve reliability and passenger experience. Specific changes to the Muni routes in the vicinity of the proposed project include changes to the 1, 10, 12, 30X, and 41 Muni routes. The San Francisco Bicycle Plan designates existing bikeways along the Battery Street/Sansome Street and Washington Street/Clay Street couplets for “minor improvements” and the segment of Battery Street between The Embarcadero and Clay Street for “long-term improvements.”<sup>1</sup> The first phase of the Clay Street Red Transit-Only Lanes Project, completed in 2015, involved the installation of “red carpet” paint treatments for the existing transit-only lane on Clay Street from Sansome Street to Front Street. The second phase of the project—extending the paint treatments to the segment of the existing transit-only lane upstream (west) of Sansome Street to Montgomery Street and enacting legislative changes to convert the segment to a 24-hour transit-only lane—was originally scheduled for public hearings, approval, and construction in 2015 but has yet to be completed.

The Columbus Avenue Safety Project would implement pedestrian safety improvements along Columbus Avenue, including permanent corner bulb-outs and new continental crosswalk striping at multiple intersections along Columbus Avenue (at Grant Avenue, Stockton Street/Green Street, Vallejo Street, and Pacific Avenue/Kearny Street) as well as a road diet between Broadway and Washington Street. As part of the Kearny Corridor Multimodal Improvement Project, the San Francisco Municipal Transportation Agency (SFMTA) is studying potential multimodal improvements for Kearny Street and Montgomery Street between Broadway and Market Street and for Washington Street and Clay Street between Montgomery Street and Stockton Street to improve pedestrian safety, traffic conditions, and transit reliability and to implement new bikeways. Finally, many major citywide projects are also ongoing, including the Central Subway, Van Ness Avenue Bus Rapid Transit, Geary Corridor Bus Rapid Transit, the Caltrain Modernization Program, expanded ferry service from the Water Emergency Transportation Authority, and various capacity upgrades to Bay Area Rapid Transit.

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<sup>1</sup> “Minor improvements” are changes to pavement markings and signage, parking configurations, and intersection traffic signal timing plans, while “long-term improvements” involve either major improvements to existing bikeways or potential future additions of streets or pathways to the bikeway network.

## 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City and County of San Francisco (City) or region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from city departments, other than the department or the Department of Building Inspection, or regional, state, or federal agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section discusses applicable (1) variances, special authorizations, and proposed changes to the planning code or zoning map; (2) conflicts with adopted plans and goals of the City and County of San Francisco (City) or region; and (3) approvals or permits required from various federal, state, and local agencies necessary for construction and operation of the 447 Battery Street Project.

Conflicts with adopted plans, policies, or regulations do not, in and of themselves, indicate a significant environmental effect within the meaning of CEQA. To the extent that physical environmental impacts may result from such conflicts, these impacts are analyzed under the relevant environmental topics in the initial study (Section E, Evaluation of Environmental Effects) or in the project EIR. The consistency of the proposed project with plans, policies, and regulations that do not relate to physical environmental issues will be considered by City decision makers when they determine whether to approve, modify, or disapprove the proposed project.

### 1. SAN FRANCISCO PLANS AND POLICIES

#### *San Francisco General Plan*

The San Francisco General Plan provides the City's vision for the future of San Francisco. The general plan is divided into 10 elements that apply citywide: Air Quality, Arts, Commerce and Industry, Community Facilities, Community Safety, Environmental Protection, Housing, Recreation and Open Space, Transportation, and Urban Design. The general plan also includes area plans that identify objectives for specific geographic planning areas, such as the Downtown Area Plan, which includes the project site. The Downtown Area Plan establishes objectives and policies that guide development in the Financial District's neighborhoods. The general plan also includes a land use index, which consolidates the different land use policies contained in all the different elements of the general plan, including area plans.

Centered on Market and Mission streets, the Downtown Area Plan covers an area roughly bounded by Van Ness Avenue to the west, Washington Street to the north, The Embarcadero to the east, and Folsom Street to the south. The Downtown Area Plan contains objectives and policies that address housing, urban form, safety and livability, streetscape, preservation, and transportation issues. The aim of the Downtown Area Plan is to encourage prime downtown office activity to grow, increase employment, retain a diverse base of support commercial activity in and near downtown, expand

the supply of housing in and adjacent to downtown, create and maintain a comfortable pedestrian environment, create building forms that are visually interesting and harmonious with surrounding buildings, and create attractive urban streetscapes.

The proposed project would not obviously or substantially conflict with any goals, policies, or objectives of the general plan, including those of the Downtown Area Plan. The compatibility of the proposed project with general plan goals, policies, and objectives that do not relate to physical environmental issues will be considered by decision makers as part of their decision to approve or disapprove the proposed project. Any potential conflicts identified as part of the process would not alter the physical environmental effects of the proposed project.

### ***San Francisco Planning Code***

The San Francisco Planning Code, which incorporates by reference the City's zoning maps, governs permitted land uses, densities, and building configurations in the city. Permits to construct new buildings (or alter or demolish existing ones) may not be issued unless (1) the proposed project complies with the planning code, (2) allowable exceptions are granted pursuant to provisions of the planning code, or (3) amendments to the planning code are incorporated into the proposed project.

The project site is in the C-3-O (Downtown Office) zoning district, which covers the eastern portions of downtown north of Market Street.

Within the C-3-O zoning district, nonresidential uses, including retail sales and services, are permitted, except for drive-up facilities and waterborne commercial uses. Hotel uses are conditional; therefore, conditional use authorization under Planning Code section 303 would be required to permit a hotel. In addition, approval of a Downtown Project Authorization, per Planning Code section 309 for projects within a C-3-O zoning district with an area of more than 50,000 square feet or height of more than 75 feet, would be required; the proposed project would have an area of 143,449 square feet and a height of 200 feet.

### ***The Accountable Planning Initiative (Proposition M)***

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added section 101.1 to the planning code to establish eight priority policies. These policies, and the corresponding sections of the initial study or EIR that address the environmental issues associated with the policies, are:

1. Preservation and enhancement of neighborhood-serving retail uses (E.1, Land Use and Land Use Planning);
2. Protection of neighborhood character (E.1, Land Use and Land Use Planning);
3. Preservation and enhancement of affordable housing (E.2, Population and Housing);
4. Discouragement of commuter automobiles (E.5, Transportation and Circulation);

5. Protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (E.1, Land Use and Land Use Planning);
6. Maximization of earthquake preparedness (E.15, Geology and Soils);
7. Landmark and historic building preservation (EIR Section 3.A, Historic Architectural Resources); and
8. Protection of open space (E.9, Wind; E.10 Shadow; and E.11, Recreation).

Demolition and partial retention of the building at 447 Battery Street could conflict with Priority Policy No. 7, which calls for the preservation of historic buildings. The physical environmental impacts that could result from these potential conflicts will be discussed in the EIR.

Prior to issuing a permit for any project that requires an initial study under CEQA; prior to issuing a permit for any demolition, conversion, or change in use; and prior to taking any action that requires a finding of consistency with the general plan, the City is required to find that the proposed project or legislation is consistent with the priority policies. The case report and approval motions for the proposed project will contain the department's comprehensive project analysis and findings regarding the consistency of the proposed project with the priority policies.

## **2. OTHER LOCAL PLANS AND POLICIES**

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

- The San Francisco Sustainability Plan is a blueprint for achieving long-term environmental sustainability by addressing specific environmental issues, including, but not limited to, air quality, climate change, energy, ozone depletion, and transportation. The goal of the San Francisco Sustainability Plan is to enable the people of San Francisco to meet their present needs without sacrificing the ability of future generations to meet their own needs. The San Francisco Building Code was amended in 2008 to add chapter 13C, Green Building Requirements, which partially implements the energy provisions of the San Francisco Sustainability Plan.
- The San Francisco Climate Action Strategy is a local action plan that examines the causes of global climate change and the human activities that contribute to global warming. It provides projections regarding climate change impacts on California and San Francisco, based on recent scientific reports; presents estimates of San Francisco's baseline greenhouse gas emissions inventory and reduction targets; and describes recommended actions for reducing the city's greenhouse gas emissions.

- The San Francisco Transit First Policy is a set of principles that emphasize the City's commitment to give priority to pedestrians, bicyclists, and public transit over the private automobile for use of public rights-of-way. These principles are embodied in the policies and objectives of the transportation element of the San Francisco General Plan. All City boards, commissions, and departments are required by law to implement the principles of the San Francisco Transit First Policy in conducting the City's affairs.
- The San Francisco Bicycle Plan is designed to provide the safe and attractive environment needed to promote bicycling as a transportation mode. In addition to identifying the existing bicycle route network and proposing short-term and long-term improvements to this network, the plan identifies goals, objectives, and policies to support the proposed improvements.
- The San Francisco Better Streets Plan consists of illustrative typologies, standards, and guidelines for the design of San Francisco's pedestrian environment, with the central focus on enhancing the livability of the city's streets. The requirements of the San Francisco Better Streets Plan were incorporated into the San Francisco Planning Code as section 138.1.
- The Transportation Sustainability Fee Ordinance requires development projects that filed environmental review applications prior to July 21, 2015, but have not yet received approval to pay 50 percent of the applicable transportation sustainability fee, which may be used to improve transit services and improve pedestrian and bicycle facilities.

The proposed project has been reviewed against these local plans and policies and would not obviously or substantially conflict with any of them.

### **3. REGIONAL PLANS AND POLICIES**

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

- The Plan Bay Area and Regional Housing Needs Plan, prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC), is a long-range land use and transportation plan for the nine-county Bay Area that covers the period from 2010 to 2040. Plan Bay Area calls for concentrating housing and job growth around transit corridors, particularly in areas identified by local jurisdictions as priority development areas. In addition, Plan Bay Area specifies strategies and investments for

maintaining, managing, and improving the region’s multimodal transportation network and proposes transportation projects and programs to be implemented from reasonably anticipated revenue. Plan Bay Area was adopted in July 2017.<sup>2</sup>

- The Bay Area Air Quality Management District’s (air district’s) Bay Area 2017 Clean Air Plan requires implementation of “all feasible measures” to reduce ozone and provide a control strategy for reducing ozone, particulate matter, toxic air contaminants, and greenhouse gases. The 2017 Clean Air Plan describes the status of local air quality and identifies the emission control measures that are to be implemented.<sup>3</sup>
- The Regional Water Quality Control Board’s Water Quality Control Plan for the San Francisco Bay Basin is a master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the state, including surface waters and groundwater, and includes implementation programs to achieve water quality objectives.<sup>4</sup>
- The San Francisco Bay Plan, adopted by the San Francisco Bay Conservation and Development Commission, presents policies to guide future uses of San Francisco Bay (Bay) and the shoreline as well as the maps needed to apply the policies to the present Bay and shoreline.<sup>5</sup>

The proposed project has been reviewed against these regional plans and policies. It would not obviously or substantially conflict with the plans or policies.

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<sup>2</sup> 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 August 21, 2018.

<sup>3</sup> 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](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 August 21, 2018.

<sup>4</sup> San Francisco Regional Water Quality Control Board, *Water Quality Control Plan (Basin 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](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch1-7_print.html), accessed August 21, 2018.

<sup>5</sup> Bay Conservation and Development Commission, *San Francisco Bay Plan*, 1969, [http://www.bcdc.ca.gov/plans/sfbay\\_plan#2](http://www.bcdc.ca.gov/plans/sfbay_plan#2), accessed August 21, 2018.



## D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could affect the environmental factor(s) checked below. The pages that follow present a more detailed checklist and discussion of each environmental factor.

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

### 1. APPROACH TO ENVIRONMENTAL REVIEW

This initial study examines the proposed project to identify potential effects on the environment. For each checklist item, the evaluation considered the impacts of the proposed project both individually and cumulatively, with the exception of greenhouse gas emissions, which are evaluated only in the cumulative context. All items on the initial study checklist that have been checked “less than significant with mitigation incorporated,” “less-than-significant impact,” “no impact,” or “not applicable” indicate that, upon evaluation, the staff has determined that the proposed project could not have a significant adverse environmental effect related to that topic. A discussion is included for those issues checked “less than significant with mitigation incorporated” and “less-than-significant impact” as well as most items checked “no impact” or “not applicable.” For all of the items checked “no impact” or “not applicable” without discussion, the conclusions regarding potential significant adverse environmental effects are based on field observations, staff experience, expertise from similar projects, and the standard reference materials available within the department, such as the City’s Transportation Impact Analysis Guidelines for Environmental Review, the California Natural Diversity Database, or maps published by the California Department of Fish and Wildlife.

For the analysis of potential cumulative effects, each environmental topic herein briefly identifies the cumulative context relevant to that topic. For example, for shadow impacts, the cumulative context would be nearby projects that could contribute to cumulative shadow effects on the same

open space affected by the project. In other cases, such as air quality, the context would be the San Francisco Bay Basin.

## 2. AESTHETICS AND PARKING ANALYSIS

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, effective January 1, 2014. Among other provisions, SB 743 amends CEQA by adding Public Resources Code section 21099, which states that “aesthetics and parking impacts from residential, mixed-use residential, or employment-center infill projects in transit priority areas shall not be considered significant impacts on the environment” under CEQA.<sup>6</sup> Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects if the project meets all of the following criteria:

- The project is on an infill site,<sup>7</sup>
- The project is in a transit priority area,<sup>8</sup> and
- The project is a residential, mixed-use residential, or an employment-center use.<sup>9</sup>

The proposed project meets each of the three criteria above because it 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) an employment-center use.<sup>10</sup> Therefore, this initial study does not consider aesthetics or the adequacy of parking in determining the significance of project impacts under CEQA. However, the department recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and desire that such information be provided as part of the environmental review process. In addition, Public Resources Code section 21099(e) states that a lead agency has the authority to consider aesthetic impacts, pursuant to local design review ordinances or other discretionary powers, and aesthetic impacts, as addressed by the revised Public Resources Code, do not include impacts on historical or cultural resources. As such, the department does consider

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<sup>6</sup> Public Resources Code section 21099(d).

<sup>7</sup> CEQA section 21099(a)(4) defines an “infill site” as a lot located within an urban area that has been previously developed or a vacant site where at least 75 percent of the perimeter adjoins, or is separated by only an improved public right-of-way from, parcels that are developed with qualified urban uses.

<sup>8</sup> CEQA section 21099(a)(7) defines a “transit priority area” as an area within 0.5 mile of an existing or planned major transit stop. A “major transit stop” is defined in CEQA section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency-of-service interval of 15 minutes or less during the morning and afternoon peak commute periods.

<sup>9</sup> CEQA section 21099(a)(1) defines an “employment center” as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 within a transit priority area.

<sup>10</sup> San Francisco Planning Department, *Transit-oriented Infill Project Eligibility Checklists for the 447 Battery Street Project*, October 14, 2019.

aesthetics for design review and for evaluating effects on historic and cultural resources. Renderings of the proposed project are included in Chapter 2, Project Description, of the EIR.

### 3. AUTOMOBILE DELAY AND VEHICLES MILES TRAVELED ANALYSIS

CEQA section 21099(b)(1) requires the Governor's Office of Planning and Research to develop revisions to the CEQA Guidelines to establish criteria for determining the significance of transportation impacts from projects that "promote a reduction in greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA section 21099(b)(2) states that, upon certification of the revised guidelines for determining transportation impacts, pursuant to section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, the Governor's Office of Planning and Research published for public review and comment its *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*,<sup>11</sup> which recommends using a vehicle-miles-traveled (VMT) metric to measure a project's transportation impacts. On March 3, 2016, the San Francisco Planning Commission adopted the Governor's Office of Planning and Research recommendation to use the VMT metric instead of automobile delay in evaluating the transportation impacts of projects (Resolution 19579). (Note: The VMT metric does not apply to the analysis of project impacts on non-automobile modes of travel, such as riding transit, walking, and bicycling.)

Accordingly, this initial study does not contain a discussion of impacts regarding automobile delay. Instead, an impact analysis regarding VMT and induced automobile travel is provided in Section E.5, Transportation and Circulation. The topic of automobile delay, nonetheless, may be considered by decision makers independent of the environmental review process as part of their decision to approve, modify, or disapprove a proposed project.

### 4. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

The 447 Battery Street Project has been evaluated to determine if it could result in significant environmental impacts. The 447 Battery Street Project could have a significant effect on:

- Historic architectural resources because of the potential for such resources to be disturbed by the 447 Battery Street Project.

Accordingly, this topic is analyzed further in the EIR.

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<sup>11</sup> This document is available online at [http://opr.ca.gov/docs/Revised\\_VMT\\_CEQA\\_Guidelines\\_Proposal\\_January\\_20\\_2016.pdf](http://opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf).

## 5. EFFECTS FOUND NOT TO BE SIGNIFICANT

The following potential individual and cumulative environmental effects were determined to be either less than significant or capable of being reduced to less than significant through the mitigation measures identified in this initial study:

- Land Use and Land Use Planning
- Aesthetics
- Population and Housing
- Cultural (Archaeological) Resources
- Tribal Cultural Resources
- Transportation and Circulation
- Noise
- Air Quality
- Greenhouse Gas Emissions
- Wind
- Shadow
- 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
- Wildfire

These items are discussed and mitigation measures are included, where appropriate, in Section E of this initial study. They require no further environmental analysis in an EIR. All mitigation measures identified in this initial study are listed in Section F, Mitigation Measures and Improvement Measures. These measures have been agreed to by the project sponsor and will be implemented.

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## E. EVALUATION OF ENVIRONMENTAL EFFECTS

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E1. LAND USE AND LAND USE PLANNING.</b>					
Would the project:					
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Impact LU-1: The proposed project would not physically divide an established community. (No Impact)**

Division of an established community typically involves constructing a physical barrier to neighborhood access, such as a new freeway, or removing a means of access, such as a bridge or a roadway. The proposed project would entail demolition of the three-story building on the project site and construction of an 18-story, 200-foot-tall hotel. The proposed project would be incorporated into the existing street configuration. It would not alter the established street grid, permanently close streets, or impede pedestrian or other means of travel through the neighborhood. Although portions of the sidewalks adjacent to the project site would very likely be closed for periods of time during project construction, the closures would be temporary. Following construction, sidewalk access would be restored. The proposed project would not construct a physical barrier to neighborhood access or remove an existing means of access, such as a bridge or roadway; therefore, it would not physically divide an established community. Accordingly, the proposed project would have *no impact* with respect to physically dividing an established community, and no mitigation measures are necessary.

### **Impact LU-2: The proposed project would not 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. (Less than Significant)**

Land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect address physical environmental issues directly. They contain targets or standards that must be met to preserve or improve specific characteristics of San Francisco's physical environment.

As described in Section C, Compatibility with Existing Zoning and Plans, the proposed project would not obviously or substantially conflict with any adopted environmental plan or policy, with the exception of the historic preservation policies contained in the general plan and the Accountable Planning Initiative. Physical environmental impacts resulting from these conflicts with historic preservation policies are discussed in topic E.4, Historic Architectural Resources, below, and will be evaluated in the EIR. In addition, within the C-3-O zoning district, nonresidential uses, including

retail sales and services, are permitted, except for drive-up facilities and waterborne commercial uses. Hotel uses are conditional; therefore, a conditional use authorization under Planning Code section 303 would be required to permit a hotel. In addition, approval of a Downtown Project Authorization, per Planning Code section 309 for projects within a C-3-O zoning district with an area of more than 50,000 square feet or height of more than 75 feet, would be required; the proposed project would have an area of 143,449 square feet and a height of 200 feet.

To the extent that the proposed project would conflict with general plan objectives and policies that are unrelated to physical environmental issues, those conflicts would be considered by decision makers as part of their decision to approve or disapprove the proposed project independent of the environmental clearance process. Potential conflicts with applicable general plan objectives and policies would continue to be analyzed and considered as part of the review of the entitlement applications required for the proposed project independent of environmental review under CEQA. In addition, the proposed project would not obviously or substantially conflict with any such adopted environmental plan or policy, such as the air district's 2010 Clean Air Plan, which addresses environmental issues directly and/or contains targets or standards that must be met to preserve or improve characteristics of the city's physical environment. Therefore, the proposed project would have a *less-than-significant* impact with regard to conflicts with existing plans and zoning, and no mitigation measures are necessary.

**Impact C-LU-1: The proposed project, 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 context for the cumulative analysis is the cumulative development in the vicinity of the project site, identified in **Table B-1**, p. B-2, and mapped in **Figure B-1**, p. B-4. Most of the cumulative development projects are residential buildings, such as 1020–1028 Kearny Street and 220 Battery Street, or mixed-use buildings, such as 425 Broadway (residential, retail, and office) and 425 Washington Street (hotel and retail). These projects would result in an intensification of land uses in the project vicinity, similar to the proposed project; however, they would be infill projects and would be consistent with the planning vision for the area, as adopted in the Downtown Area Plan. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in cumulative land use impact. Accordingly, cumulative effects related to land use would be *less than significant*.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E2. POPULATION AND HOUSING.</b>					
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 an extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

According to the U.S. Census Bureau's most recent American Community Survey, the City and County of San Francisco had an estimated population of about 840,763 in 2015.<sup>12</sup> By 2040, the population of San Francisco is projected to increase by approximately 280,490, giving the city a total population of 1,085,730.<sup>13</sup> American Community Survey 2013–2017 census data indicate that the population of the census tract where the project site is located (census tract 611) is approximately 4,572.<sup>14</sup>

*Plan Bay Area*, which is the current regional transportation plan and sustainable communities strategy, adopted by MTC and ABAG in July 2013, contains housing and employment projections for San Francisco through 2040. *Plan Bay Area* calls for an increasing percentage of Bay Area growth to occur as infill development in areas with good transit access and the services necessary for daily living in proximity to housing and jobs. With its abundant transit services and mixed-use neighborhoods, San Francisco is expected to accommodate an increasing share of future regional growth.

<sup>12</sup> U.S. Census Bureau, *2011–2015 American Community Survey 5-Year Estimates, San Francisco County, Demographic and Housing Estimates*, [https://data.census.gov/cedsci/table?g=16000000US0667000&tid=ACSDP1Y2018.DP05&hidePreview=false&vintage=2018&layer=VT\\_2018\\_160\\_00\\_PY\\_D1&cid=DP05\\_0001E](https://data.census.gov/cedsci/table?g=16000000US0667000&tid=ACSDP1Y2018.DP05&hidePreview=false&vintage=2018&layer=VT_2018_160_00_PY_D1&cid=DP05_0001E), accessed August 1, 2019.

<sup>13</sup> Association of Bay Area Governments, *Plan Bay Area*, p. 40, [http://files.mtc.ca.gov/pdf/Plan\\_Bay\\_Area\\_FINAL/Plan\\_Bay\\_Area.pdf](http://files.mtc.ca.gov/pdf/Plan_Bay_Area_FINAL/Plan_Bay_Area.pdf), accessed July 22, 2019.

<sup>14</sup> U.S. Census Bureau, *2013–2017 American Community Survey 5-year Estimates, Age and Sex*, [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_17\\_5YR\\_S0101&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S0101&prodType=table), accessed: August 1, 2019.

The project site is in the Downtown-Van Ness-Geary Priority Development Area, as identified in *Plan Bay Area*.<sup>15</sup> In the last few years, the supply of housing has not met demand in San Francisco. In July 2013, ABAG projected regional housing needs in the *Regional Housing Need Plan for the San Francisco Bay Area: 2015–2023*. In 2015, ABAG projected that the housing need in San Francisco for 2015–2023 will be 28,869 dwelling units, consisting of 6,234 dwelling units that would be affordable to households at the very low-income level (0–50 percent of the Area Median Income [AMI]), 4,639 at the low-income level (51–80 percent), 5,460 at the moderate-income level (81–120 percent), and 12,536 above the moderate-income level (above 120 percent).<sup>16</sup> As noted above, as part of the planning process for *Plan Bay Area*, San Francisco identified priority development areas, which are existing neighborhoods that are near transit and appropriate for future growth. The project site is in the Downtown-Van Ness-Geary Priority Development Area.

In general, a project would be considered growth inducing if its implementation were to result in substantial population increases and/or new development, either directly or indirectly. The proposed project would partially demolish, except for the façade, a three-story office building with retail space and replace it with an 18-story, 198-room hotel. The project, which would be located in an urbanized area, proposes no housing. Therefore, it is not expected to substantially alter existing development patterns in downtown, or San Francisco as a whole, in a way that would induce unplanned population growth.

The proposed project would not indirectly induce substantial population growth in the project area due to infrastructure improvements because the project site is an infill site in an urbanized area. The proposed project would not involve any extensions to area roads or other infrastructure that could enable additional development in currently undeveloped areas.

Employment in San Francisco is projected to increase by 34 percent (191,740 jobs) between 2010 and 2040, based on 2010 base employment rates.<sup>17</sup> As of December 1, 2019, the labor force in San Francisco consisted of 590,700 jobs.<sup>18</sup> Given size of the proposed hotel and retail/restaurant uses, the new businesses on the project site would employ a maximum of 50 people. Hotel and

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<sup>15</sup> Association of Bay Area Governments, *Plan Bay Area*, Priority Development Area ArcGIS Webviewer, [https://www.arcgis.com/home/webmap/viewer.html?panel=gallery&suggestField=true&url=https%3A%2F%2Fservices3.arcgis.com%2Ffi2dkYWmb4wHvYPda%2Farcgis%2Frest%2Fservices%2Fpriority\\_development\\_areas\\_current%2FFeatureServer%2F0](https://www.arcgis.com/home/webmap/viewer.html?panel=gallery&suggestField=true&url=https%3A%2F%2Fservices3.arcgis.com%2Ffi2dkYWmb4wHvYPda%2Farcgis%2Frest%2Fservices%2Fpriority_development_areas_current%2FFeatureServer%2F0), accessed January 6, 2017.

<sup>16</sup> Association of Bay Area Governments, *Regional Housing Need Plan for the San Francisco Bay Area: 2015–2023*, 2015, [https://abag.ca.gov/sites/default/files/2015-23\\_rhna\\_plan.pdf](https://abag.ca.gov/sites/default/files/2015-23_rhna_plan.pdf), accessed July 22, 2019.

<sup>17</sup> Association of Bay Area Governments and Metropolitan Transit Commission, *Jobs-Housing Connection Strategy*, revised May 16, 2012, p. 49, [http://www.planbayarea.org/pdf/JHCS/May\\_2012\\_Jobs\\_Housing\\_Connection\\_Strategy\\_Main\\_Report.pdf](http://www.planbayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf), accessed August 1, 2019.

<sup>18</sup> Employment Development Department of California, *San Francisco County Profile*, 2019, <https://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSResults.asp?selectedarea=San+Francisco+County&selectedindex=38&menuChoice=localareapro&state=true&geogArea=0604000075&countyName=&submit1=View+Local+Area+Profile>, accessed February 13, 2020.



retail/restaurant employment under the proposed project would not be likely to attract new residents to San Francisco because such jobs are typically filled by existing residents in the area. Therefore, it is anticipated that most of the employees would live in San Francisco (or nearby communities) and that the proposed project would not generate demand for new housing to accommodate the potential hotel and retail/restaurant employees. Even if all of the approximately 50 employees associated with the proposed project were conservatively assumed to be new to San Francisco, project-related employment growth would represent considerably less than 1 percent (0.02 percent) of the city's estimated job growth between 2010 and 2040. This estimated increase in employment would be negligible in the context of total jobs in San Francisco.

Although proposed project operations would require approximately 50 employees, the existing commercial uses on the project site (a wine bar, a furniture store, and a technology company) also support approximately 40 to 50 employees. Therefore, onsite staffing requirements with project implementation are not considered to be substantially different from staffing requirements currently at the project site. Any increase in the number of employees at the project site would not be substantial relative to the existing number of residents and employees in the project vicinity, nor would the increase in employees exceed the projections for growth and employment in the ABAG projections, the San Francisco General Plan Housing Element, or *Plan Bay Area*. Therefore, the proposed project would not directly or indirectly induce substantial population growth. It would have a *less-than-significant* impact related to population growth. No mitigation is necessary.

**Impact PH-2: The proposed project would not displace a substantial number of existing housing units, people, or employees or create demand for additional housing elsewhere. (Less than Significant)**

The proposed project would not displace housing units because housing units do not currently exist on the project site. As noted above, the project site is occupied by five office and retail tenants, including a furniture rental store and a wine bar, that employ approximately 40 to 50 people. Therefore, the proposed project would result in a minor loss with respect to employment. However, up to 50 jobs would be created at the hotel and restaurants, thereby offsetting the loss of jobs. Hotel and retail/restaurant employment under the proposed project would not be likely to attract new residents to San Francisco because such jobs are typically filled by existing area residents. Therefore, it is anticipated that most of the employees would live in San Francisco (or nearby communities) and that the proposed project would not generate demand for new housing to accommodate the potential hotel and retail/restaurant employees. However, even if all of the new employees were new San Francisco residents, which is a conservative assumption, the estimated 50 new employees attributable to the proposed project would generate a potential demand for about 37 new dwelling units,<sup>19</sup> which is equivalent to 0.1 percent of the overall housing needs allocation of 28,869 units

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<sup>19</sup> According to ABAG's Projections 2040, in 2015, San Francisco had an estimated 1.36 workers per household. Association of Bay Area Governments, Projections 2040, 2019.

between 2015 and 2023. This potential increase in employment related housing demand would not be considered substantial in the context of total housing demand in San Francisco. In addition, the actual increase in housing demand due to the proposed project may be lower because some of the new employees may not be new to San Francisco. Therefore, the proposed project would have a *less-than-significant* impact related to the displacement of housing or employees and the creation of demand for new housing elsewhere. No mitigation is necessary.

**Impact C-PH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative population and housing impacts. (Less than Significant)**

As noted above, *Plan Bay Area*, the current regional transportation plan and sustainable communities strategy, adopted by MTC and ABAG in July 2013, contains housing and employment projections for San Francisco through 2040. Therefore, the *Plan Bay Area* projections provide context for the population and housing cumulative analysis.

As described above, the proposed project would not induce substantial direct or indirect population growth; displace a substantial number of existing housing units, people, or employees; or create demand for additional housing elsewhere.

The approved and proposed projects identified in **Table B-1**, p. B-2, and mapped in **Figure B-1**, p. B-4, would add approximately 665 new residents within 283 dwelling units in the vicinity of the project site.<sup>20</sup> Overall, these approved and proposed projects would represent a residential population increase of approximately 3.4 percent, which has been anticipated and accounted for in ABAG and City projections. Therefore, planned population growth, in and of itself, would not result in a significant impact on the physical environment. Because the proposed project would not include residential units, it would not contribute to this growth, and no cumulative impact on housing would result. In addition, because the project site currently employs approximately 50 individuals, and project operations would require approximately 40 to 50 employees, the net change in the number of employees would be between zero and 10, resulting in a very minor impact on employment. Accordingly, the project would not contribute to cumulative effects related to population and housing, and the impact would be *less than significant*. No mitigation is necessary.

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<sup>20</sup> Assumes the city of San Francisco average of 2.35 persons per unit.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E3. CULTURAL RESOURCES.</b>					
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact CR-1: The proposed project could cause a substantial adverse change in the significance of on-site historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Potentially Significant)**

Implementation of the proposed project would have the potential to result in significant impacts on the significance of historical resources. Accordingly, this topic is further analyzed and included in the EIR.

**Impact CR-2: The proposed project could cause a substantial adverse change in the significance of nearby historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Potentially Significant)**

Implementation of the proposed project would have the potential to result in significant impacts on nearby historical resources. Accordingly, this topic is further analyzed and included in the EIR.

**Impact CR-3: The proposed project could cause a substantial adverse change in the significance of an archaeological resource, as defined in section 15064.5. (Less than Significant with Mitigation)**

Based on the results of the department's preliminary archaeological review,<sup>21</sup> discoveries of significant archaeological resources are possible in the project area. Although no known CEQA-related significant archaeological resources have been recorded within project area,<sup>22</sup> geotechnical analysis and archival research show that there is a low potential for encountering deeply buried prehistoric resources but high potential for encountering early wharfs and debris along historic shorelines. As a result of this high potential for encountering historical archaeological resources,

<sup>21</sup> San Francisco Planning Department, *Environmental Planning Preliminary Archeological Review – 447 Battery Street*, July 30, 2019.

<sup>22</sup> Ibid.

the proposed project has the potential to disturb unknown archaeological resources. Such an impact would be considered *significant*. Accordingly, to reduce impacts on significant archaeological resources, the project sponsor must implement Mitigation Measure M-CR-3, Conduct Archaeological Testing and, if Required, Archaeological Monitoring, which would require the project sponsor to retain the services of an archaeologist from the department's qualified archaeological consultants list to develop and implement an archaeological testing plan. With implementation of Mitigation Measure M-CR-3, the proposed project's impact would be *less than significant with mitigation*.

**M-CR-3: Conduct Archaeological Testing and, if Required, Archaeological Monitoring.** Based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources and on human remains and associated or unassociated funerary objects. The project sponsor shall retain the services of an archaeological consultant from the rotational qualified archaeological consultants list maintained by the department's archaeologist. After the first project approval action, or as directed by the Environmental Review Officer, the project sponsor shall contact the department archaeologist to obtain the names and contact information for the next three archaeological consultants on the qualified archaeological consultants list. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the Environmental Review Officer for review and comment and be considered draft reports subject to revision until final approval by the Environmental Review Officer. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the Environmental Review Officer, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means for reducing potential effects on a significant archaeological resource, as defined in CEQA Guidelines sections 15064.5(a) and (c), to a less-than-significant level.

*Consultation with Descendant Communities:* On discovery of an archaeological site associated with descendant Native Americans, the overseas Chinese, or other potentially interested descendant group, an appropriate representative of the descendant group and the Environmental Review Officer shall be contacted. The

representative of the descendant group shall be given the opportunity to monitor archaeological field investigations of the site and offer recommendations to the Environmental Review Officer regarding appropriate archaeological treatment of the site, recovered data from the site, and, if applicable, any interpretative treatment of the associated archaeological site. A copy of the final archaeological resources report shall be provided to the representative of the descendant group.

*Archaeological Testing Program.* The archaeological consultant shall prepare and submit to the Environmental Review Officer for review and approval an archaeological testing plan. The archaeological testing program shall be conducted in accordance with the approved archaeological testing plan. The archaeological testing plan shall identify the archaeological resource(s) that could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program is to determine, to the extent possible, the presence or absence of archaeological resources and identify and evaluate whether any archaeological resource encountered on the site constitutes a historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to the Environmental Review Officer. If, based on the archaeological testing program, the archaeological consultant finds that significant archaeological resources may be present, the Environmental Review Officer, in consultation with the archaeological consultant, shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. No archaeological data recovery shall be undertaken without the prior approval of the Environmental Review Officer or the department archaeologist. If the Environmental Review Officer determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- The proposed project shall be redesigned to avoid any adverse effect on the significant archaeological resource, or
- A data recovery program shall be implemented, unless the Environmental Review Officer determines that the archaeological resource is of greater interpretive significance rather than research significance and that interpretive use of the resource is feasible.

*Archaeological Monitoring Program.* If the Environmental Review Officer, in consultation with the archaeological consultant, determines that an archaeological

monitoring program shall be implemented, the archaeological monitoring program shall include, at a minimum, the following provisions:

- The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult regarding the scope of the archaeological monitoring program reasonably prior to commencement of any project-related soil-disturbing activities. The Environmental Review Officer, in consultation with the archaeological consultant, shall determine which project activities shall be archaeologically monitored. In most cases, any soil-disturbing activities (e.g., demolition, foundation removal, excavation, grading, utility installation, site remediation) shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and their depositional context.
- The archaeological consultant shall undertake a worker training program for soil-disturbing workers that shall include an overview of expected resource(s), how to identify the evidence of the expected resource(s), and the appropriate protocol in the event of apparent discovery of an archaeological resource.
- The archaeological monitor(s) shall be present on the project site, according to a schedule agreed upon by the archaeological consultant and the Environmental Review Officer, until the Environmental Review Officer has, in consultation with project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits.
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archaeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/construction activities and equipment until the deposit is evaluated. If the archaeological monitor has cause to believe that deep foundation activities (e.g., foundation work, shoring) may affect an archaeological resource, such activities shall be terminated until an appropriate evaluation of the resource has been made in consultation with the Environmental Review Officer. The archaeological consultant shall immediately notify the Environmental Review Officer of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit and present the findings of this assessment to the Environmental Review Officer.

Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the Environmental Review Officer.

*Archaeological Data Recovery Program.* The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan. The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult on the scope of the archaeological data recovery plan prior to preparation of a draft archaeological data recovery plan. The archaeological consultant shall submit a draft archaeological data recovery plan to the Environmental Review Officer. The archaeological data recovery plan shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the archaeological data recovery plan shall identify which scientific/historical research questions are applicable to the expected resource, which data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, shall be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

The scope of the archaeological data recovery plan shall include the following:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloging and Laboratory Analysis. Descriptions of selected cataloging systems and artifact analysis procedures.
- Discard and Deaccession Policy. Descriptions of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an onsite/offsite public interpretive program during the course of the archaeological data recovery program.
- Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report. Descriptions of proposed report format and distribution of results.
- Curation. Descriptions of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

*Human Remains and Associated or Unassociated Funerary Objects.* The treatment of human remains and associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws, including immediate notification of the Office of the Chief Medical Examiner of the City and County of San Francisco and, in the event of the medical examiner's determination that the human remains are Native American remains, notification of the California Native American Heritage Commission, which shall appoint a most likely descendant (Public Resources Code section 5097.98). The Environmental Review Officer shall also be immediately notified upon discovery of human remains.

The archaeological consultant, project sponsor, Environmental Review Officer, and most likely descendent shall make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]) within six days of the discovery of the human remains. This proposed timing shall not preclude the Public Resources Code section 5097.98 requirement that descendants make recommendations or preferences for treatment within 48 hours of being granted access to the site. The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the Environmental Review Officer to accept the recommendations of a most likely descendant. The archaeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects, as specified in the treatment agreement, if such as agreement has been made, or, otherwise, as determined by the archaeological consultant and the Environmental Review Officer. If no agreement is reached, state regulations shall be followed, including reburial of the human remains and associated burial objects with appropriate dignity on the property, in a location not subject to further subsurface disturbance (Public Resources Code section 5097.98).

*Final Archaeological Resources Report.* The archaeological consultant shall submit a final archaeological resources report to the Environmental Review Officer that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. The final archaeological resources report shall include a curation and deaccession plan for all



recovered cultural materials. The final archaeological resources report shall also include an interpretation plan for public interpretation of all significant archaeological features.

Copies of the final archaeological resources report shall be sent to the Environmental Review Officer for review and approval. Once approved by the Environmental Review Officer, the consultant shall also prepare a public distribution version of the final archaeological resources report. Copies of the final archaeological resources report shall be distributed as follows: California Archaeological Site Survey, Northwest Information Center, shall receive one copy, and the Environmental Review Officer shall receive a copy of the transmittal of the final archaeological resources report to the Northwest Information Center. The Environmental Planning Division of the department shall receive one bound copy of the final archaeological resources report as well as one unlocked, searchable portable document format copy on compact disc, along with copies of any formal site recordation forms (California Department of Parks and Recreation 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of public interest in the resource or high interpretive value, the Environmental Review Officer may require different, or additional, content for the final report, a different format, and a different distribution plan.

With implementation of Mitigation Measure M-CR-3, the impact on prehistoric or historical archaeological resources from project construction would be *less than significant with mitigation*.

**Impact CR-4: The proposed project could disturb human remains, including those interred outside of formal cemeteries. (Less than Significant with Mitigation)**

As discussed above, the project area exhibits elevated archaeological sensitivity. Prehistoric archaeological sites, including some that contain human remains, have been identified within San Francisco. There is some degree of likelihood for inadvertently exposing currently unknown archaeological resources, including those containing human remains, during construction of the proposed project. The inadvertent exposure of human remains, including those interred outside of formal cemeteries, and associated or unassociated funerary objects would be considered a *significant* impact. To reduce this impact to a less-than-significant level, the project sponsor would comply with Mitigation Measure M-CR-3, Conduct Archaeological Testing and, if Required, Archaeological Monitoring, as presented above under Impact CR-3, which requires the project sponsor to solicit the most likely descendant's recommendations and adhere to appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition protocols for the treatment of human remains.

With implementation of Mitigation Measure M-CR-3, the proposed project's impact related to potential disturbance of human remains would be *less than significant with mitigation*.

**Impact C-CR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in demolition and/or alteration of historical resources, as defined in section 15064.5, including resources listed in articles 10 or 11 of the San Francisco Planning Code. (Potentially Significant)**

This topic is further analyzed and included in the EIR.

**Impact C-CR-2: The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on archaeological resources and human remains. (Less than Significant with Mitigation)**

Out of 13 cumulative projects, only 530 Sansome Street, which proposes construction of a 200-room visitor-serving hotel, plus office, gym, and restaurant uses, and a new fire station, has the potential to combine with the proposed project to result in cumulative effects. As described above, there are no known extant archaeological resources in the project area. However, the potential exists for the proposed project to individually and cumulatively affect unknown archaeological resources and human remains.

Individually, the 447 Battery Street Project has the potential to demolish, destroy, relocate, or alter as-yet undocumented archaeological resources and human remains. In concert with 530 Sansome Street, the project has the potential to result in an overall cumulative impact on as-yet undocumented archaeological resources and/or human remains. The proposed project, when considered with 530 Sansome Street, has the potential to contribute considerably to the overall cumulative impact on archaeological resources and human remains; the impact would be *significant*. However, the impact would be addressed with implementation of approved plans for testing, monitoring, and preservation or implementation of an interpretive plan that would preserve and realize the information potential of archaeological resources and human remains. With implementation of Mitigation Measure M-CR-3, the proposed project's contribution to any potential cumulative impacts related to archaeological resources and human remains would be reduced to *less than significant with mitigation*.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E4. TRIBAL CULTURAL RESOURCES.</b>					
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact TCR-1: The proposed project could cause 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. As defined in section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing on a national, state, or local register of historical resources.

Pursuant to CEQA section 21080.3.1(d), on August 13, 2019, the department contacted Native American individuals and organizations for the San Francisco area, providing a description of the proposed project and requesting comments on the identification, presence, and significance of tribal cultural resources in the area. During the 30-day comment period, no Native American tribal representatives contacted the department to request consultation.

The archaeological assessment, based on the Far Western Sensitivity Model,<sup>23</sup> indicated that the project area was submerged under the Bay approximately 6,000 to 4,000 years ago. Based on discussions with Native American tribal representatives in San Francisco, prehistoric archeological

<sup>23</sup> San Francisco Planning Department, Environmental Planning Preliminary Archeological Review – 447 Battery Street, July 30, 2019..

resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance. As discussed under Impact CR-2, the project site is within an archeologically sensitive area with a high potential for encountering historical archaeological resources, low potential for encountering deeply buried prehistoric resources, some potential for very old buried prehistoric deposits at approximately 40 to 50 feet below the ground surface, but little to no potential for near-surface prehistoric deposits.

The department's preliminary archeological review<sup>24</sup> and tribal notification letter<sup>25</sup> did not identify any tribal cultural resources in the project area. Both reports maintain that the proposed project would have low to moderate potential with respect to affecting tribal cultural resources or as-yet undocumented prehistoric sites. However, as discussed under Impact CR-2, a disturbance of previously unidentified archeological resources, including tribal cultural resources, would be considered a *significant* impact. Implementation of Mitigation Measure M-TCR-1, Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance, would reduce potential adverse effects on tribal cultural resources to *less than significant with mitigation*. Mitigation Measure M-TCR-1 would require either preservation in place, if determined effective and feasible, or an interpretive program developed in consultation with affiliated Native American tribal representatives.

**M-TCR-1. Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance.** If the Environmental Review Officer determines that a significant archeological resource is present and, in consultation with the affiliated Native American tribal representatives, that the resource constitutes a tribal cultural resource that could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the Environmental Review Officer determines that preservation in place 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 is not an adequate or feasible option, then the project sponsor shall implement an interpretive program in coordination with affiliated Native American tribal representatives. An interpretive

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<sup>24</sup> San Francisco Planning Department, *Environmental Planning Preliminary Archeological Review – 447 Battery Street*, July 30, 2019.

<sup>25</sup> San Francisco Planning Department, *Tribal Notification – 447 Battery Street*, August 13, 2019.

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 for those displays or installations, the producers or artists involved with the displays or installations, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists; oral histories from local Native Americans; artifact displays and interpretation; and educational panels or other informational displays.

Implementation of Mitigation Measure M-TCR-1 would reduce potential impacts on tribal cultural resources to *less than significant with mitigation*.

**Impact C-TCR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, could result in a cumulatively considerable contribution to cumulative impacts on tribal cultural resources. (Less than Significant with Mitigation)**

Out of 13 cumulative projects, only 530 Sansome Street has the potential to combine with the proposed project to result in cumulative effects. The project at 530 Sansome Street, which most likely would require ground disturbance, proposes a 200-room visitor-serving hotel, plus office, gym, and restaurant uses, and a new fire station.

The project at 447 Battery Street would have the potential to cumulatively affect as-yet undocumented tribal cultural resources and prehistoric archaeological sites. As identified in the department's preliminary archeological review<sup>26</sup> and tribal notification letter,<sup>27</sup> the project would have low to moderate potential with respect to affecting prehistoric resources. Ground-disturbing activities from past, present, and reasonably foreseeable future projects in the project vicinity (i.e., 200 feet) may have disturbed or have the potential to disturb previously unidentified tribal cultural resources. Because the project at 530 Sansome Street would most likely require ground disturbance, the project at 447 Battery Street, in combination with past, present, and reasonably foreseeable future projects, has the potential to contribute considerably to the overall cumulative impact on tribal cultural resources; the impact would be *significant*. However, the impacts would be addressed with implementation of approved plans for testing, monitoring, and preservation or implementation of an interpretive plan, which would preserve and realize the information potential of tribal cultural resources. With implementation of Mitigation Measures M-TCR-1 and M-CR-3, the proposed project's contribution to any potential cumulative impacts related to tribal cultural resources would be *less than significant with mitigation*.

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<sup>26</sup> San Francisco Planning Department, *Environmental Planning Preliminary Archeological Review – 447 Battery Street*, July 30, 2019.

<sup>27</sup> San Francisco Planning Department, *Tribal Notification – 447 Battery Street*, August 13, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E5. TRANSPORTATION AND CIRCULATION.</b>					
Would the project:					
a) Involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create potentially hazardous conditions for people walking, bicycling, or driving or public transit operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Interfere with accessibility for people walking or bicycling to and from the project site, and adjoining areas, or result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially delay public transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow travel lanes) or by adding new roadways to the network?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Result in a substantial vehicular parking deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving; interfere with accessibility for people walking or bicycling or access for emergency vehicles; or substantially delay public transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following discussion is based on the information provided in the transportation study prepared for the proposed project. That study analyzed project trips and event-related trips.<sup>28</sup>

The project would satisfy the eligibility criteria for a “transit-oriented infill project” under Public Resources Code section 2109 because it would consist of residential, mixed-use residential, or employment center uses; would be located on an infill site; and would be located within a transit priority area. Therefore, the project would be exempt from an analysis of impacts on (automobile) parking under CEQA. Because the project would meet the map-based screening criterion for VMT impacts, the project would also be exempt from an analysis of secondary impacts related to parking,

<sup>28</sup> AECOM, 447 Battery Street Transportation Impact Study, San Francisco, CA, November 2019.

including potentially hazardous conditions for people walking, bicycling, or driving; interference with accessibility for people walking or bicycling; inadequate access for emergency vehicles; and substantial delay for public transit. For these reasons, topic 5g is not applicable to the project.

### **Setting**

The transportation study area, which includes a one- to two-block radius around the project site, is generally bounded by Pacific Avenue to the north, Halleck Street to the south, Davis Street to the east, and Montgomery Street to the west. Access to the project site by transit, on foot, or by bicycle is available from existing bus transit services, sidewalks, streets, and crosswalks near the site.

As part of the transportation study, p.m. peak-hour data were collected at the following four study intersections: Battery Street and Washington Street, Battery Street and Clay Street, Sansome Street and Washington Street, and Sansome Street and Clay Street. Of the four main intersections bounding the block containing the project site, all are signalized and feature marked crosswalks at all intersection legs. The existing building does not include any accessory off-street vehicular parking, and there are no existing curb cuts at the project site.

**Roadways.** Battery Street is a semi-major arterial roadway, oriented in the north–south direction, running between The Embarcadero/Lombard Street and Market Street/Bush Street. Sansome Street is a semi-major arterial roadway, oriented in the north–south direction, running between The Embarcadero/Chestnut Street and Sutter Street/Market Street. Washington Street is a semi-major collector roadway, oriented in the east–west direction, running between The Embarcadero along the northeast waterfront and Arguello Boulevard in Presidio Heights and passing through the Financial District, Chinatown, Nob Hill, and Pacific Heights. Clay Street is a semi-major collector roadway, oriented in the east–west direction, running between Drumm Street in the Financial District and Arguello Boulevard in Presidio Heights, passing through Chinatown, Nob Hill, and Pacific Heights. Merchant Street is an alley, oriented in the east–west direction, running between Battery Street and Kearny Street. An intermediate segment of Merchant Street was vacated with development of the Transamerica Pyramid; the street now consists of two unconnected segments.

**Bicycle Facilities.** The major bikeways in the immediate vicinity of the project are located along the Battery Street/Sansome Street and Washington Street/Clay Street couplets, consisting of class III facilities (shared lanes) with pavement markings (sharrows) and signage. These facilities serve as the primary north–south bikeways through the Financial District, connecting at the north end with the class III bikeways along Columbus Avenue, then continuing north into North Beach and Fisherman’s Wharf, and at the south end with Market Street (class III bikeways) and Second Street (class II/III bikeways).

**Pedestrian Facilities.** All major streets in the vicinity of the project site have sidewalks along both sides, including the four street segments bounding the block containing the project site (Washington Street, Clay Street, Battery Street, and Sansome Street). The pavement along these

sidewalks is in generally good condition and was recently replaced following construction work for Americans with Disabilities Act (ADA) compliance at the northwest corner of Battery and Merchant streets. The four main intersections bounding the block containing the project site are signalized and feature marked crosswalks on all legs of the intersections.

**Transit.** The project site is along the northern edge of the Financial District and well served by both local and regional transit service. Local public transit service to and from the project site is provided primarily by Muni bus and rail lines, while regional public transit service is provided by a variety of transit operators, including Bay Area Rapid Transit, the Alameda–Contra Costa Transit District, the San Mateo County Transit District, and the Golden Gate Bridge, Highway, and Transportation District, among others. Regional transit services that are not within walking or biking distance of the project site can also be accessed by connecting local transit service.

Surface transit running along Market Street includes the F Market & Wharves historic streetcar service as well as trunk lines that serve major outlying Muni corridors. Muni Metro (J Church, K Ingleside, L Taraval, M Ocean View, N Judah, and T Third Street) runs under Market Street, with the closest stations to the project site being Embarcadero Station and Montgomery Station. The closest entrances are at the southwest corner of the Beale Street/Market Street/Davis Street/Pine Street intersection and the northwest corner of the Main Street/Market Street intersection (for Embarcadero Station) and the Sansome Street/Sutter Street and Sutter Street/Market Street intersections (for Montgomery Station). ADA-compliant elevator access to and from the station concourse level is provided by elevators at the northwest corner of the Main Street/Market Street intersection (for Embarcadero Station) and the northwest corner of the Sutter Street/Market Street intersection (for Montgomery Station).

In addition to Muni, other frequent local public transit service is provided by the PresidiGo Downtown Shuttle, connecting the Presidio with downtown San Francisco. The shuttle operates along Battery Street and Clay Street inbound to downtown and along Washington Street and Sansome Street outbound to the Presidio. Service is bi-directional during the weekday a.m. and p.m. peak periods, with a frequency of every 15 minutes, although all trips during the weekday a.m. peak period and every other trip during the weekday p.m. peak period are restricted to PresidiGo pass holders.

### **Vehicle Miles Traveled in San Francisco and the Bay Area**

Many factors affect travel behavior. These factors include density, the diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management (TDM). Typically, low-density development at great distances from other land uses in areas with poor access to non-private vehicular modes of travel generate more automobile travel compared with development in urban areas where a higher density, a mix of land uses, and travel options, other than private vehicles, are available. Given these travel behavior factors, San Francisco has a lower vehicle-miles-



traveled (VMT) ratio than the nine-county San Francisco Bay Area region. In addition, some areas of the city have lower VMT ratios than other areas of the city. These areas of the city can be expressed geographically through transportation analysis zones. Transportation analysis zones are used in transportation planning models for transportation analysis and other planning purposes. The zones vary in size from single city blocks in the downtown core, multiple blocks in outer neighborhoods, to even larger zones in historically industrial areas like the Hunters Point Shipyard.

The San Francisco County Transportation Authority (Transportation Authority) uses the San Francisco Chained Activity Model Process (SF-CHAMP) to estimate VMT by private automobiles and taxis for different land use types. The calibration of travel behavior in SF-CHAMP is based on observed behavior taken from the California Household Travel Survey, 2010–2012; census data regarding automobile ownership rates and county-to-county worker flows; and observed vehicle counts and transit boarding. SF-CHAMP uses a synthetic population, a set of individual actors that represent the Bay Area's actual population and make simulated travel decisions for a complete day. The Transportation Authority uses tour-based analysis for office and residential uses, which examines the entire chain of trips over the course of a day, not just trips to and from a project. For retail uses, the Transportation Authority uses trip-based analysis, which counts VMT from individual trips to and from the project as opposed to the entire chain of trips. A trip-based approach, as opposed to a tour-based approach, is necessary for retail projects because a tour is likely to consist of trips that stop at multiple locations; the summarizing of tour VMT at each location would overestimate VMT.<sup>29,30</sup>

In January 2016, the Governor's Office of Planning and Research (OPR) published for public review and comment its *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* (proposed transportation impact guidelines),<sup>31</sup> with a draft recommendation that transportation impacts for projects (especially automobile delay) be measured using a VMT metric rather than the level-of-service (LOS) metric. On March 3, 2016, in anticipation of future certification of the revised CEQA Guidelines, the San Francisco Planning Commission adopted a resolution (consistent with OPR's recommendation) to use the VMT metric instead of automobile delay (as measured by LOS) to evaluate the transportation impacts of projects (Resolution 19579).<sup>32</sup>

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<sup>29</sup> To state another way, a tour-based assessment of VMT at a retail site would consider VMT for all trips in the tour for any tour with a stop at the retail site. If a single tour stops at two retail locations, for example, a coffee shop on the way to work and a restaurant on the way back home, both retail locations would be allotted the total tour VMT. A trip-based approach allows us to apportion all retail-related VMT to retail sites without double counting.

<sup>30</sup> San Francisco Planning Department, *Executive Summary: Resolution Modifying Transportation Impact Analysis*, Appendix F, Attachment A, March 3, 2016.

<sup>31</sup> This document is available online at [https://www.opr.ca.gov/docs/Revised\\_VMT\\_CEQA\\_Guidelines\\_Proposal\\_January\\_20\\_2016.pdf](https://www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf).

<sup>32</sup> The VMT metric does not apply to the analysis of project impacts on non-automobile modes of travel such as transit, walking, and bicycling.

A project would have a significant effect on the environment if it were to cause substantial additional VMT. OPR's proposed transportation impact guidelines recommend screening criteria to identify the project types, characteristics, or locations that would not result in significant impacts related to VMT. If a project meets the screening criteria, then it is presumed that VMT impacts would be less than significant for the project, and a detailed VMT analysis is not required.

Trips associated with tourist hotel land uses typically function similarly to residential. Therefore, tourist hotel land uses are treated as residential for this screening and analysis. For residential development, regional average daily VMT per capita is 17.2. For office and retail development, which is also included as part of the proposed project, regional average daily work-related VMT per employee is 14.9 (see **Table E5-1**, which includes the traffic analysis zone [TAZ] where the project site is located [TAZ 804]).

San Francisco 2040 cumulative conditions were projected using a SF-CHAMP model run and the same methodology outlined above but with residential and job-growth estimates, as well as reasonably foreseeable transportation investments through 2040, included. For residential development, projected 2040 regional average daily VMT per capita is 16.1. For retail development, regional average daily retail VMT per employee is 14.6.

**Table E5-1. Daily Vehicle Miles Traveled**

Land Use	Daily Vehicle Miles Traveled per Capita or Employee					
	Existing Conditions			Cumulative Conditions		
	Bay Area Regional Average	Bay Area Regional Average Minus 15%	TAZ 804	Bay Area Regional Average	Bay Area Regional Average Minus 15%	TAZ 804
Households (residential)	17.2	14.6	2.5	16.1	13.7	2.2
Employment (retail)	14.9	12.6	8.7	14.6	12.4	7.9

Source: San Francisco Planning Department, 2017.

### Vehicle Miles Traveled Impact Analysis Methodology

#### *Vehicle Miles Traveled Analysis*

Land use projects may cause substantial additional VMT. The following identifies the thresholds of significance and screening criteria used to determine if a land use project would result in significant impacts under the VMT metric.

*Residential and Retail (and Similar) Projects*

For residential uses, a project would generate substantial additional VMT if it were to exceed the regional household VMT per capita minus 15 percent.<sup>33</sup> For office projects, a project would generate substantial additional VMT if it were to exceed the regional VMT per employee minus 15 percent. For retail projects, the department uses a VMT efficiency metric approach (i.e., a project would generate substantial additional VMT if it were to exceed the regional VMT per retail employee minus 15 percent). This approach is consistent with CEQA section 21099 and the thresholds of significance for other land uses recommended in OPR's proposed transportation impact guidelines. As documented in the proposed transportation impact guidelines, a 15 percent threshold below existing development is "both reasonably ambitious and generally achievable."

OPR's proposed transportation impact guidelines provide screening criteria for identifying the types, characteristics, or locations of land use projects that would not exceed the VMT thresholds of significance. According to OPR, if a project or land use proposed as part of a project meets any of the screening criteria below, then VMT impacts are presumed to be less than significant for that land use, and a detailed VMT analysis is not required. These screening criteria and how they are applied in San Francisco are as follows:

- *Map-based Screening for Residential, Office, and Retail Projects.* OPR recommends mapping areas where VMT is less than the applicable threshold for that land use. Accordingly, the Transportation Authority has developed maps that depict existing VMT levels in San Francisco for residential, office, and retail land uses, based on the SF-CHAMP 2012 base-year model run. The department uses these maps and associated data to determine whether a proposed project is located in an area of the city that is below the VMT threshold.
- *Proximity to Transit Stations.* According to OPR, residential, retail, and office projects, as well projects with a mix of these uses, proposed within 0.5 mile of an existing major transit stop (as defined by CEQA section 21064.3) or an existing stop along a high-quality transit corridor (as defined by CEQA section 21155) would not result in a substantial increase in VMT. However, this presumption would not apply if the project were to have a floor area ratio of less than 0.75; include more parking for use by residents, customers, or employees than required or allowed, without a conditional use permit; or be considered inconsistent with the applicable sustainable communities strategy.<sup>34</sup>

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<sup>33</sup> OPR's proposed transportation impact guidelines state that a project would cause substantial additional VMT if it exceeds both existing city household VMT per capita minus 15 percent and existing regional household VMT per capita minus 15 percent. In San Francisco, the city's average VMT per capita (8.4) is lower than the regional average (17.2). Therefore, the city average is irrelevant for the purposes of the analysis.

<sup>34</sup> A project is considered to be inconsistent with the sustainable communities strategy if development is located outside of areas contemplated for development in the sustainable communities strategy.

### Induced Automobile Travel Analysis

Transportation projects may substantially induce additional automobile travel. The following discussion identifies the thresholds of significance and screening criteria used to determine if transportation projects would result in significant impacts by inducing substantial additional automobile travel.

Pursuant to OPR's proposed transportation impact guidelines, a transportation project would substantially induce automobile travel if it were to generate more than 2,075,220 VMT per year. This threshold is based on the fair-share VMT allocated to transportation projects that are required to achieve California's long-term greenhouse gas emissions reduction goal of 40 percent below 1990 levels by 2030.

OPR's proposed transportation impact guidelines include a list of transportation project types that would not lead to a substantial or measurable increase in VMT. If a project fits within the general types of projects described in the following list (including a combination of types), it is presumed that VMT impacts would be less than significant, and a detailed VMT analysis would not be required. Accordingly, the proposed project would not result in a substantial increase in VMT because it would include the components and features listed below.

- Active Transportation, Rightsizing (a.k.a. Road Diet), and Transit Project
  - Provide pedestrian-safety and traffic-calming improvements along Merchant Street, including wider sidewalks, raised crosswalks, and new or reconstructed ADA-compliant curb ramps
- Other Minor Transportation Projects
  - Remove and/or reconfigure on-street parking and loading
  - Establish a new on-street passenger loading zone
  - Reconstruct/replace existing sidewalks along the south side of Merchant Street

### Travel Demand

The travel demand analysis for the proposed project analyzed both project trips and trips generated from events. The proposed project would meet the previously described criterion for map-based screening of residential and retail projects, proximity to transit stations, and tourist hotels. As such, potential transportation impacts would be determined under the VMT analysis and would not require an analysis of induced automobile travel. Overall, the proposed project, including the hotel and restaurant, would generate 3,157 person trips on a daily basis and 321 person trips during the weekday p.m. peak hour. During the weekday p.m. peak hour, the proposed project would generate 44 net new person trips by automobile, 59 net new person trips by transit, 176 net new person trips by walking, and 43 net new person trips by other modes, which include transportation network companies (TNCs)/taxis, private shuttles, and

bicycles. The proposed project would also generate up to 600 person trips on a daily basis as well as 200 person trips during the weekday p.m. peak hour during events. During the weekday p.m. peak hour with a regional event taking place, the proposed project would generate 36 net new person trips by automobile, 58 net new person trips by transit, 85 net new person trips by walking, and 20 net new person trips by other modes.

### ***Impact Evaluation***

**Impact TR-1: The proposed project would not involve construction that would require a substantially extended duration or intensive activity, the effects of which would create potentially hazardous conditions for people walking, bicycling, or driving, or public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit. (Less than Significant)**

Construction activities would take place over a period of approximately 31 months and would include demolition, site preparation, grading, building construction, paving, and the application of architectural coatings. Construction staging would be expected to take place primarily within the confines of the project site, although the Battery Street and/or Merchant Street sidewalks adjacent to the project site may need to be closed on a temporary basis. Any closures would very likely require temporary closure of the adjacent parking lane (if available) to maintain pedestrian access but otherwise would have little effect on roadway capacity. Signage and features related to pedestrian protection would be erected, as appropriate.

It is anticipated that no roadways or travel lanes would need to be closed, no transit services would need to be rerouted, and no bus stops would need to be relocated during the construction period. Any temporary closure of travel lanes or changes to transit service on streets adjacent to the project site, either for extended periods or for temporary events, such as erection and disassembly of tower cranes, would be cleared and coordinated with the SFMTA.<sup>35</sup> Project-related construction activities would comply with all applicable City codes and regulations, such as the San Francisco Noise Ordinance and SFMTA's *Regulations for Working in San Francisco Streets* ("The Blue Book"), as well as Department of Building Inspection permit provisions.

The department has set forth screening criteria for the types of construction activities that typically do not result in significant construction-related transportation effects. Although the project would involve excavation for construction of the four below-grade levels, it would not involve especially intense activities, beyond what would normally be expected for the localized context of the project site. Construction activities would be temporary and would not result in permanent changes to the

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<sup>35</sup> In general, temporary traffic and transportation changes must be coordinated through SFMTA's Interdepartmental Staff Committee on Traffic and Transportation and require a public meeting. As part of this process, the construction management plan may be reviewed by SFMTA's Transportation Advisory Committee to resolve internal differences between different transportation modes.

physical environment. Given the project's context, construction duration, and magnitude, the project would meet the department's screening criteria; construction impacts would be less than significant. Furthermore, construction activities would comply with all applicable City codes and regulations, ensuring that such activities would not result in potentially hazardous conditions for people walking, bicycling, or driving, or for public transit operations; interfere with emergency access or accessibility for people walking or bicycling; or substantially delay public transit. For these reasons, the project would result in a *less-than-significant* impact related to construction, and no mitigation is required.

**Impact TR-2: The proposed project would not create potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations, nor would it interfere with accessibility for people walking or bicycling to and from the project site and adjoining areas or result in inadequate emergency access. (Less than Significant)**

### Transit Operations

Although the proposed project would implement streetscape changes along an adjacent segment of Merchant Street, these changes would have no effect on transit operations because there are no transit services along Merchant Street. In addition, although the project would add vehicle trips to the surrounding roadways, project-generated vehicular trips would be well below the department's transit delay screening criterion of 300 vehicle trips during the peak hour, even during an event, and would not substantially affect transit operations on nearby routes, resulting in a *less-than-significant* impact.

### Traffic Hazards

The project site does not have any existing curb cuts; direct vehicle access into and out of the site would be provided from a single access point at the proposed vehicle/freight elevator along Merchant Street. Although the elevator would be shared by vehicles and freight, accommodating one vehicle at a time, the expected potential for conflicts is expected to be minor given the size of the garage for the proposed project (24 spaces that would be managed entirely by a valet operator). The expected volume of project-generated vehicle traffic on a daily basis would total 548 trips, with 48 trips during the peak hour. During a regional event, the proposed project is expected to generate an additional 118 daily vehicle trips (for a total of 666 daily vehicle trips), of which 39 of these vehicle trips would occur during the peak hour (for a total of 87 peak hour vehicle trips).

On a non-event day, the proposed project is expected to generate demand for 38 freight loading spaces (including spaces required for service vehicles), of which, three spaces would be required during the peak hour. Freight and service vehicle loading demand would likely vary substantially by event based on attendance levels and whether or not the event is formal.<sup>36</sup> However, given the

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<sup>36</sup> Formal events may require accommodations for catering, equipment or furniture rental, and pre-event set-up and post-event take-down activities.

maximum attendance levels and potential frequency of events the freight and service vehicle loading demand is expected to be accommodated by the proposed project's single off-street freight loading space which would be available for use at all times of the day. Use of this space would be scheduled with building management staff to ensure availability for event-related loading activities. Nearby on-street parking and commercial loading spaces are also available and may be reserved with the SFMTA.

As such, the demand for freight loading spaces would be met regardless of whether or not an event is taking place. In addition, it should be noted that vehicle volumes and speeds along Merchant Street are low which would reduce the potential for secondary impacts associated with vehicle staging for loading activities, including accessing the elevator to the onsite loading space.

The project would remove existing parking and loading spaces along the north side of Merchant Street to provide a widened sidewalk, enhance pedestrian safety, and improve walkability. Proposed streetscape amenities such as trees, bollards, and other features would be placed so as not to obstruct sight lines at the driveway leading to/from the elevator. Other streetscape changes proposed by the project, including raised crosswalks at either end of Merchant Street, curb removal along the north side of the street (adjacent to the widened sidewalk), and special pavement treatments (e.g., special colors, textures), would encourage slower vehicle speeds into, out of, and along Merchant Street, which would generally improve motorist safety.

Although the proposed project would result in a general increase in vehicle activity on the surrounding street network, given the low number of added vehicles, low vehicle speeds, and the use of a professional valet service for vehicles entering and exiting the garage, the proposed project is unlikely to result in or substantially contribute to a traffic hazard. The impact would be *less than significant*.

### **Bicycle Conditions**

Counts of bicycle turning movements conducted at the four study intersections bounding the block containing the project site show that current bicycle activity at these locations during the weekday p.m. peak hour ranges from approximately 10 to 30 bicycles per hour (along Clay Street) to approximately 30 to 40 bicycles per hour (in each direction on Sansome Street). The project would generate approximately eight bicycle trips under regular (non-event) conditions, with up to an additional eight bicycle trips under event conditions.

The proposed project would provide class I bicycle parking inside the building and class II bicycle parking in scattered locations within portions of the sidewalks adjacent to the site, subject to SFMTA approval. Building access from street level would be provided along both site frontages (i.e., along Battery Street and Merchant Street). Given these considerations and the one-way traffic circulation patterns of most streets in the vicinity of the project site, project-generated bicycle activity is expected to be concentrated along Battery Street, Sansome Street, and Merchant Street.

In particular, both Battery Street and Sansome Street feature class III bikeways that would very likely serve as key routes for bicyclists traveling to and from the project site.

Existing safety concerns for bicyclists generally stem from the potential for conflicts with vehicles, such as right-turning traffic at intersections, as well as conflicts associated with transit vehicles in transit-only lanes and/or near curbside transit stops. Vehicles stopped in the right-most travel lane, such as delivery or TNC vehicles, as well as vehicles involved in passenger loading, can also introduce hazards for bicyclists and obstruct circulation. The proposed project, however, is not anticipated to generate any activities that would create hazards for bicyclists or interfere with bicycle access or circulation. Given existing traffic levels, as well as the conservative estimates of daily project-generated vehicle volumes (even during events), the project is not expected to substantially increase overall traffic levels. Project and event-generated vehicle and bicycle volumes would remain low along adjacent streets. The minimal increase in vehicle volumes would not create potentially hazardous conditions for bicyclists or otherwise interfere with bicycle access or circulation. In addition, speeds along Merchant Street are low, which benefits bicycle conditions.

Potential conflicts with passenger loading would not be substantially worse than those associated with on-street parking spaces with high turnover. Such situations would be infrequent because the zone would have adequate capacity for accommodating the project's peak passenger loading demand, even under the "worst case" scenario, whereby regular and event-related passenger loading demand would peak concurrently. Furthermore, the adjacent segment of Battery Street has a total of three travel lanes. There would be adequate roadway capacity for bicycles to maneuver into the adjacent travel lane and avoid any temporary disruptions associated with queuing or double parking.

Bicyclists would generally be sharing the single travel lane along Merchant Street with other vehicles and therefore could be subject to minor delays or obstructions as motorists enter and exit the proposed project's vehicle/freight elevator. These occurrences, however, would not constitute a safety hazard because bicyclists, similar to motorists, would generally be expected to slow down and wait until driveway traffic has cleared; motorists exiting the landing area would be professional drivers and would be expected to yield to oncoming bicyclists. In addition, there would be adequate sight lines and adequate distances between bicyclists on Merchant Street and motorists exiting the driveway, with the proposed sidewalk widening providing additional buffer space and enhanced sight lines. Proposed streetscape amenities such as street trees, bollards, and other features would be placed so as not to obstruct sight lines at the driveway leading to/from the vehicle/freight elevator.

Given these considerations, the proposed project would not create potentially hazardous conditions for bicyclists or otherwise interfere with bicycle accessibility to and from the site or adjoining areas. The project's impacts on bicycle conditions would be *less than significant*.



## **Pedestrian Conditions**

The proposed project would include several streetscape improvements (e.g., widened sidewalks along the north side of Merchant Street and raised crosswalks across Merchant Street at Battery Street and Sansome Street), reconstruct the existing ADA-compliant curb ramps along the north side of Merchant Street with curbless designs (e.g., with detectable warnings and other treatments for ADA compliance), and replace the existing ADA-compliant curb ramps along the south side of Merchant Street. These improvements would enhance pedestrian access and safety by improving accessibility and ADA compliance, expanding circulation and queuing zones, and calming vehicle traffic.

Although the proposed project would construct a new shared vehicle/freight driveway along the north side of Merchant Street, the proposed sidewalk widening and curbless design at this location would minimize any potential vehicle/pedestrian conflicts at the vehicle/freight elevator landing area by improving sight lines for motorists, encouraging slower vehicle speeds, and allowing pedestrians to bypass any vehicles that may be stopped in the curb cut as they enter the traffic flow along Merchant Street. Detectable warnings, pavement colors and materials, bollards, and other treatments would satisfy ADA requirements and provide visual cues that would separate the sidewalk from the adjacent travel lane while reinforcing the low-speed, pedestrian-focused nature of the street.

On weekdays, the project would increase the number of vehicle trips by 548 and the number of person trips by 3,157. During a regional event, the project would generate an additional 118 vehicle trips and 600 person trips for a total of 666 vehicle trips and 3,757 person trips. However, the project would not include any design features that would create hazards for pedestrians or interfere with pedestrian access or circulation. In addition, the project would include streetscape improvements along Merchant Street that would increase pedestrian safety. Given these considerations, the proposed project would not create potentially hazardous conditions for pedestrians or otherwise interfere with pedestrian accessibility to and from the site or adjoining areas. The impact would be *less than significant*.

## **Emergency Vehicle Access**

Emergency vehicle access to the project site is currently provided along all four streets bounding the block containing the project site (Washington Street, Clay Street, Battery Street, and Sansome Street), with Merchant Street providing additional access to the secondary (southern) frontage of the project site. Emergency vehicles would generally have access to any of the streets in the vicinity of the project site, with the exception of some alleys and other smaller streets that have been fully or partially closed to vehicular traffic or public access. During the weekday a.m. and p.m. peak periods, general traffic congestion in the vicinity of the project site can result in some delay to emergency vehicle response, but California Vehicle Code section 21806 generally requires that all non-emergency vehicles yield the right-of-way to emergency vehicles.

Along Merchant Street and other alleys, larger emergency vehicles, such as aerial trucks, may have some difficulty negotiating turns or securing adequate space for deploying outriggers or other apparatus because of the narrow curb-to-curb widths. Although the project proposes streetscape changes along Merchant Street, including sidewalk widening along the north side of the street and raised crosswalks at either end of the street, these changes have already undergone review from the San Francisco Fire Department (SFFD)<sup>37</sup> and members of the Street Design Advisory Team to ensure adequate access for aerial trucks. In particular, the proposed sidewalk widening would be achieved through removal of the on-street parking along Merchant Street; the required turning radius for the southbound right-turn movement from Battery Street onto Merchant Street would generally remain the same. Furthermore, the one-way traffic circulation pattern along Battery Street would allow aerial trucks and other large emergency vehicles to begin their turning movements from the center or left-most lanes along Battery Street (as opposed to a situation where a truck needs to cross into opposing lanes of traffic to negotiate a turn).

Although SFFD Station 13 is in the immediate vicinity of the project site, at the intersection of Merchant Street and Sansome Street, primary ingress and egress for the station, including the station's fire trucks, is provided along Sansome Street. Therefore, the proposed streetscape changes along Merchant Street would have a negligible effect on ingress and egress for emergency vehicles. The project would replace the north sidewalk along Merchant Street with a curbless design but retain the red "Tow-Away, No Stopping Any Time" zone along the Merchant Street frontage of SFFD Station 13. Although the proposed project would result in a general increase in vehicle traffic on the surrounding roadway network, this increase would not be substantial enough to produce a material effect on emergency response from the station or overall emergency vehicle access to or through the area, even accounting for event-related traffic.

Other than SFFD Station 13, the project site is not in the immediate vicinity of any existing uses or facilities that generate unusually large amounts of emergency vehicle activity that could be disrupted by project design features or project-generated activities. Therefore, the proposed project would not result in inadequate emergency access. The impact on emergency vehicle access would be *less than significant*.

## Conclusion

For the reasons specified above, the proposed project would result in a *less-than-significant* impact related to creating potentially hazardous conditions for people walking, bicycling, or driving or for public transit operations; interfering with accessibility for people walking or bicycling to and from the project site and adjoining areas; or negatively affecting emergency access during daily operations or during events. No mitigation measures are required.

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<sup>37</sup> Street Design Advisory Team (SDAT) meeting, October 23, 2017.

**Impact TR-3: The proposed project would not substantially delay public transit. (Less than Significant)**

Construction of the proposed project would not substantially delay transit because it would not require relocation of any existing bus stops, and it would not close any roadway travel lanes that buses would use. During project operations, the proposed project would also not result in relocation or removal of any existing bus stops or other changes that would alter transit service. Although the proposed project would implement streetscape changes along the adjacent segment of Merchant Street, these changes would have no effect on transit operations because there are no transit services along Merchant Street. In addition, although the proposed project would add traffic to surrounding roadways, project and event-generated vehicle traffic would not substantially affect transit operations on nearby routes. In particular, although three of the four street segments bounding the block containing the project site (Clay Street, Battery Street, and Sansome Street) serve important roles as corridors for local and regional transit services, the proposed project would generate only a modest increase in vehicle traffic along these streets compared with existing traffic levels.

Although the proposed project would establish a new passenger loading zone along Battery Street, this specific segment of Battery Street is not a major corridor for transit services, outside of its use by inbound Golden Gate Transit commuter buses during the weekday a.m. peak period. As a result, use of the passenger loading zone is not expected to result in substantial delay for transit operations.

For these reasons, the proposed project would result in a *less-than-significant* impact related to transit.

**Impact TR-4: The proposed project would not cause substantial additional vehicle miles traveled or substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or adding new roadways to the network. (Less than Significant)****Vehicle Miles Traveled Analysis – Residential and Tourist Hotel**

As discussed above and shown in **Table E5-1**, p. E5-5, existing average daily VMT per capita for TAZ 804 is less than the corresponding Bay Area regional averages minus 15 percent. For residential uses, existing average daily household VMT per capita in TAZ 804 is 2.5, which is 86 percent below the existing regional average daily household VMT per capita of 17.2. For retail uses, existing average daily work-related VMT per employee in TAZ 804 is 8.7, which is 42 percent below the existing regional average daily work-related VMT per employee of 14.9.

Given that the project site is in an area where VMT is less than the corresponding regional averages minus 15 percent for all proposed land uses, the proposed project would meet the map-based

screening criteria and would not cause substantial additional VMT.<sup>38</sup> The impact would be *less than significant*.

### **Induced Automobile Travel**

The proposed project is not a transportation project, but it would include transportation features such as pedestrian-safety and traffic-calming improvements along Merchant Street (e.g., widened sidewalks, raised crosswalks, and new or reconstructed ADA-compliant curb ramps). Therefore, the proposed project would qualify as an “active transportation, rightsizing (a.k.a. road diet), and transit project.” The proposed project would remove and/or reconfigure on-street parking and loading, establish a new on-street passenger loading zone, and reconstruct/replace an existing sidewalk along the south side of Merchant Street. Therefore, the project would qualify as an “other minor transportation project.” The project would not substantially induce automobile travel, and impacts would be *less than significant*.

### **Conclusion**

For the reasons outlined above, the project would not cause a substantial increase in VMT. The impact from overall induced automobile demand would be *less than significant*.

**Impact TR-5: The proposed project would not result in a loading deficit, the secondary effects of which would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit. (Less than Significant)**

### **Freight Loading and Service Vehicles**

The proposed project would generate a demand for up to two freight loading spaces during the average hour and up to three freight loading spaces during the peak hour. The project proposes one off-street freight loading space in Basement Level 3, accessed from the car elevator on Merchant Street. Given that each delivery is expected to last for only an average of 15 to 20 minutes, it is likely that the loading demand would be fully accommodated within the loading dock. The majority of daily service vehicle activity associated with hotel uses and retail uses typically consists of smaller vehicle types, such as light trucks and panel vans. Because of their size, these vehicles would have the option of using on- or off-street parking spaces in the vicinity of the project site and would not be restricted to using the proposed freight loading dock, particularly if it were already occupied. As described above, event-related freight loading/service-vehicle demand varies substantially from one event to the next; however, such demand is not expected to require dedicated accommodations, outside the single off-street freight loading space that is already proposed by the project.

Although the project’s proposed streetscape changes along Merchant Street and the passenger loading zone along Battery Street would result in the loss of 10 existing on-street yellow spaces,

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<sup>38</sup> San Francisco Planning Department, *Eligibility Checklist for CEQA Section 21099: Modernization of Transportation Analysis*, 447 Battery Street, October 14, 2019.

remaining on-street parking and commercial loading spaces<sup>39</sup> in the vicinity of the project site would most likely have adequate capacity to accommodate both the displaced demand from these spaces and any project-generated demand that would not be accommodated by the proposed off-street freight loading dock. Current utilization of these spaces, which are used mostly for unpermitted activities, such as TNC passenger pickup/drop-off and general parking, is low. Given these considerations, the proposed project would not result in a deficit with respect to freight loading/service vehicle accommodations. Because there would be no loading deficit, no secondary effects that would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit would result. Overall, proposed project design features related to freight loading/service vehicles and project-generated freight loading/service vehicle activities would result in *less-than-significant* impacts on traffic, transit, and bicycle and pedestrian circulation.

Regarding potential loading impacts from the freight loading dock, traffic volumes, and vehicle speeds along Merchant Street—a narrow mid-block alley with one-way (westbound) traffic circulation, with no through access at either Battery Street or Sansome Street—are low and would continue to remain low with project implementation. The proposed streetscape changes along Merchant Street, including sidewalk widening (and removal of adjacent curb) on the north side of the street, raised crosswalks at either end of the street, and special pavement treatments, would reinforce the low vehicle and bicyclist volumes and maintain the low speeds currently found on Merchant Street. Vehicles moving in and out of the vehicle/freight elevator would be operated by professional drivers who would take extra precautions to avoid bicyclists and pedestrians when entering and exiting. Furthermore, as previously discussed, the majority of hotel and retail service vehicle activity consists of smaller vehicles, such as light trucks and panel vans. In general, these smaller service vehicles would have the option of using on- or off-street parking spaces in the vicinity of the project site and would not be restricted to using the proposed freight loading dock, particularly if the dock were already occupied. Given these considerations, the proposed freight loading dock would not interfere with bicycle or pedestrian accessibility to and from the site or adjoining areas or create potentially hazardous conditions for bicyclists, pedestrians, or motorists or for transit operations. Therefore, impacts of the proposed project related to freight loading and service vehicles would be *less than significant*.

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<sup>39</sup> As described in further detail in Section 4.4.1.2 of the *447 Battery Street Transportation Impact Study* (November 7, 2019) there would still be at least 11 on-street commercial loading spaces within a one-block radius of the project site, even after implementation of the project's proposed streetscape changes. These include five spaces along the west side of Battery Street (one adjacent to the 423 Washington Street building and four adjacent to the 425 Battery Street building), five spaces along the west side of Sansome Street (adjacent to the 505 Sansome Street building), and one space along the north side of Clay Street (adjacent to the 432 Clay Street building).

Although the proposed project is not expected to cause significant impacts, the improvement measure below would be implemented to further minimize any secondary (but less-than-significant) effects as a result of project-generated freight loading/service vehicle activities.

**I-TR-5a. Management of Freight Loading/Service Vehicle Activities.** The project sponsor should ensure that building management deploys attendants during all vehicle movements into or out of the project's off-street freight loading dock on Merchant Street. The attendant's primary duties would include ensuring that movements occur without negatively affecting the safety of motorists, bicyclists, and pedestrians and minimizing any disruptions to traffic, bicycle, and pedestrian circulation. The attendant would be responsible for ensuring that no conflicts with bicyclists, pedestrians, or motorists would occur before the freight loading/service vehicle operator begins his or her movement into or out of the elevator. While the vehicle is maneuvering into or out of the space, the attendant would also be responsible for guiding the vehicle into or out of the elevator; this includes providing instructions or guidance to the vehicle operator and holding any arriving bicyclists, pedestrians, and motorists until it is safe for them to pass. The project sponsor should also ensure that tenants report any expected use of the off-street freight loading dock to building management and that building management coordinates such activities to maximize use of the off-street dock (in lieu of disruptive alternatives such as double parking on the street) to the extent feasible and minimize any scheduling conflicts.

### **Passenger Loading**

The project proposes to establish a new passenger loading zone along the entire Battery Street frontage of the project site (approximately 74 feet in length), subject to approval from the SFMTA. Based on the proposed dimensions, the zone would be capable of accommodating approximately three or four vehicles at any one time.

The project would generate a peak passenger loading demand of approximately 2.0 vehicles per minute under regular (non-event conditions) and up to an additional 1.6 vehicles per minute under event conditions. Conservatively assuming a "worst case" scenario, whereby regular and event-related passenger loading demand peak concurrently, the proposed project would generate a total passenger loading demand of approximately 3.6 vehicles per minute (i.e., three or four vehicles each minute). Therefore, the project would have the capacity to accommodate the estimated peak passenger loading demand, even under this "worst case" scenario.

Furthermore, although the project would not be required to provide any tour bus loading spaces, the proposed passenger loading zone would have adequate capacity for a large tour bus (approximately 40 to 45 feet in length), if necessary, with additional space remaining for an additional one or two vehicles. Given these considerations, the proposed on-street passenger loading zone would be adequate with respect to meeting the passenger loading needs of the project.

The project would not result in a deficit in passenger loading space. Because there would be no loading deficit, no secondary effects that would create potentially hazardous conditions for people walking, bicycling, or driving or substantially delay public transit would result.

Vehicles moving into or out of the proposed white zone could cause a temporary blockage in the adjacent travel lane, forcing other vehicle traffic, transit vehicles, and bicycles to slow, stop, and/or maneuver into the adjacent mixed-flow travel lane. However, these effects would generally not be substantially worse than the effects associated with on-street parking spaces where high turnover occurs (although the zone would generally be expected to attract more vehicle traffic). Vehicles entering moving into or out of the proposed white zone would be operated by professional drivers (valets) who would take extra precautions to avoid bicyclists and pedestrians when entering and exiting. Furthermore, the adjacent segment of Battery Street has three travel lanes; there would be adequate roadway capacity for vehicle traffic, transit vehicles, and bicycles that need to maneuver into the adjacent travel lane to avoid any temporary disruptions associated with queuing or double parking. In addition, the potential for increased delays for transit operations along Battery Street as a result of the proposed passenger loading zone would be marginal because Battery Street is used primarily by Golden Gate Transit commuter buses during the weekday a.m. peak period. During other times of the day on weekdays as well as weekends and holidays, there is no transit service along Battery Street in the vicinity of the project site.<sup>40</sup> Given these considerations, project design features related to passenger loading and project-generated passenger loading activities would result in *less-than-significant* impacts on traffic, transit, and bicycle and pedestrian circulation, and no secondary effects would occur. Although the proposed project is not expected to cause significant impacts, the improvement measure below would be implemented to further minimize any secondary (but less-than-significant) effects as a result of project-generated passenger loading.

**I-TR-5b: Management of Passenger Loading Activities.** It should be the responsibility of the project sponsor to ensure that project-generated passenger loading activities along Battery Street are accommodated within the confines of the proposed on-street white zone or in available on-street parking spaces. Specifically, the project sponsor should monitor passenger loading activities at the proposed zone to ensure that such activities are in compliance with the following requirements:

- Double parking, queuing, or other project-generated activities should not result in intrusions into the adjacent travel lane or obstruction of the adjacent sidewalk. Any project-generated vehicle conducting, or attempting to conduct, passenger pickup or drop-off activities should not occupy the adjacent travel lane such that traffic, transit, or bicycle circulation is inhibited, and associated

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<sup>40</sup> A limited-service Muni route (the 82X Levi Plaza Express) also travels along Battery Street during the weekday PM peak period; buses on this route would be traveling in the left-most lane on the segment of Battery Street adjacent to the project site in order to make a left turn onto Clay Street and generally not be affected by any queuing or double parking at or near the proposed passenger loading zone.

passenger and pedestrian activity should not occupy the adjacent sidewalk such that pedestrian circulation is inhibited.

- Project-generated activities should not result in a vehicle queue, defined as one or more vehicles blocking any portion of any public right-of-way for a combined period of 15 minutes a day for at least three days a week observed during a one-month period.
- Should passenger loading activities at the proposed on-street passenger loading zone not be in compliance with the above requirements, the project sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or deployment of staff members to direct passenger loading activities; use of off-site parking facilities or shared parking with nearby uses; additional TDM measures, as described in the Planning Commission's TDM Program Standards; and/or limited hours for access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the department.
- If the planning director, or his or her designee, suspects that project-generated passenger loading activities in the proposed passenger loading zone are not in compliance with the above requirements, the department should notify the property owner in writing. The property owner, or his or her designated agent (such as building management), should hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant should submit a report to the department, documenting conditions. Upon review of the report, the department should determine whether or not project-generated passenger loading activities are in compliance with the above requirements and notify the property owner of the determination in writing.
- If the department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner, or his or her designated agent, should have 90 days from the date of the written determination to carry out abatement measures. If, after 90 days, the department determines that the property owner, or his or her designated agent, has been unsuccessful in ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure compliance. These restrictions should be determined by the department in coordination with the SFMTA, as deemed appropriate, based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner, or



his or her designated agent, should be responsible for relaying these restrictions to building tenants to ensure compliance.

**I-TR-5c: Event-Related Transportation Strategies.** In addition to the measures described under Improvement Measure I-TR-5b, Management of Passenger Loading Activities, other measures may be warranted to minimize any potential disruptions to traffic, transit, and bicycle and pedestrian circulation as a result of events at the project site. When booking or hosting events in the proposed hotel's function/conference spaces, the hotel operator and building management should work together with event sponsors to identify the expected transportation needs of the event and implement improvement measures to assist with event-related passenger loading. Potential measures could include (but are not limited to) the following:

- For events that may generate substantial demand for curbside passenger loading, in excess of regular (non-event) conditions, manage use of the proposed passenger loading zone to ensure that adequate space is provided to accommodate the additional vehicles while maintaining regular (non-event) use of the zone. If necessary, apply for (temporary) extended hours for the passenger loading zone through the SFMTA to accommodate event-related passenger loading. If additional space is necessary, apply for temporary signage through the SFMTA to convert on-street parking in the immediate vicinity of the project site (including on-street commercial loading zones, if not in use) into additional space for event-related passenger loading. If warranted, implement a temporary curbside valet program or deploy staff members to direct and facilitate passenger loading activities to maximize efficient use of the zone and minimize disruptions to traffic, transit, and bicycle and pedestrian circulation. If substantial passenger queuing is expected at the zone during the post-event period, encourage event attendees to wait inside the hotel lobby and avoid obstructing pedestrian circulation along the sidewalk adjacent to the zone.

Provide general transit information (e.g., directions to/from key transit hubs, routes, schedules, fares) to event sponsors and hosts (i.e., organizations or individuals renting the event space) for distribution to event attendees, and encourage attendees to take transit, bike, or walk when traveling to/from the event. If necessary, provide general information about nearby public parking facilities (e.g., maps, directions, rates, etc.) to event sponsors for distribution to event attendees. Any information should be provided to event sponsors and hosts in advance of events to ensure adequate time for dissemination to event attendees through online websites, email communications, mailings, and/or other means.

**Impact C-TR-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative transportation impacts. (Less than Significant)**

The cumulative transportation analysis incorporates data and forecasts from the SF-CHAMP travel demand forecasting model for the analysis of both VMT and transit impacts as well as the development of future traffic volume forecasts. The SF-CHAMP forecasts are derived from county-level population and employment growth estimates developed by ABAG and MTC for the nine-county Bay Area and used in MTC's regional travel demand forecasting model. The department maintains a refined dataset that allocates the county-level growth projected by ABAG and MTC for San Francisco across SF-CHAMP's finer-grained TAZ structure. The allocation specifically accounts for major land use changes in the cumulative timeframe, including community plans, major redevelopment areas, and large development projects. In addition, the cumulative analysis also considers the effects of foreseeable changes to the transportation network.

There are multiple currently active development projects in the vicinity of the project site; these are in various stages of planning, design, or construction. The majority of the active development projects in the vicinity of the project site are "small-site" developments that generally comply with existing zoning and height/bulk restrictions. Therefore, it is assumed that the SF-CHAMP forecasts adequately account for future population and employment growth in the vicinity of the project site, and no additional adjustments are necessary.

**Bicycle and Pedestrian Conditions**

As previously discussed, the proposed project would not create potentially hazardous conditions for bicyclists or pedestrians or otherwise interfere with bicycle or pedestrian accessibility to or from the site or adjoining areas. Likewise, none of the cumulative projects would create potentially hazardous conditions for bicyclists or pedestrians or otherwise interfere with bicycle or pedestrian accessibility to or from the site or adjoining areas. Although both vehicle and bicycle activity on the surrounding street network would increase under the future-year (2040) cumulative-conditions scenario as a result of the proposed project, other development projects in the vicinity, and background growth elsewhere in the city and region, changes to the transportation network would result in upgrades to the existing network of bikeway facilities and improve overall safety and access for bicyclists.

The proposed project would also not conflict with any planned or proposed improvements to bikeway facilities or affect pedestrian conditions. The project would not make physical changes along any streets, with the exception of the proposed streetscape changes along Merchant Street and the proposed passenger loading zone along Battery Street. Although the proximity of two large development proposals, that is, the proposed project and the project at 530 Sansome Street, could result in a concentrated increase in vehicle traffic in the immediate vicinity of the project site, the increased vehicle activity would be unlikely to be large enough to create

potentially hazardous conditions for bicyclists or pedestrians. In particular, both sites would involve replacement of existing active uses that already generate some level of vehicle activity, and neither site would propose a substantial amount of accessory automobile parking (the proposed project proposes approximately 24 spaces; the project at 530 Sansome Street proposes approximately 48 spaces). In addition, the two projects would have primary frontages on different streets, minimizing the potential for any combined effects on bicycle and pedestrian conditions due to increased vehicle traffic generated by the two projects. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative transportation impact on bicycle and pedestrian conditions. Accordingly, cumulative effects related to this topic would be *less than significant*.

### **Loading**

The proposed project would not conflict with any planned or proposed changes to the transportation network in a way that would result in a cumulative deficit in freight loading/service vehicle accommodations relative to the peak demand or passenger loading. In particular, the proposed project would not make physical changes along any streets, with the exception of the proposed streetscape changes along Merchant Street and proposed passenger loading zone along Battery Street. However, these changes would not preclude or inhibit any of the future proposed transportation network changes. The proximity of two large development proposals, ~~for~~ that is, the proposed project and the project at 530 Sansome Street, could result in a concentrated increase in freight loading/service vehicle demand and passenger loading demand in the immediate vicinity of the project site. However, the proposed project would not result in a deficit in freight loading/service vehicle or passenger loading accommodations, even when accounting for the loss of 10 existing on-street yellow spaces due to the streetscape changes and passenger loading zone under the proposed project.

Although the project's proposed streetscape changes along Merchant Street and passenger loading zone along Battery Street would result in the loss of approximately 10 yellow spaces, the majority of these spaces are adjacent to the project site, and any nearby uses that may be affected, including the 530 Sansome Street development, would have additional on-street commercial loading spaces available along Battery, Sansome and Merchant streets. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative loading impact. Accordingly, cumulative effects related to loading would be *less than significant*. No mitigation measures are necessary. Improvement Measures I-TR-1 through I-TR-3 would further minimize any secondary effects as a result of project-generated loading activities.

### **Emergency Vehicle Access**

Vehicle activity on the surrounding street network would increase under the future-year (2040) cumulative-conditions scenario as a result of the proposed project, other development projects

in the vicinity, and background growth elsewhere in the city and the region, although an increase in traffic levels alone would not result in inadequate emergency access. Under California Vehicle Code section 21806, non-emergency vehicles must generally yield the right-of-way to emergency vehicles. In addition, major streets in the vicinity of the project site would continue to remain wide enough to accommodate large emergency vehicles such as aerial trucks. Any streetscape changes under these plans and projects, or any future land use developments (such as the proposed project or the project at 530 Sansome Street), would be designed to applicable design standards and typically be reviewed by SFFD prior to construction to ensure adequate access for aerial trucks. Emergency vehicles would also be able to use any proposed transit-only lanes to bypass traffic congestion in mixed-flow lanes and therefore may see reduced response times when traveling through the area. Even where proposed transportation changes may result in minor effects on emergency vehicle access, these effects can generally be addressed through design treatments such as advanced stop bars, parking restrictions, or rolled/mountable curbs.

The proposed project would not conflict with any planned or proposed changes to the street network in the vicinity of the project site as part of the transportation network changes in a way that would result in cumulative impacts on emergency vehicle access. Aside from a privately owned public open space and mid-block connection between Washington Street and Merchant Street, the project at 530 Sansome Street would not propose any streetscape changes or other physical changes, such as curb cuts for automobile parking or freight or passenger loading or on-street commercial or passenger loading zones. Although the proposed project proposes a new shared parking/loading driveway on the north side of Merchant Street, as well as various streetscape changes along Merchant Street that would extend west and include the street segment adjacent to the project at 530 Sansome Street, these changes have already undergone review by SFFD and members of the Street Design Advisory Team.<sup>41</sup> Additional review by SFFD would take place prior to construction to confirm adequate access for aerial trucks, both at the project site and at the 530 Sansome Street site. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative impact on emergency vehicle access. Accordingly, cumulative effects related to emergency vehicle access would be *less than significant*. No mitigation measures are necessary.

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<sup>41</sup> Street Design Advisory Team (SDAT) meeting, October 23, 2017.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E6. NOISE.</b>					
Would the project:					
a) Generate 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generate excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not within an airport land use plan area, nor is it in the vicinity of a private airstrip. Therefore, topic 6c is not applicable and it not discussed further.

**Impact NOI-1: Construction of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity. (Less than Significant with Mitigation)**

### ***Applicable Noise Standards***

The Federal Transit Administration (FTA) has developed general assessment criteria for analyzing construction noise, which is based on the simultaneous operation of the two noisiest pieces of equipment. The general assessment criteria sets construction noise limits, as summarized in **Table E6-1**. To evaluate a reasonable worst-case scenario, the analysis assumes that the two loudest pieces of equipment would operate simultaneously at the same location.

**Table E6-1. FTA General Assessment Criteria for Construction Noise Limits**

<b>Land Use</b>	<b>One-hour <math>L_{eq}</math> (dBA)</b>	
	<b>Day</b>	<b>Night</b>
Residential	90	80
Commercial	100	100
Industrial	100	100

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Office of Planning and Environment, 2018, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf), accessed September 12, 2019.

dBA = A-weighted decibel

$L_{eq}$  = equivalent sound level

The FTA guidelines for construction noise were developed in the context of transportation projects. However, it is reasonable to use these guidelines for the project because the guidelines address noise resulting from construction equipment, regardless of the project type or context.

Noise levels associated with project-related construction activities were evaluated in accordance with FTA guidelines. Using FTA's general assessment construction noise criterion (90 A-weighted decibels [dBA] daytime eight-hour equivalent sound level [ $L_{eq}$ ]) and an increase in the ambient noise level of more than 10 dBA (a perceived doubling of loudness), the construction noise analysis evaluates noise from the two loudest pieces of equipment for each construction phase. This is a reasonable worst-case scenario of construction noise because it is unlikely that more than the two loudest pieces of equipment would operate at the same time at the same location. The project sponsor provided a list of the construction equipment that is expected to be used. Noise reference levels in the Federal Highway Administration's (FHWA's) *Road Construction Noise Model User's Guide* were used to assess noise from this equipment.<sup>42</sup>

An exceedance of the FTA and the 10 dBA-above-ambient criteria is not necessarily considered to be a significant impact because there are non-quantitative considerations, such as the frequency, intensity, and duration of construction noise, which are also determinants of whether an impact is significant. The frequency of occurrence of the activity causing an exceedance in a given day is an important aspect of noise that is evaluated for instances in which noise exceeds the FTA criteria. The intensity of exceedances during construction are discussed in the context of human hearing and the noticeability of noise increases, while construction noise duration, in conjunction with frequency and intensity, is evaluated in terms of the potential for the noise to adversely affect sensitive receptors. As such, this analysis uses both quantitative and qualitative assessments in the evaluation of construction noise impacts.

### ***Existing Noise in Project Site Vicinity***

To quantify existing ambient noise levels in the project area, three long-term (24-hour) ambient noise measurements were conducted in preparation of this analysis. For the complete dataset of measured noise levels, please refer to Appendix C.

Long-term measurements were conducted by ICF between Tuesday, August 27, and Wednesday, August 28, 2019.<sup>43</sup> Measurements were conducted at locations on or near the project site, locations that would capture representative ambient noise levels throughout the day.

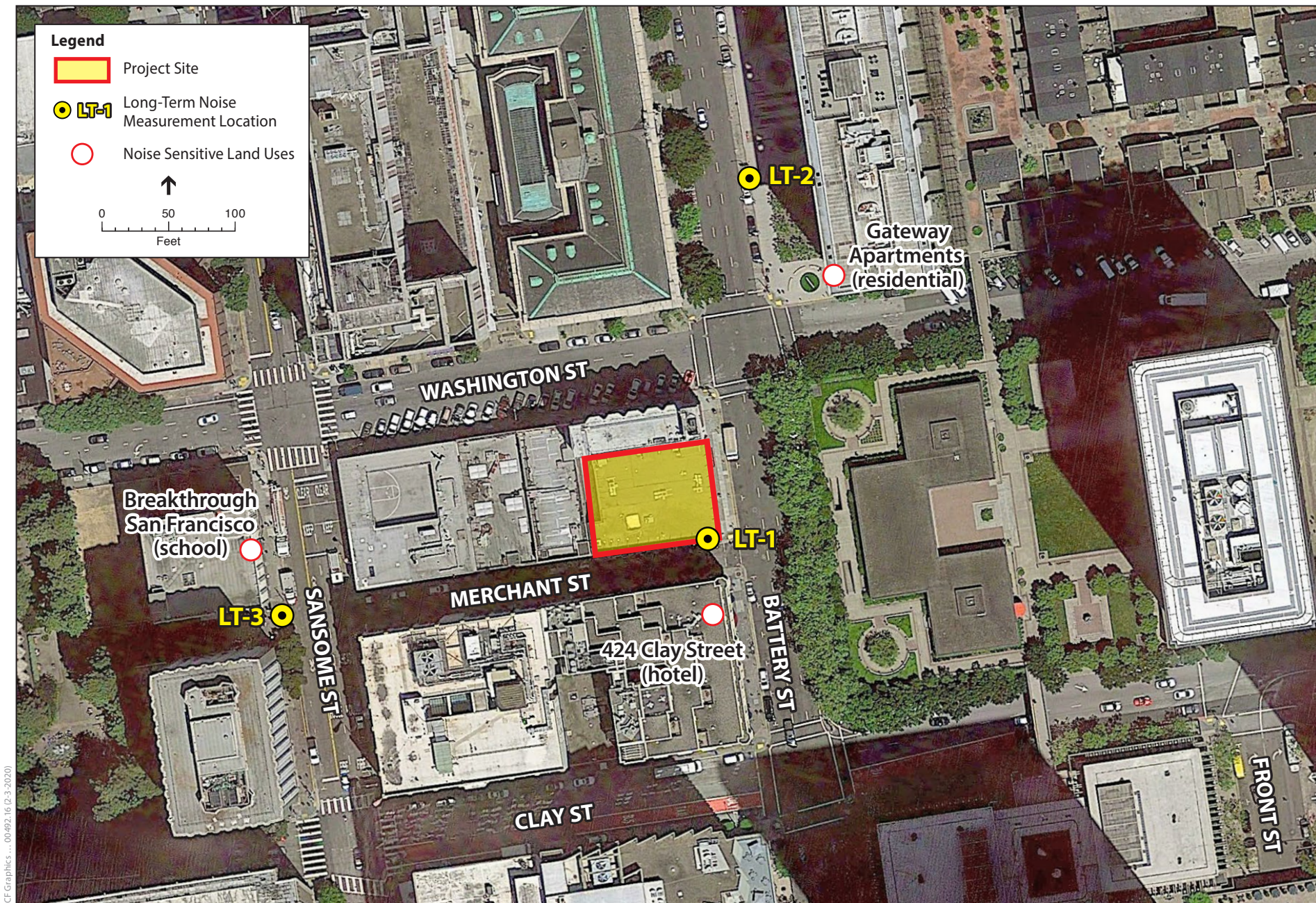
The noise measurement sites are shown in **Figure E6-1. Table E6-2**, p. E6-4, summarize the results of the noise measurement survey.

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<sup>42</sup> Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2006, Washington, D.C., [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/rcnm.pdf](http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf), accessed September 13, 2019.

<sup>43</sup> See Appendix C of the EIR for the long-term noise monitoring data.







**Table E6-2. Long-Term Noise Level Measurements Near the Project Site**

Site	Site Description	Time Period	Measured: $L_{dn}$ $L_{eq}$ (24-hour) Daytime $L_{eq}$ (13-hour $L_{eq}$ ) <sup>1</sup>	Primary Noise Sources
LT-1	Southeast corner of project site at corner of Merchant and Battery Streets, adjacent to existing hotel building.	08/27/19– 08/28/19	76.1 69.0 68.6	Traffic on Battery Street, fire department vehicles, pedestrian voices, other urban noises.
LT-2	Near 550 Battery Street, in front of the Gateway Apartments residential tower.	08/27/19– 08/28/19	75.0 71.0 72.5	Traffic on Battery Street, fire department vehicles, pedestrian voices, other urban noises.
LT-3	In front of 505 Sansome Street, across from San Francisco Fire Department fire station.	08/27/19– 08/28/19	80.9 75.0 75.6	Traffic on Sansome Street, fire department vehicles, pedestrian voices, other urban noises.

Note: See Appendix C for data.

LT = long-term (24-hour) ambient noise measurement.

<sup>1</sup> A 13-hour  $L_{eq}$  was calculated using long-term measurement data to compare construction noise levels. The San Francisco Municipal Code permits construction to occur between 7 a.m. and 8 p.m. (i.e., 13 hours); therefore, the  $L_{eq}$  noise level was calculated using hourly noise level measurement data for the hours between 7 a.m. and 8 p.m. for a direct comparison.

Existing noise levels in the project area are high and characteristic of an urban/city environment, with all long-term measurements having a day-night sound level ( $L_{dn}$ ) of 75 dBA or greater. San Francisco Fire Department Station 13 is on the same block as the project site, at 530 Sansome Street, and directly across the street from long-term noise measurement location 3. The fire station contributes frequent siren and truck noise to the ambient noise environment.

The nearest sensitive receptor to the project site is a hotel at 424 Clay Street, which has a façade that faces the project site. The nearest windows in the hotel are approximately 20 feet from the project site, across Merchant Street. In addition, an apartment building (Gateway Apartments) is approximately 150 feet northeast of the project site. Farther away from the project site (approximately 250 feet) is a school (Breakthrough Collaborative), located at 545 Sansome Street; however, there is no direct line of sight between this land use and the project site. These three noise-sensitive land uses are shown in **Figure E6-1**, p. E6-3.

The project site is in a dense urban area. Although other noise-sensitive receptors may also be affected by the project's noise impacts, the closest sensitive receptors would experience impacts that would be more severe than those experienced by receptors located at greater distances from the project site.



### ***Daytime Construction Noise Evaluation***

The daytime construction noise analysis evaluates noise from the two loudest pieces of equipment at sensitive receptor locations to determine if construction noise would exceed 90 dBA or be 10 dBA above the ambient noise level. If so, the evaluation considers the frequency, duration, and intensity of noise levels in determining whether the project would result in a significant noise impact. Analysis of construction noise relative to the FTA's commercial and industrial general assessment criterion of 100 dBA noise limit, as shown in **Table E6-1**, p. E6-1, is also considered. **Table E6-3** shows the worst-case noise levels for each major phase of construction for the proposed project. As indicated above, the worst-case noise levels assume that the two loudest pieces of equipment from each construction phase would be operating simultaneously. Detailed tables regarding noise from each construction phase are included in Appendix C.

As shown in **Table E6-3**,  $L_{eq}$  noise levels would range from 82 to 94 dBA at a distance of 25 feet and 74 to 86 dBA at a distance of 50 feet. For the loudest activities, construction noise would be above the FTA general assessment criterion of 90 dBA for sensitive residential receptors 25 feet from the project site but below the criterion of 100 dBA for commercial areas.<sup>44</sup> Although the hotel at 424 Clay Street is a commercial land use, the project's construction noise is compared against the 90 dBA criterion for residential uses because hotel occupants are similar to residential receptors in that noise could cause sleep disturbance or otherwise adversely affect those temporarily residing in the hotel. At the nearest residential receptors, at the Gateway Apartments, approximately 150 feet away, construction noise would be a maximum of 74 dBA and therefore below the 90 dBA criterion.

For the evaluation of noise impacts with respect to the 10 dBA increase above ambient noise levels, construction noise is compared to the 13-hour  $L_{eq}$ <sup>45</sup> ambient noise levels in the project area, which range from approximately 69 to 76 dBA. As discussed above, noise levels would range from 82 to 94 dBA at a distance of 25 feet and 74 to 86 dBA at a distance of 50 feet, which would

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<sup>44</sup> Although the project's property plane is 25 feet from the nearest building with sensitive receptors, there would be a buffer of space between the construction equipment and the adjacent land uses. As such, 25 feet is presumed to be the worst-case separation distance.

<sup>45</sup> A 13-hour  $L_{eq}$  was calculated using the long-term measurement data in 4.D-6 to compare to construction noise levels. article 29 of the Police Code permits construction to occur between 7 a.m. and 8 p.m. (i.e., 13 hours), so an  $L_{eq}$  noise level has been calculated using the hourly noise level measurement data between 7 a.m. and 8 p.m. for a direct comparison to the permitted construction hours.

**Table E6-3.  $L_{eq}$  Construction Noise Levels by Phase (dBA)**

Distance Between Source and Receiver (feet)	Demolition <sup>a</sup>	Site Preparation <sup>b</sup>	Grading/ Excavation <sup>c</sup>	Building Construction <sup>d</sup>	Paving <sup>e</sup>	Architectural Coating <sup>f</sup>
25	<b>92</b>	<b>91</b>	<b>91</b>	<b>91</b>	<b>94</b>	82
50	84	83	84	83	86	74
80	79	78	78	78	81	69
100	77	76	76	76	78	66
150	72	71	72	71	74	62
200	69	68	69	68	71	59
250	67	66	66	66	69	57
300	65	64	64	64	67	55
400	62	60	61	60	63	51
500	59	58	59	58	61	49
600	57	56	57	56	59	47
700	56	54	55	54	57	45
800	54	53	53	53	56	44
900	53	52	52	52	55	43
1,000	52	51	51	51	53	41

Notes:

Values shown in bold exceed the applicable FTA criterion of 90 dBA.

See Appendix C for data.

Geometric attenuation based on 6 decibels per doubling of distance. This calculation does not include the effects, if any, of local shielding.

 $L_{eq}$  noise is presented in dBA units, which approximate the frequency response of the human ear.<sup>a</sup> For this activity, the two loudest pieces of equipment are a concrete saw and dozer.<sup>b</sup> For this activity, the two loudest pieces of equipment are two tractors.<sup>c</sup> For this activity, the two loudest pieces of equipment are a grader and tractor.<sup>d</sup> For this activity, the two loudest pieces of equipment are a forklift and tractor.<sup>e</sup> For this activity, the two loudest pieces of equipment are two pavers.<sup>f</sup> For this activity, the only equipment is an air compressor.

increase background noise levels by more than 10 dBA. A worst-case scenario would occur if a sensitive receptor near measurement site LT-1 from **Table E6-2**, p. E6-4, (where the 13-hour  $L_{eq}$  is 68.6) and 25 feet from the proposed project (i.e., the hotel at 424 Clay Street) were to be exposed to a construction  $L_{eq}$  of 94 dBA. This scenario would result in an increase of 25 decibels (dB) in exterior noise levels.

At the nearest residential building, the Gateway Apartments, approximately 150 feet from the project site, the ambient noise level is represented by measurement LT-2 from **Table E6-2**, p. E6-4. At this location, the 13-hour  $L_{eq}$  ambient noise level is 72.5. At that distance, the loudest construction activity at the project site would be 74 dBA, which would not cause a 10 dBA increase

in ambient noise levels at the apartment building. In addition to the use of heavy-duty equipment, construction of the proposed project would require the use of on-road vehicles to deliver and haul away materials and move construction workers to and from the site. Construction would last approximately 31 months. During that time, an average of approximately 12 trucks per day would be expected to travel to the site, in addition to a maximum of 57 construction workers per day. As shown in **Table E6-5**, p. E6-13, traffic volumes on all roadways during the peak hour total at least 455 vehicles. Because the total daily number of construction-related trips would be relatively small compared with existing traffic volumes, there would be no substantial increase in noise from construction traffic.

Although noise from project construction activities would be above 90 dBA at the hotel at 424 Clay Street, the amount of time that the noise would exceed this level at a sensitive receptor is not anticipated to be excessive because the two loudest equipment pieces would not frequently operate simultaneously within 25 feet of a sensitive receptor. The worst-case distance of 25 feet (or nearest distance analyzed) would occur only when construction activity is conducted at the southernmost perimeter of the site because, even for the loudest activity (paving), noise levels would drop to 90 dBA  $L_{eq}$  at a distance of 35 feet. As such, the worst-case scenario would be expected to occur only in instances when construction equipment is operating at the southernmost boundary of the site. Although the exact duration of this worst-case scenario for daytime construction noise impacts cannot be determined with certainty, it is reasonably anticipated to occur for less than two weeks at any single sensitive receptor and, therefore, would not be prolonged or excessive. Furthermore, although the two loudest equipment pieces could operate simultaneously at any single location, potentially for up to two weeks, this does not mean that equipment operations would occur uninterrupted for two weeks. In addition, any noise exposure for hotel guests would be limited by the fact that hotel guests are transitory, and the exposure would be even shorter than a permanent resident located the same distance from the project site. Given these considerations, noise from construction activities would not be significant with respect to the FTA general assessment criterion of 90 dBA for residences or 100 dBA for commercial areas.

As shown in **Table E6-3**, p. E6-6, noise for most construction activities would be between 78 and 79 dBA at a distance of 80 feet and 78 dBA for paving, the loudest activity, at a distance of 100 feet. Therefore, nearly all activities would result in noise levels that would be 10 dBA or more above the existing noise levels near LT-2 (68.6 dBA). Although the duration for the worst-case scenario (i.e., as close as 25 feet from the nearest sensitive receptor) would probably be short, less than two weeks, sensitive receptors at distances up to 100 feet from construction activity could nevertheless be exposed to a noise increase of 10 dBA or more. The frequency of the worst-case noise increase would be periodic on any given day of construction activity because simultaneous operation of the two loudest pieces of equipment would not be required for the whole workday. However, the worst-case scenario could occur several times throughout the day, which nearby sensitive receptors may find disturbing, considering the magnitude of the increase. Consequently, sensitive receptors

within 100 feet of construction activity could be exposed to a substantial noise increase, greater than 10 dBA, for a duration that could be considered excessive.

Because unmitigated construction noise could be as much as 25 dBA greater than ambient noise levels, representing a substantial increase, the proposed project would result in temporary or periodic construction noise that would be substantially above ambient noise levels. This impact is therefore considered to be *significant*.

Implementation of Mitigation Measure M-NOI-1, Construction Noise Control, would reduce daytime construction noise resulting from the proposed project. Components of the construction noise control plan would be implemented to reduce construction noise and its effect on nearby sensitive land uses by requiring measures to control noise and preparation of a noise control plan in response to noise complaints from nearby residents. Measures in the noise control plan would reduce quantitative increases in noise through direct mitigation related to equipment noise, such as measures to ensure that equipment is maintained in a manner that reduces noise, and through the use of improved mufflers, engine enclosures, and acoustically attenuating shields.

**M-NOI-1: Construction Noise Control.** The project sponsor shall develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant to ensure that maximum feasible noise attenuation shall be achieved for the duration of construction activities. Prior to commencement of demolition and construction activities, the project sponsor shall submit the construction noise control plan to the department for review and approval. Noise attenuation measures shall be implemented to meet a goal of not increasing noise levels from construction activities by more than 10 dBA above the ambient noise level at sensitive receptor locations. Noise measures may include, but are not limited to, those listed below.

- Require that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Prohibit gasoline or diesel engines from having unmuffled exhaust systems.
- Ensure that equipment and trucks for project construction use the best available noise control techniques (e.g., improved mufflers, redesigned equipment, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds) wherever feasible. According to FHWA, the use of shields or barriers around noise sources can reduce noise by 5 to 10 dBA, depending on the type of barrier used.
- Use “quiet” gasoline-powered or electrically powered compressors as well as electric rather than gasoline- or diesel-powered forklifts for small lifting, where feasible.

- Locate stationary noise sources, such as temporary generators, concrete saws, and crushing/processing equipment, as far from nearby receptors as possible; muffle and enclose noise sources within temporary enclosures and shield with barriers, which reduces construction noise by as much as 5 dB; or implement other measures, to the extent feasible.
- Undertake the noisiest activities during times of least disturbance to surrounding residents and occupants, such as midday or early afternoon when residents are more likely to be at work and less likely to be sleeping, as feasible.
- In response to noise complaints received from people in the project area, monitor the effectiveness of noise attenuation measures by taking noise measurements. A plan for noise monitoring shall be provided to the City for review prior to the commencement of each construction phase.

The construction noise control plan must include the following measures for responding to and tracking complaints pertaining to construction noise:

- A procedure and phone numbers for notifying the Department of Building Inspection, health department, or the police department of complaints (during regular construction hours and off hours).
- A sign posted onsite describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction.
- Designation of an onsite construction complaint and enforcement manager for the project.
- A plan for notification of neighboring residents and nonresidential building managers within 300 feet of the project construction area at least 30 days in advance of activities that could increase daytime ambient noise levels at sensitive receptor locations by 10 dBA or more. The notification must include the associated control measures that will be implemented to reduce noise levels.

This measure would serve to mitigate impacts from noise increases at the locations of sensitive receptors; however, it is possible that construction could still cause increases in noise that would be greater than 10 dBA. These increases would occur under a worst-case scenario, which would involve simultaneous operation of the two loudest pieces of equipment. This is a conservative assessment of noise impacts because the two loudest pieces of equipment would not frequently operate at the same time and at the same location. Therefore, with implementation of Mitigation Measure M-NOI-1, the impact from daytime project construction would be *less than significant with mitigation*.

### **Nighttime Construction Noise Evaluation**

The majority of construction activity is expected to occur during daytime hours; however, limited construction activities could occur outside of the permitted hours of 7 a.m. to 8 p.m. and as late as 11 p.m. on some occasions. Night construction work is not anticipated to be represented by the two loudest pieces of equipment operating simultaneously (i.e., a worst-case scenario). Nighttime construction activities would include concrete pours and concrete finishing, as well as raising the crane, during the building construction phase. During the periods when nighttime construction work would be required, the activities would be less intensive relative to the daytime construction activities. For instance, concrete pours would involve the use of concrete mixer trucks and concrete pump trucks, which have maximum sound levels ( $L_{\max}$ ) values of 81 and 79 dBA, respectively.<sup>46</sup> **Table E6-4** shows what the combined noise levels would be from simultaneous operation of the concrete mixer and concrete pump trucks, representative of the worst-case nighttime construction activities that would occur.

As shown in **Table E6-4**, exterior noise levels from nighttime construction would exceed 70 dBA within 100 feet from the project site. With exterior noise greater than 70 dBA, indoor noise could exceed 45 dBA<sup>47</sup>, which is the generally accepted interior noise level required to prevent sleep disturbance.<sup>48</sup> Consequently, sensitive receptors within about 100 feet of the project site could be exposed to nighttime noise that would result in sleep disturbance. This impact is therefore considered to be *significant*.

Implementation of Mitigation Measure M-NOI-1, Construction Noise Control, would reduce nighttime construction resulting from the proposed project. As discussed under Daytime Construction Noise Evaluation, components of the construction noise control plan would be implemented to reduce construction noise and its effect on nearby sensitive land uses by requiring measures to control noise and preparation of a noise control plan in response to noise complaints from nearby residents. As an example of a potential measure, during concrete pours, the construction contractor could set up temporary barriers around the concrete mixer trucks or pumps to attenuate noise when the equipment is within 100 feet of sensitive receptors or otherwise causing exterior or interior noise levels to exceed 70 dBA and 45 dBA, respectively.

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<sup>46</sup> Federal Highway Administration, *Roadway Construction Noise Model User's Guide*, January 2006, Washington, D.C., [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/rcnm/rcnm.pdf](http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf), September 13, 2019.

<sup>47</sup> Assuming a 25 dB attenuation from the building shell ( $70 - 25 = 45$  dBA).

<sup>48</sup> World Health Organization, *Guidelines for Community Noise*, 1999, <https://www.who.int/docstore/peh/noise/guidelines2.html>, accessed November 11, 2019.

**Table E6-4.  $L_{eq}$  Night Construction Noise Levels (dBA)**

<b>Distance Between Source and Receiver (feet)</b>	<b>Calculated <math>L_{eq}</math> Sound Level<sup>a</sup></b>
25	85
50	78
80	72
100	70
150	66
200	63
250	60
300	58
400	55
500	53
600	51
700	49
800	47
900	46
1,000	45

Notes:

See Appendix C for data.

Geometric attenuation based on 6 dB per doubling of distance. This calculation does not include the effects, if any, of local shielding.

$L_{eq}$  noise is presented in dBA units, which approximate the frequency response of the human ear.

<sup>a</sup> Assumes concurrent operation of a concrete mixer truck and a concrete pump truck.

In addition, nighttime work would require a special permit from the director of Public Works or the director of the Department of Building Inspection for noise that would exceed the ambient noise level by 5 dBA at the nearest property plane. The project applicant would need to comply with all requirements to engage in nighttime construction work; therefore, nighttime noise would be subject to the limits of the permit that is granted. Implementation of Mitigation Measure M-NOI-1 would reduce the impact to *less than significant with mitigation*.

**Impact NOI-2: Operation of the proposed project would not generate substantial temporary or periodic increases in ambient noise levels in the project vicinity. (Less than Significant)*****Applicable Noise Standards***

Section 2909 of the City's noise ordinance, enforced by the San Francisco Department of Public Health during the day and the police department during the night, limits stationary-source noise and generally prohibits noise levels from any machine, device, or music or entertainment venue (or any combination) as follows:

- a. For residential properties, no more than 5 dBA above the local ambient noise level, as measured at any point outside the property plane;
- b. For commercial and industrial properties, no more than 8 dBA above the local ambient noise level, as measured at any point outside the property plane; and
- c. For public property, no more than 10 dBA above the local ambient noise level at a distance of 25 feet or more from the noise source (unless the noise source is being operated to serve or maintain the property or as otherwise provided in the noise ordinance).

The criteria provided in section 2909(a)–(c) are limits for the specified locations (e.g., the property plane or, for public properties, 25 feet from the noise source) and do not refer to a receptor. Section 2909(d) establishes maximum noise levels for fixed sources (e.g., mechanical equipment) at sensitive receptors (i.e., 55 dBA 7 a.m. to 10 p.m. and 45 dBA 10 p.m. to 7 a.m.) inside any sleeping or living room in any dwelling unit on residential property to prevent sleep disturbance with windows open, except where building ventilation is achieved through mechanical systems that allow windows to remain closed.

The noise ordinance contains additional limits for specific types of noise sources, such as trash compactors. For more information, see article 29 of the San Francisco Police Code, Regulation of Noise, Guidelines for Noise Control Ordinance Monitoring and Enforcement.<sup>49</sup>

***Project-Induced Traffic Noise***

As described above, the existing noise environment in the project area is governed primarily by vehicle traffic. With respect to on-road vehicle traffic, the proposed project would result in an increase in traffic noise relative to existing traffic noise levels because there would be a net increase in the number of vehicle trips to and from the project site. Of the 16 roadway segments included in the transportation impact study prepared for the proposed project, there are 11 roadway segments where traffic volumes would increase; as a result, traffic noise could increase on those streets (see

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<sup>49</sup> San Francisco Department of Public Health, *San Francisco Police Code Article 29: Regulation of Noise, Guidelines for Noise Control Ordinance Monitoring and Enforcement*, December 2014, <https://www.sfdph.org/dph/files/EHSdocs/ehsNoise/GuidelinesNoiseEnforcement.pdf>, accessed September 12, 2019.



**Table E6-5).** On the five other roadway segments, traffic volumes would be unchanged relative to existing conditions.

A doubling in traffic volumes would result in a 3 dBA change in the noise level, which is barely noticeable to the human ear. Therefore, any increase in traffic that would be less than a doubling in volumes would not be noticeable to existing sensitive receptors in the project vicinity. As shown in **Table E6-5**, the proposed project would result in an increase in traffic noise on 11 of the 16 analyzed roadways, up to 8 percent greater than existing traffic volumes. An 8 percent increase is well below the doubling of traffic volumes needed to produce a barely noticeable change in traffic noise (i.e., a doubling of traffic volumes, or a 100 percent increase). Consequently, increased traffic on these 11 roadways would not result in a substantial increase in noise. Therefore, this impact would be *less than significant*.

**Table E6-5. Traffic Volume Increases Associated with Proposed Project**

Roadway Segment	Peak-Hour Traffic Volumes		
	Existing p.m. Peak-Hour Volumes	Proposed Project p.m. Peak-Hour Volumes	Percentage Increase from Proposed Project
Battery Street north of Washington Street	916	966	5%
Battery Street south of Washington Street	913	969	6%
Washington Street west of Battery Street	464	464	—
Washington Street east of Battery Street	461	467	1%
Battery Street north of Clay Street	874	941	8%
Battery Street south of Clay Street	697	750	8%
Clay Street west of Battery Street	623	623	—
Clay Street east of Battery Street	800	814	2%
Sansome Street north of Washington Street	622	659	6%
Sansome Street south of Washington Street	717	764	7%
Washington Street west of Sansome Street	520	530	2%
Washington Street east of Sansome Street	455	455	—
Sansome Street north of Clay Street	726	743	2%
Sansome Street south of Clay Street	704	721	2%
Clay Street west of Sansome Street	735	735	—
Clay Street east of Sansome Street	633	633	—

Source: AECOM, *447 Battery Street Transportation Impact Study*, November 7, 2019.

Notes: See Appendix C for data.

### ***Fixed Mechanical Equipment Noise***

Stationary mechanical equipment at the project site, including building equipment, would contribute to the ambient noise environment. The proposed project would introduce new stationary noise sources, including HVAC equipment, exhaust fans, a chiller, trash compactors, an elevator motor and controls, a fuel pump, an emergency generator, and a car elevator. The trash compactor and potentially<sup>50</sup> the chiller or generator would be located within the basement levels of the building and therefore entirely enclosed by the building shell. Being subterranean, it would be further shielded by its distance from the ground surface. The car elevator would be mostly contained within the building shell, except for the opening at the vehicle entrance on Merchant Street. The machinery that would generate noise at the car elevator would be attenuated by the building shell; therefore, any noise that travels through the car elevator entrance would most likely be minor. Other stationary sources of noise would be located in the mechanical penthouse at the top of the building, including the cooling tower, elevator motor and controls, fuel pump, exhaust vents, and, potentially, the chiller or generator.<sup>7</sup> All equipment in the mechanical penthouse would be shielded by the shell of the penthouse, which would attenuate noise and avoid disturbances for hotel guests. The emergency generator, if located in the mechanical penthouse, would be contained within its own separate room. Exhaust gas from all equipment would be directed into one output duct; the corresponding exhaust fan would be housed in a shielded enclosure to reduce noise.

Operation of all stationary equipment at the project site would be subject to section 2909(b) of the noise ordinance, which limits noise produced at commercial and industrial properties to no more than 8 dBA above the local ambient condition at any point outside the property plane. In addition, stationary operational noise would be limited by section 2909(d) of the noise ordinance, which provides that noise from stationary equipment at residential interiors cannot exceed 55 dBA during daytime hours (7 a.m. to 10 p.m.) and 45 dBA during nighttime hours (10 p.m. to 7 a.m.).

Although the exact noise levels from stationary equipment cannot be quantified at this time, some of the louder equipment, such as heating, ventilation, and air-conditioning (HVAC) equipment and exhaust fans, can produce sound levels in the range of 70 to 75 dBA at 50 feet, depending on the size of the unit.<sup>51</sup> All equipment would either be located in the mechanical penthouse at the top of the building or in the basement and therefore would be shielded.

As shown in **Table E6-2**, p. E6-4, the 24-hour noise levels (i.e.,  $L_{dn}$ ) at all three measurement sites in the project area are between 75 and 81 dBA. Therefore, based on the higher end of the range for typical HVAC equipment, 75 dBA, operation of the proposed project's HVAC equipment would not produce noise greater than 8 dBA at any point outside the property plane at ground level, which is where the measurements were taken. However, as previously discussed, the proposed project's HVAC

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<sup>50</sup> Either the emergency generator or the chiller would be located in the basement. Whatever equipment is not located in the basement would be located in the mechanical penthouse.

<sup>51</sup> Hoover and Keith, *Noise Control for Buildings, Manufacturing Plants, Equipment, and Products*, 2000, Houston, TX.

equipment would be located in the mechanical penthouse at the top of the building. The adjacent commercial building to the north at 423 Washington Street (seven stories), the hotel to the south at 424 Clay Street (11 stories), and the commercial building to the west at 425 Washington Street (three stories) are mid- or low-rise buildings; therefore, there would be a substantial vertical distance between the proposed project's mechanical penthouse (above the 19<sup>th</sup> story) and the top floors of the adjacent buildings. As described above, all mechanical equipment would be shielded to prevent disturbances for future hotel guests; as such, the typical noise level for HVAC equipment, 75 dBA, would be attenuated by the equipment shielding and enclosures. Further attenuation would also occur in the vertical distance between the mechanical penthouse and the nearest upper floors on existing buildings. With respect to section 2909(d), the stationary equipment would have to operate at a noise level of 80 dBA during the day and 70 dBA during the night to exceed the interior noise levels of 55 and 45 dBA, respectively.<sup>52</sup> Because the upper estimate of noise from typical HVAC equipment is 75 dBA, it is probable that the equipment shielding and enclosures, as well as the vertical separation, would be enough to attenuate the noise to below 70 dBA and, therefore, to below the interior noise limits specified by section 2909(d).

Because all stationary equipment would be shielded and there would be substantial vertical distance between the project's stationary equipment and existing uses, it is not likely that stationary equipment noise would cause noticeable violations of section 2909(b) or section 2909(d). Similarly, mechanical equipment located in the basement levels would be shielded and therefore also not cause any violation of section 2909(b) or section 2909(d). The proposed project would not result in a significant permanent increase in ambient noise levels. This impact would be *less than significant*, and mitigation measures would not be required.

**Impact NOI-3: Construction and operation of the proposed project would not generate excessive ground-borne vibration or ground-borne noise levels. (Less than Significant)**

Ground-borne vibration, which occurs during construction activities, can result in effects ranging from annoyance for people to structural damage for buildings. The main concerns associated with construction-generated vibration include sleep disturbance, building damage, and interference with vibration-sensitive instruments or machinery, such as that used in research laboratories or hospitals.

The most substantial ground-borne vibration is generated by impact construction equipment, which makes forceful, repeated contact with the ground surface. The proposed project would not involve the use of any impact equipment; however, construction would nevertheless require the use of heavy equipment that could generate temporary ground-borne vibration, such as bulldozers or loaded trucks. The proposed project would not require the use of impact pile driving; the

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<sup>52</sup> Assuming a 25 dB attenuation from the building shell.

foundations for project building would very likely require drilled piles, which do not require the use of impact equipment.

Construction-related vibration impacts depend on the proximity of construction activities to sensitive receptors, the presence of intervening barriers, the number of pieces of construction equipment and the types, and the duration of use. The attenuation of ground-borne vibration depends on the underlying condition of the soil. The proposed project would use heavy-duty equipment, such as a large bulldozer, that could generate ground-borne vibration levels of 0.089 inch per second at 25 feet and 0.0315 inch per second at 50 feet. As shown in **Table E6-6**, a large bulldozer would result in the greatest amount of vibration, based on equipment vibration reference levels published by the FTA. Based on the California Department of Transportation's (Caltrans') guidelines for vibration annoyance potential, as shown in **Table E6-7**, this level of vibration would be distinctly perceptible at 25 feet and barely perceptible at 50 feet.

### ***Sleep Disturbance***

Ground-borne vibration could be considered significant if it were to result in sleep disturbances at sensitive receptors near the project site. A reasonable assumption for the amount of vibration needed to induce sleep disturbance is vibration that is considered to be strongly perceptible, the generally acceptable standard of which is 0.10 inch per second for continuous, frequent intermittent sources (see **Table E6-6**). As indicated above, even at extremely close distances to sensitive receptors (i.e., 25 feet), the ground-borne vibration from a large bulldozer would be 0.089 inch per second, which is below the generally acceptable standard of what is considered to be strongly perceptible vibration (0.10 inch per second). Consequently, it is unlikely that any sensitive receptors near the project site would be exposed to strongly perceptible ground-borne vibration from construction equipment for any appreciable amount of time. For these reasons, construction activities would not result in vibration at levels that would disturb sleep. This impact would be *less than significant*, and mitigation measures are not required.

**Table E6-6. Vibration Levels for Construction Equipment**

<b>Equipment</b>	<b>PPV (and VdB) at 25 Feet</b>	<b>PPV (and VdB) at 50 Feet</b>	<b>PPV (and VdB) at 75 Feet</b>	<b>PPV (and VdB) at 100 Feet</b>	<b>PPV (and VdB) at 175 Feet</b>
Large bulldozer	0.089 (87)	0.0315 (78)	0.0171 (73)	0.0111 (69)	0.0048 (62)
Loaded trucks	0.076 (86)	0.0269 (77)	0.0146 (72)	0.0095 (68)	0.0041(61)
Jackhammer	0.035 (79)	0.0124 (70)	0.0067 (65)	0.0044 (61)	0.0019 (54)
Small bulldozer	0.003 (58)	0.0011 (49)	0.0006 (44)	0.0004 (40)	0.0002 (33)

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, Office of Planning and Environment, 2018, [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf), accessed September 12, 2019.

PPV = peak particle velocity; VdB = vibration decibel level

**Table E6-7. Caltrans Guidelines for Vibration Annoyance Potential**

Human Response	Maximum PPV (inch per second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, Table 20, September 2013, [http://www.dot.ca.gov/hq/env/noise/pub/TCVGM\\_Sep13\\_FINAL.pdf](http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf), accessed September 12, 2019.

Note: Transient sources create a single, isolated vibration event (e.g., blasting or the use of drop balls).

Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

### **Building Damage**

With respect to structural damage, at 25 feet, ground-borne vibration from construction could exceed the building damage threshold of 0.08 inch per second for extremely fragile historic buildings but would not exceed the damage threshold for any other building types, as shown in **Table E6-8**. The project would not involve the use of any impact equipment but would use other equipment, including bulldozers and loaded trucks, that would also be capable of causing damage to some buildings. Based on consultation with the department, it has been determined that no buildings within the city meet the criteria for extremely fragile historic buildings because most buildings have either been constructed to meet modern building codes or have been required to undergo structural reinforcement. As such, no buildings in the project area are characterized as extremely fragile historic buildings. Because no building damage thresholds would be exceeded, construction activity would not result in structural damage to any surrounding buildings. This impact would be *less than significant*, and mitigation measures are not required.

**Table E6-8. Caltrans Vibration Guidelines for Potential Damage to Structures**

Structure Type and Condition	Maximum Peak Particle Velocity (PPV, inch per second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3

Structure Type and Condition	Maximum Peak Particle Velocity (PPV, inch per second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, Table 19, September 2013, [http://www.dot.ca.gov/hq/env/noise/pub/TCVGM\\_Sep13\\_FINAL.pdf](http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf), accessed: September 12, 2019.

Note: Transient sources create a single, isolated vibration event (e.g., blasting or the use of drop balls).

Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

### ***Vibration-Sensitive Equipment***

There are no hospitals near the project site that may contain vibration-sensitive equipment, such as magnetic resonance imaging equipment or high-resolution lithographic, optical, or electron microscopes. As such, the project would not cause vibration that would affect vibration-sensitive equipment.

**Impact C-NOI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative noise and vibration impacts. (Less than Significant with Mitigation)**

### ***Construction Noise***

Construction activities in the vicinity of the project site, such as excavation, grading, or construction of other buildings in the area, would occur on a temporary and intermittent basis. Project construction-related noise would not substantially increase ambient noise levels at locations greater than a few hundred feet from the project site. Other than renovation projects, there is one development project, 530 Sansome Street, that is close enough (within 500 feet) to combine with the noise created during construction of the proposed project to result in a cumulative construction noise impact. The cumulative project at 530 Sansome Street would be on the same block as and adjacent to the western property line of the proposed project and would also be a hotel. At the ground level of the 530 Sansome Street project, the existing fire station would be reconstructed; other proposed uses at that project site include a restaurant, gym, office space, and a public open space area.

Although it is currently unknown when construction for this cumulative project would occur, it is possible that construction activities from that project could overlap with construction activities from the proposed project. Because the project site would be adjacent to the project at 530 Sansome Street, construction noise from the proposed project and the Sansome Street project could overlap and be noticeably audible at nearby sensitive receptors, causing an increase in ambient noise levels that would be greater than 10 dBA. Consequently, cumulative

noise impacts would be significant. The proposed project's contribution to cumulative construction noise would be considerable because, as discussed for Impact NOI-1, the proposed project would increase noise levels by approximately 25 dB at the nearest sensitive receptor. In addition, the duration would be approximately 31 months, which is a relatively long time. Because the magnitude of construction noise and the duration of schedule overlap cannot be determined with precision at this time, cumulative noise is conservatively considered to be *significant*.

With implementation of Mitigation Measure M-NOI-1, the project's contribution to cumulative noise impacts would be *less than significant with mitigation* through the requirement to implement noise control measures and a noise control plan in response to noise complaints from nearby residents. In addition, the nearest sensitive land use is a hotel; guests will be transitory and not exposed to a substantial duration of elevated noise levels; therefore, it is not likely that any single sensitive receptor would be exposed to cumulative construction noise for the full 31-month duration.

As discussed under Impact NOI-1, at the nearest residential building (Gateway Apartments), the proposed project would result in construction noise of 74 dBA, which is slightly above the 13-hour  $L_{eq}$  ambient noise level of 72.5 dBA. Cumulative construction-related noise impacts from the proposed project would be *less than significant with mitigation*.

### **Traffic Noise**

Localized traffic noise would increase in conjunction with foreseeable residential and commercial growth in the project vicinity. Therefore, the cumulative context for operational traffic noise includes the roadways in the vicinity of the proposed project and cumulative development.

Analysis of traffic volumes on roadways used to access the project site (i.e., Battery Street, Washington Street, Clay Street, Sansome Street) indicates that the cumulative traffic volumes would increase by no more than 27 percent compared to existing conditions. **Table E6-9** shows the existing and cumulative traffic volumes as well as the individual increase on each roadway. Cumulative traffic noise would not result in a doubling of traffic volumes (i.e., a 100 percent increase), which would be necessary to create a perceptible change. Consequently, cumulative noise impacts would be *less than significant*, and no mitigation measures are necessary.

**Table E6-9. Cumulative Traffic Volume Increases**

Roadway Segment	Peak-Hour Traffic Volumes		
	Existing p.m. Peak-Hour Volumes	Cumulative p.m. Peak-Hour Volumes <sup>a</sup>	Percentage Increase from Proposed Project
Battery Street north of Washington Street	916	1,054	15%
Battery Street south of Washington Street	913	1,094	20%
Washington Street west of Battery Street	464	534	15%
Washington Street east of Battery Street	461	574	25%
Battery Street north of Clay Street	874	1,005	15%
Battery Street south of Clay Street	697	851	22%
Clay Street west of Battery Street	623	740	19%
Clay Street east of Battery Street	800	894	12%
Sansome Street north of Washington Street	622	789	27%
Sansome Street south of Washington Street	717	906	26%
Washington Street west of Sansome Street	520	626	20%
Washington Street east of Sansome Street	455	523	15%
Sansome Street north of Clay Street	726	903	24%
Sansome Street south of Clay Street	704	851	21%
Clay Street west of Sansome Street	735	920	25%
Clay Street east of Sansome Street	633	766	21%

Source: AECOM 2019. *447 Battery Street Transportation Impact Study*. November 7, 2019.

Notes: See Appendix C for data.

<sup>a</sup> These volumes include increases associated with the proposed project in addition to cumulative projects.

### ***Fixed Mechanical Equipment Noise***

Project-related stationary-source noise, such as from HVAC equipment, exhaust fans, or an emergency generator, would not substantially increase ambient noise levels at locations that are more than a few hundred feet from the project site. The proposed project at 530 Sansome Street is the only cumulative development project close enough (within 500 feet) to consider the potential to result in a cumulative operational noise impact. The project at 530 Sansome Street is adjacent to the project site and may have rooftop stationary-source equipment. Because it is likely that both the proposed project and the project at 530 Sansome Street would have equipment that would be shielded or enclosed, operational noise from stationary sources is not anticipated to be a substantial contributor to the noise environment in the cumulative context. In addition, the proposed project's mechanical equipment, as well as the mechanical equipment used for other projects in the vicinity, including at 530 Sansome Street, would be required to comply with section 2909 of the noise



ordinance. Therefore, the proposed project would result in *less-than-significant* cumulative impacts related to operational noise, and no mitigation measures are necessary.

### **Ground-Borne Vibration**

Ground-borne vibration attenuates with distance to levels that are not perceptible, even vibration from a large bulldozer 100 feet away. Therefore, the cumulative context for construction vibration impacts is the immediate area surrounding the project site. If construction of the project overlaps with construction activities at 530 Sansome Street, it is possible that ground-borne vibration from both projects could combine and result in vibration that would disturb sleep at the nearest sensitive receptors at 424 Clay Street. Consequently, cumulative construction vibration impacts would be potentially significant. However, as discussed for Impact NOI-3, the project itself would not result in sleep disturbance as a result of construction vibration at any sensitive receptors, even at a distance of 25 feet. Because the project's contribution would not result in sleep disturbance, even at the worst-case distance of 25 feet, the project's contribution would not be cumulatively considerable. There would be no appreciable potential for ground-borne vibration from the proposed project to combine with that of reasonably foreseeable projects and result in a significant cumulative vibration impact. Therefore, the cumulative impact would be *less than significant*, and no mitigation is required.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E7. AIR QUALITY.</b>					
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Bay Area Air Quality Management District (air district) is the regional agency with jurisdiction over the nine-county San Francisco Bay Area Air Basin (air basin), which includes San Francisco, Alameda, Contra Costa, Marin, San Mateo, Santa Clara, and Napa Counties and portions of Sonoma and Solano Counties. The air district is responsible for attaining and maintaining air quality in the air basin within federal and state air quality standards, as established by the federal Clean Air Act (CAA) and the California Clean Air Act (CCAA), respectively. Specifically, the air district has the responsibility for monitoring ambient air pollutant levels throughout the air basin and developing and implementing strategies to attain the applicable federal and state standards. The CAA and the CCAA require plans to be developed for areas that do not meet air quality standards, generally. The most recent air quality plan, the 2017 Clean Air Plan, was adopted by the air district on April 19, 2017, to provide a regional strategy to improve Bay Area air quality and meet public health goals.<sup>53</sup> The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, in accordance with the requirements of the state CAA to implement all feasible measures to reduce ozone; provide a control strategy to reduce particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. The 2017 Clean Air Plan contains the following primary goals:

- Protect air quality and health at the regional and local scale: Attain all state and national air quality standards, and eliminate disparities among Bay Area communities in the cancer health risk from toxic air contaminants (TACs).

<sup>53</sup> Bay Area Air Quality Management District, *Bay Area 2017 Clean Air Plan: Spare the Air, Cool the Climate—A Blueprint for Clean Air and Climate Protection in the Bay Area, Final*, 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](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 September 12, 2019.

- Protect the climate: Reduce Bay Area greenhouse gas emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 Clean Air Plan represents the most current applicable air quality plan for the air basin. Consistency with this plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan.

### **Criteria Air Pollutants**

In accordance with the state and federal CAAs, air pollutant standards are identified for the following six criteria air pollutants: ozone, carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. These air pollutants are termed criteria air pollutants because they are regulated by specific public health- and welfare-based criteria developed as the basis for setting permissible levels. By its nature, regional air pollution is largely a cumulative impact in that no single project is large enough to, by itself, result in non-attainment of air quality standards. Instead, a project's individual emissions contribute to existing cumulative air quality impacts. If a project's contribution to cumulative air quality impacts is considerable, then the project's impact on air quality would be considered significant.

**Table E7-1** identifies air quality significance thresholds, followed by a discussion of each threshold.

**Table E7-1. Thresholds of Significance for Criteria Air Pollutants**

<b>Pollutant</b>	<b>Construction Thresholds</b>	<b>Operational Thresholds</b>	
	<b>Average Daily Emissions (lbs/day)</b>	<b>Average Daily Emissions (lbs/day)</b>	<b>Maximum Annual Emissions (tpy)</b>
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
Fugitive Dust	Construction dust ordinance or other best management practices	Not applicable	

Notes: lbs/day = pounds per day; tpy = tons per year; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = particulate matter with an aerodynamic diameter less than 2.5 microns; PM<sub>10</sub> = particulate matter with an aerodynamic diameter less than 10 microns; ROG = reactive organic gases

Source: Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed September 12, 2019.

Projects that would result in criteria air pollutant emissions below these significance thresholds would not violate an air quality standard, contribute substantially to an air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants within the air basin. In general,

the air basin experiences low concentrations of most pollutants compared with federal or state standards. The air basin is designated as either in attainment<sup>54</sup> or unclassified for most criteria pollutants, with the exception of ozone, particulate matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>), and particulate matter with an aerodynamic diameter less than 10 microns (PM<sub>10</sub>), which are designated as non-attainment pollutants for either the state or federal standards.

**Ozone Precursors.** The air basin is currently designated as a non-attainment area for ozone. Ozone is a secondary air pollutant, produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROGs) and oxides of nitrogen (NO<sub>x</sub>). The potential for a project to result in a cumulatively considerable net increase in criteria air pollutants, which may contribute to an existing or projected air quality violation, is based on the state and federal CAA emissions limits for stationary sources. The New Source Review program was created by the federal CAA to ensure that stationary sources of air pollution are constructed in a manner that is consistent with attainment of federal health-based ambient air quality standards. Similarly, to ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, air district Regulation 2, Rule 2, requires any new source that emits criteria air pollutants above a specified emissions limit to offset those emissions. For ozone precursors ROG and NO<sub>x</sub>, the offset emissions level is an annual average of 10 tons per year (or 54 pounds per day).<sup>55</sup> These levels represent emissions by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants.

Although this regulation applies to new or modified stationary sources, land use development projects result in ROG and NO<sub>x</sub> emissions from increases in the number of vehicle trips, the application of architectural coatings, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects, and projects with emissions that are below the thresholds would not contribute to an existing or projected air quality violation or result in a considerable net increase in ROG and NO<sub>x</sub> emissions. Because of the temporary nature of construction activities, only the average daily thresholds are applicable to construction-phase emissions.

**Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>).** The air district has not established an offset limit for PM<sub>2.5</sub>. However, the emissions limit in the federal New Source Review for stationary sources in nonattainment areas is an appropriate significance threshold. For PM<sub>10</sub> and PM<sub>2.5</sub>, the emissions

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<sup>54</sup> "Attainment" status refers to those regions that are meeting federal and/or state standards for a specified criteria pollutant. "Non-attainment" refers to regions that do not meet federal and/or state standards for a specified criteria pollutant. "Unclassified" refers to regions where there is not enough data to determine the region's attainment status.

<sup>55</sup> Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 17, <http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en>, accessed September 4, 2019.

limit under New Source Review is 15 tons per year (82 pounds per day) and 10 tons per year (54 pounds per day), respectively. These emissions limits represent levels at which a source is not expected to have an impact on air quality.<sup>56</sup> Similar to the ozone precursor thresholds identified above, land use development projects typically result in particulate matter emissions as a result of increases in the number of vehicle trips, space heating and natural gas combustion, landscape maintenance, and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of a land use project. Again, because construction activities are temporary in nature, only the average daily thresholds are applicable to construction-phase emissions.

**Fugitive Dust.** Fugitive dust emissions are typically generated during construction phases. Studies have shown that the application of best management practices (BMPs) at construction sites significantly controls fugitive dust,<sup>57</sup> and individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.<sup>58</sup> The air district has identified a number of BMPs to control fugitive dust emissions from construction activities.<sup>59</sup> The City's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) also requires a number of measures to control fugitive dust and ensure that construction projects do not result in visible dust. The BMPs employed in compliance with the City's Construction Dust Control Ordinance are an effective strategy for controlling construction-related fugitive dust.

**Other Criteria Pollutants.** Regional concentrations of CO in the Bay Area have not exceeded the state standards in the past 14 years, and SO<sub>2</sub> concentrations have never exceeded the standards. The primary source of CO emissions from development projects is vehicular traffic. Construction-related SO<sub>2</sub> emissions represent a negligible portion of total basin-wide emissions, and construction-related CO emissions represent less than 5 percent of the Bay Area's total basin-wide CO emissions. As discussed previously, the Bay Area is in attainment for both CO and SO<sub>2</sub>. Furthermore, the air district has demonstrated, based on modeling, that project traffic, in addition to existing traffic, would need to exceed 44,000 vehicles per hour at affected intersections (or 24,000 vehicles per hour where vertical and/or horizontal mixing is limited) to exceed the California ambient air quality standard of 9.0 ppm (eight-hour average) or 20.0 ppm (one-hour average) for CO. Therefore, given the Bay Area's attainment status and the limited CO and SO<sub>2</sub> emissions that

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<sup>56</sup> Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 16.

<sup>57</sup> Western Regional Air Partnership, *WRAP Fugitive Dust Handbook*, September 7, 2006, [http://www.wrapair.org/forums/dejffdh/content/FDHandbook\\_Rev\\_06.pdf](http://www.wrapair.org/forums/dejffdh/content/FDHandbook_Rev_06.pdf), accessed: September 4, 2019.

<sup>58</sup> Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 27.

<sup>59</sup> Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017, [http://www.baaqmd.gov/~/\\_media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed September 4, 2019.

could result from a development project, the proposed project would not result in a cumulatively considerable net increase in CO or SO<sub>2</sub>, and a quantitative analysis is not required.

### **Local Health Risks and Hazards**

In addition to criteria air pollutants, individual projects may emit TACs. TACs collectively refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but short-term) adverse effects on human health, including carcinogenic effects. A TAC is defined in California Health and Safety Code section 39655 as an air pollutant that may cause or contribute to an increase in mortality or serious illness or pose a present or potential hazard to human health. Human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs, with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

Unlike criteria air pollutants, TACs do not have ambient air quality standards; rather, TACs are regulated by the air district using a risk-based approach. This approach uses a health risk assessment to determine which sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated and considered together with information regarding the toxic potency of the substances to provide quantitative estimates of health risks.<sup>60</sup>

Air pollution does not affect every individual in the population in the same way; some groups are more sensitive to adverse health effects than others. Land uses such as residences, schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than other land uses. Therefore, assessments of air pollutant exposure for residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter (PM<sub>2.5</sub>) are strongly associated with mortality, respiratory diseases, and diminished lung development in children as well as other endpoints, such as hospitalization for cardiopulmonary disease.<sup>61</sup> In addition to PM<sub>2.5</sub>, diesel particulate matter (DPM) is also of concern. The California Air Resources Board (CARB) identified DPM as a TAC in

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<sup>60</sup> In general, a health risk assessment is required if the air district concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. The applicant is then subject to a health risk assessment for the source in question. Such an assessment generally evaluates chronic, long-term effects, estimating the increased risk of cancer as a result of exposure to one or more TACs.

<sup>61</sup> San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effects from Intra-Urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 2008.

1998, based primarily on evidence demonstrating cancer effects in humans.<sup>62</sup> The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TACs that are routinely measured in the region.

In an effort to identify the areas of San Francisco that are most adversely affected by sources of TACs, San Francisco partnered with the air district to inventory and assess air pollution and exposures from mobile, stationary, and area sources within San Francisco. Areas with poor air quality, termed “Air Pollutant Exposure Zones,” were identified, based on health-protective criteria that consider estimated cancer risk, exposures to fine particulate matter, proximity to freeways, and locations with particularly vulnerable populations. The project site is within an Air Pollutant Exposure Zone. The Air Pollutant Exposure Zone criteria are discussed below.

**Excess Cancer Risk.** The “100 per 1 million persons” criterion is based on U.S. Environmental Protection Agency (USEPA) guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale level.<sup>63</sup> As described by the air district, the USEPA considers a cancer risk of 100 per 1 million to be within the “acceptable” range of cancer risk. Furthermore, in the 1989 preamble to the benzene National Emissions Standards for Hazardous Air Pollutants rulemaking,<sup>64</sup> the USEPA states that it “...strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately 1 in 1 million and (2) limiting to no higher than approximately 1 in 10,000 [100 in 1 million] the estimated risk that a person living near a plant would have if he or she were exposed to the maximum pollutant concentrations for 70 years.” In addition, 100 per 1 million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area, based on air district regional modeling.<sup>65</sup>

**Fine Particulate Matter.** In April 2011, the USEPA published its *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards* (Particulate Matter Policy Assessment).<sup>66</sup> In this document, USEPA concludes that the current federal annual PM<sub>2.5</sub> standard of 15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) should be revised to a level within the range of 13 to 11  $\mu\text{g}/\text{m}^3$ , with evidence strongly supporting a standard within the range of 12 to 11  $\mu\text{g}/\text{m}^3$ . Determinations

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<sup>62</sup> California Air Resources Board, *Fact Sheet, The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines*, October 1998.

<sup>63</sup> Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

<sup>64</sup> 54 *Federal Register* 38044, September 14, 1989.

<sup>65</sup> Bay Area Air Quality Management District, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance*, October 2009, page 67.

<sup>66</sup> U.S. Environmental Protection Agency, *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*, <https://www3.epa.gov/ttn/naaqs/standards/pm/data/20110419pmpafinal.pdf>, April 2011, accessed November 7, 2019.

of air pollution hot spots in San Francisco are based on the health protective PM<sub>2.5</sub> standard of 11 µg/m<sup>3</sup>, as supported by the USEPA's Particulate Matter Policy Assessment, although lowered to 10 µg/m<sup>3</sup> to account for error bounds in emissions modeling programs.

**Proximity to Freeways.** According to the CARB, studies have shown an association between the proximity of sensitive land uses to freeways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children. Siting sensitive uses in proximity to freeways increases both exposure to air pollution and the potential for adverse health effects. Because evidence shows that sensitive uses within a 500-foot buffer of any freeway are at an increased health risk from air pollution,<sup>67</sup> lots that are within 500 feet of freeways are included in Air Pollutant Exposure Zones.

**Health Vulnerable Locations.** Based on the air district's evaluation of health vulnerability in the Bay Area, zip codes in the worst quintile of Bay Area health vulnerability scores (94102, 94103, 94105, 94124, and 94130) as a result of air pollution-related causes were afforded additional protection by lowering the standards for identifying lots in an Air Pollutant Exposure Zone to (1) an excess cancer risk greater than 90 per 1 million persons exposed and/or (2) PM<sub>2.5</sub> concentrations in excess of 9 µg/m<sup>3</sup>.<sup>68</sup>

The above citywide health risk modeling was also used as the basis for approving a series of amendments to the San Francisco Building and Health Codes, generally referred to as the Enhanced Ventilation Required for Urban Infill Sensitive Use Developments or Health Code article 38 (Ordinance 224-14, effective December 8, 2014). The purpose of article 38 is to protect the public health and welfare by establishing an Air Pollutant Exposure Zone and imposing an enhanced ventilation requirement for all urban infill sensitive-use development within an Air Pollutant Exposure Zone. In addition, projects within an Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would add a substantial amount of emissions to areas that are already adversely affected by poor air quality. The project site is within an Air Pollutant Exposure Zone. The project site is located within the 94111 zip code, which is a health vulnerable location.

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<sup>67</sup> California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005, <https://ww3.arb.ca.gov/ch/handbook.pdf>, accessed September 12, 2019.

<sup>68</sup> San Francisco Planning Department, *San Francisco Property Information Map*, version 3.4.4, <http://propertymap.sfplanning.org/?dept=planning>, 2020, accessed July 15, 2020. These documents are part of San Francisco Board of Supervisors File No. 14806, Ordinance No. 224-14, Amendment to Health Code article 38.



**Impact AQ-1: The proposed project's construction activities would not generate fugitive dust or criteria air pollutants, violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)**

Construction activities (short term) typically result in emissions of ozone precursors and PM in the form of dust (fugitive dust) and exhaust (e.g., vehicle tailpipe emissions). Emissions of ozone precursors and PM are primarily a result of the combustion of fuel from on-road and off-road vehicles. However, ROG's are also emitted from activities that involve painting, applying other types of architectural coatings, or asphalt paving. The proposed project would involve retaining the existing building façade, as seen by the public; replacing the internal structure to bring it up to building and structural codes; and creating a new 18-story, 200-foot-tall hotel with 198 rooms. During the proposed project's approximately 31-month construction period, construction activities would have the potential to result in emissions of fugitive dust, ozone precursors, and PM, as discussed below.

### ***Fugitive Dust***

Proposed project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that contributes particulate matter to the local atmosphere. The current health burden of particulate matter demands that, where possible, public agencies take feasible actions to reduce sources of particulate matter exposure. According to the CARB, reducing PM<sub>2.5</sub> concentrations to state and federal standards of 12 µg/m<sup>3</sup> in the San Francisco Bay Area would prevent between 200 and 1,300 premature deaths.<sup>69</sup>

Dust can be an irritant, causing watering eyes or irritation to the lungs, nose, and throat. Demolition, excavation, grading, and other construction activities can result in wind-blown dust that adds particulate matter to the local atmosphere. Depending on exposure, adverse health effects can occur from this particulate matter in general and specific contaminants such as lead or asbestos, which may be constituents in the soil. In response, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health Codes, generally referred hereto as the Construction Dust Control Ordinance (ordinance 176-08, effective July 30, 2008), with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work in order to protect the health of the general public and onsite workers, minimize public nuisance complaints, and avoid orders to stop work by the Department of Building Inspection (building department).

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<sup>69</sup> California Air Resources Board, *Methodology for Estimating Premature Deaths Associated with Long-term Exposure to Fine Airborne Particulate Matter in California*, Staff Report, Table 4c, October 24, 2008.

The ordinance requires all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or expose or disturb more than 10 cubic yards, or 500 square feet, of soil to comply with specified dust control measures, whether or not the activity requires a permit from the building department. The director of the building department may waive this requirement for activities on sites that are less than 0.5 acre and unlikely to result in any visible wind-blown dust.

In compliance with the Construction Dust Control Ordinance, the project sponsor and the contractor responsible for construction activities at the project site would be required to follow the practices listed below to control construction dust on the site or other practices that would result in equivalent dust control and be acceptable to the director of the building department. These dust suppression activities may include:

- All active construction areas shall be adequately watered to prevent dust from becoming airborne.
- The frequency of watering may be increased whenever wind speeds exceed 15 miles per hour, as necessary.
- During excavation and dirt-moving activities, contractors shall wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday
- Inactive stockpiles (where no disturbance occurs for more than seven days) greater than 10 cubic yards, or 500 square feet, with excavated material, backfill material, import material, gravel, sand, road base, or soil shall be covered with a 10-millimeter (0.01-inch) polyethylene plastic (or equivalent) tarp that has been braced, or other equivalent soil stabilization techniques may be used.
- Ordinance 175-91 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 San Francisco, unless permission is obtained from the San Francisco Public Utilities Commission (SFPUC).
- Non-potable water must be used for soil compaction and dust control activities during project construction and demolition; the SFPUC operates a truck-fill station with recycled water at the Southeast Water Pollution Control Plant that provides recycled water for these activities at no charge.

The project site is less than 0.5 acre; therefore, the sponsor would not be required to prepare a site-specific Dust Control Plan, pursuant to the Dust Control Ordinance. However, the project sponsor would be required to designate an individual to monitor compliance with the dust control requirements. Compliance with the regulations and procedures set forth by the San Francisco Dust Control Ordinance would ensure that potential dust-related air quality impacts would be reduced to a *less-than-significant* level.

### **Construction-Related Criteria Air Pollutants**

As discussed above, construction activities would result in emissions of criteria air pollutants from the use of off- and on-road vehicles and equipment. The air district provides screening-level sizes for land use projects in Table 3-1 of its CEQA Guidelines.<sup>70</sup> It can be assumed that projects that meet the screening criteria in the air district's CEQA Guidelines would not result in the generation of construction-related criteria air pollutants and/or precursors that would exceed the thresholds of significance. Other screening criteria are discussed in Section 3.5.1 of the air district's CEQA Guidelines. The criteria specify that projects that do not require demolition activity, projects that do not have a simultaneous occurrence of more than two construction phases, and projects that do not have extensive site preparation or extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) would result in a less-than-significant impact. If a project meets the criteria, then a detailed analysis of construction criteria air pollutants is not required.

The proposed project would involve some demolition activity and may include material transport involving more than 10,000 cubic yards of soil; therefore, the air district screening criteria would not be met directly. However, based on the department's experience from conducting quantitative criteria air pollutant analyses for larger projects that required greater amounts of excavation and still resulted in emissions that were below the air district's significance thresholds, it can be confidently assumed that the proposed project would not exceed the thresholds. This conclusion is further substantiated by the fact that the proposed project would have only 36 percent of the air district's construction criteria pollutant screening criterion value for the number of hotel rooms (554 rooms). Therefore, quantification of project-generated criteria air pollutant emissions is not required. The proposed project would not exceed any of the significance thresholds for criteria air pollutants and would result in *less-than-significant* impacts.

The proposed project would not exceed the thresholds established for construction-related fugitive dust or criteria air pollutants. Therefore, impacts would be *less than significant*, and no mitigation measures are necessary.

#### **Impact AQ-2: The proposed project's construction activities would generate toxic air contaminants, including diesel particulate matter, but would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant with Mitigation)**

As discussed above, the project site is within an Air Pollutant Exposure Zone. Sensitive receptors are located close to the project site, including high-density residences and an assisted-living facility.

With regards to construction emissions, off-road equipment (which includes construction-related equipment) is a large contributor to DPM emissions in California, although, since 2007, CARB has

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<sup>70</sup> Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed September 4, 2019.

found the emissions to be substantially lower than previously expected.<sup>71</sup> Newer and more refined emission inventories have substantially lowered the estimates of DPM emissions from off-road equipment.<sup>72</sup> In addition, a number of federal and state regulations require cleaner off-road equipment. Specifically, both the USEPA and the State of California have set emissions standards for engines in new off-road equipment, ranging from Tier 1 to Tier 4. Tier 1 emission standards were phased in between 1996 and 2000, and Tier 4 interim and final emission standards for all new engines were phased in between 2008 and 2015. To meet the Tier 4 emission standards, engine manufacturers were required to produce new engines with advanced emission-control technologies. Although the full benefits of these regulations will not be realized for several years, the USEPA estimates that by implementing the federal Tier 4 standards, NO<sub>x</sub> and PM emissions will be reduced by more than 90 percent.<sup>73</sup>

Construction activities do not lend themselves to analysis of long-term health risks because of their temporary and variable nature. As explained in the air district's CEQA Guidelines:

Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet .... In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk.<sup>74</sup>

Project-level analyses of construction activities have a tendency to produce overestimated assessments of long-term health risks. However, within the Air Pollutant Exposure Zone, as discussed above, additional construction activity may adversely affect populations that are already at a higher risk for adverse long-term health risks from existing sources of air pollution.

The proposed project would require construction over approximately 31 months. Project construction activities would result in short-term emissions of DPM and other TACs. The project site is in an area that already experiences poor air quality. Project construction activities would generate additional air pollution, affecting nearby sensitive receptors and resulting in a **significant** impact. Implementation of Mitigation Measure M-AQ-2, Construction Emissions Minimization

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<sup>71</sup> California Air Resources Board, *Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Proposed Amendments to the Regulation for In-Use Off-Road Diesel-Fueled Fleets and the Off-Road Large Spark-Ignition Fleet Requirements*, October 2010.

<sup>72</sup> Ibid.

<sup>73</sup> U.S. Environmental Protection Agency, *Clean Air Nonroad Diesel Rule: Fact Sheet*, May 2004.

<sup>74</sup> Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017, [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en), accessed September 4, 2019.

Plan, would reduce the magnitude of this impact. Although emission reductions from limiting idling, educating workers and the public, and properly maintaining equipment are difficult to quantify, other measures—specifically, the requirement for equipment with Tier 2 engines and a Level 3 Verified Diesel Emission Control Strategy (VDECS)—can reduce construction emissions by 89 to 94 percent (i.e., compared to emissions from with engines meeting no emission standards and without a VDECS).<sup>75</sup> Emissions reductions from the combination of Tier 2 equipment with Level 3 VDECS is almost equivalent to requiring only equipment with Tier 4 Final engines, which would result in substantial reductions in construction emissions.

#### **M-AQ-2: Construction Emissions Minimization Plan**

The project sponsor or the project sponsor's contractor shall comply with the following:

##### *A. Engine Requirements.*

1. All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either USEPA or CARB Tier 2 off-road emission standards and have been retrofitted with a CARB Level 3 VDECS. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards automatically meet this requirement.
2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English,

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<sup>75</sup> PM emissions benefits are estimated by comparing off-road PM emission standards for Tier 2 with Tier 1 and 0. Tier 0 off-road engines do not have PM emission standards, but the USEPA's *Exhaust and Crankcase Emissions Factors for Nonroad Engine Modeling – Compression Ignition* estimated Tier 0 engines between 50 hp and 100 hp have a PM emission factor of 0.72 gram per brake horsepower-hour (g/bhp-hr) and greater than 100 hp have a PM emission factor of 0.40 g/bhp-hr. Therefore, requiring off-road equipment to have at least a Tier 2 engine would result in between a 25 percent and 63 percent reduction in PM emissions compared to emissions from off-road equipment with Tier 0 or Tier 1 engines. The 25 percent reduction comes from comparing the PM emission standards for off-road engines between 25 hp and 50 hp for Tier 2 (0.45 g/bhp-hr) and Tier 1 (0.60 g/bhp-hr). The 63 percent reduction comes from comparing the PM emission standards for off-road engines above 175 hp for Tier 2 (0.15 g/bhp-hr) and Tier 0 (0.40 g/bhp-hr). In addition to the Tier 2 requirement, CARB Level 3 VDECS would be required, which would reduce PM by an additional 85 percent. Therefore, the mitigation measure would result in between an 89 percent (0.0675 g/bhp-hr) and 94 percent (0.0225 g/bhp-hr) reduction in PM emissions compared to emissions from equipment with Tier 1 (0.60 g/bhp-hr) or Tier 0 engines (0.40 g/bhp-hr).

Spanish, and Chinese in designated queuing areas and at the construction site to remind operators of the two-minute idling limit.

4. The contractor shall instruct construction workers and equipment operators regarding the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturers' specifications.

**B. *Waivers.***

1. The department's environmental review officer (ERO) or designee may waive the alternative source of power requirement of subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).
2. The ERO may waive the equipment requirements of Subsection (A)(1) if a particular piece of off-road equipment with a CARB Level 3 VDECS is technically not feasible, the equipment would not produce the desired emissions reduction because of the expected operating modes, installation of the equipment would create a safety hazard or impair the operator's vision, or a compelling emergency need requires the use of off-road equipment that is not retrofitted with a CARB Level 3 VDECS. If the ERO grants the waiver, the contractor must use the next-cleanest piece of off-road equipment, according to Table M-AQ-2.

**Table M-AQ-2: Off-Road Equipment Compliance Step-down  
Schedule**

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	CARB Level 2 VDECS
2	Tier 2	CARB Level 1 VDECS

**C. *Construction Emissions Minimization Plan.***

Before starting onsite construction activities, the contractor shall submit a Construction Emissions Minimization Plan (Plan) to the ERO for review and approval. The Plan shall state, in reasonable detail, how the contractor will meet the requirements of Section A.

1. The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, expected fuel usage, and hours of operation. For VDECS, the description may include technology type, serial number, make, model, manufacturer, CARB verification number level, installation date, and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
  2. The project sponsor shall ensure that all applicable requirements of the Plan have been incorporated into the contract specifications. The Plan shall include a certification statement, indicating that the contractor agrees to comply fully with the Plan.
  3. The contractor shall make the Plan available to the public for review onsite during working hours. The contractor shall post a legible and visible sign at the construction site summarizing the Plan. The sign shall also state that the public may ask to inspect the Plan for the project at any time during working hours and shall explain how to request to inspect the Plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.
- D. *Monitoring.* After the start of construction activities, the contractor shall submit quarterly reports to the ERO, documenting compliance with the Plan. After completion of construction and prior to receiving a final certificate of occupancy, the project sponsor shall submit a final report to the ERO, summarizing construction activities, including the start and end dates, duration of each construction phase, and the specific information required in the Plan.

This measure would serve to mitigate impacts from construction air quality emissions at the locations of sensitive receptors. Therefore, compliance with Mitigation Measure M-AQ-2 would reduce construction emissions impacts on nearby sensitive receptors. The impact would be *less than significant with mitigation*.

**Impact AQ-3: During project operations, the proposed project would not result in emissions of criteria air pollutants at levels that would violate an air quality standard, contribute to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants. (Less than Significant)**

The air district provides screening-level sizes for land use projects in Table 3-1 of its CEQA Guidelines. As stated in the guidelines, “If a project meets the screening criteria in Table 3-1, a project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds of significance.”<sup>76</sup> If a project meets the criteria, then a detailed analysis of operational criteria air pollutants is not required.

The screening-level size for operational criteria air pollutants pertaining to hotels is 489 rooms. Because the proposed project would provide a total of 198 hotel rooms, it would meet the screening criteria, and a detailed analysis would not be required. In general, emission modeling shows that a project must generate more than 5,000 daily vehicle trips to result in an exceedance of the significance criteria for criteria air pollutants from project operations. As described in Section E.5, Transportation and Circulation, the proposed project would generate approximately 665 net new daily vehicle trips during a regional event and approximately 548 net new daily vehicle trips during regular conditions.<sup>77</sup> Therefore, quantification of project-generated criteria air pollutant emissions is not required. The proposed project would not exceed any of the significance thresholds for criteria air pollutants, resulting in a *less-than-significant* impact with respect to criteria air pollutants. No mitigation measures are necessary.

**Impact AQ-4: During project operations, the proposed project would not generate toxic air contaminants, including diesel particulate matter, and expose sensitive receptors to substantial air pollutant concentrations. (Less than Significant with Mitigation)**

The proposed project would include development of a 198-room hotel; this land use is not defined as a sensitive receptor in the air district's 2017 CEQA Guidelines. The project site is within the Air Pollutant Exposure Zone, as described above. Sensitive receptors are located close to the project site, including high-density residences and an assisted-living center. Operation of the proposed project would generate TACs, as described below.

### ***Toxic Air Contaminants***

**Vehicle Trips.** Individual projects result in emissions of TACs, primarily as a result of an increase in the number of vehicle trips. The air district considers roads with fewer than 10,000 vehicles per day to be “minor, low-impact” sources that do not pose a significant health impact, even in combination with other nearby sources, and recommends that they be excluded from

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<sup>76</sup> Ibid.

<sup>77</sup> Trip generation estimate is reported in the *447 Battery Street Project Transportation Impact Study* prepared by AECOM, 2019.



environmental analysis. The proposed project's maximum of 665 vehicle trips would be well below this level, and the trips would be distributed across the local roadway network; therefore, an assessment of project-generated TACs resulting from vehicle trips is not required. The proposed project would not generate a substantial level of TAC emissions that could affect nearby sensitive receptors.

**On-site Diesel Generator.** The proposed project would include a backup emergency generator. Emergency generators are regulated by the air district through its New Source Review permitting process (Regulation 2, Rule 5). The project applicant would be required to obtain applicable permits from the air district to operate an emergency generator at the project site. Although emergency generators are intended to be used only during power outages, monthly generator testing would be required. The air district limits testing to no more than 50 hours per year. In addition, as part of the permitting process, the air district would limit the excess cancer risk from any facility to no more than 10 per 1 million and require any source that would result in an excess cancer risk greater than 1 per 1 million to install Toxic Best Available Control Technology. However, because the project site is in an area that already experiences poor air quality, the proposed emergency backup generator has the potential to expose sensitive receptors to substantial concentrations of diesel emissions, a known TAC, resulting in a *significant* air quality impact. Implementation of Mitigation Measure AQ-4, Best Available Control Technology for Diesel Generators, would reduce the magnitude of this impact by reducing emissions by 89 to 94 percent (i.e., compared to emissions from with engines meeting no emission standards and without a VDECS).

**M-AQ-4: Best Available Control Technology for Diesel Generators.** The project sponsor shall ensure that the backup diesel generator meets or exceeds one of the following emission standards for particulate matter: (1) the generator is equipped with a Tier 4 certified engine or (2) the generator is equipped with a Tier 2 or Tier 3 certified engine with a CARB Level 3 VDECS. A non-verified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical CARB verified model and if the air district approves of its use. The project sponsor shall submit documentation of compliance with the air district New Source Review permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emission standard requirement of this mitigation measure to the department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.

This measure would serve to mitigate impacts from substantial concentrations of diesel emissions at the locations of sensitive receptors. Therefore, although the proposed project would add a new source of TACs within an area that already experiences poor air quality, implementation of Mitigation Measure M-AQ-4 would reduce this impact, resulting in an impact that would be *less than significant with mitigation*.

**Impact AQ-5: The proposed project would not conflict with, or obstruct implementation of, the 2017 Clean Air Plan. (Less than Significant)**

Air quality plans describe the air pollution control strategies to be implemented by a city, county, or region. The primary goals of the 2017 Clean Air Plan are to protect public health and the climate by reducing emissions, concentrations of harmful air pollutants, and exposure to the pollutants that pose the greatest health risks. To meet the primary goals, the 2017 Clean Air Plan includes individual control measures that describe specific actions to reduce emissions of air pollutants, with measures assigned to categories such as mobile source, stationary source, and land use.

The proposed project would be consistent with the 2017 Clean Air Plan if it were to support the plan's goals, include applicable control measures from the 2017 Clean Air Plan, and not disrupt or hinder implementation of any control measures from the plan. Consistency with the plan is the basis for determining whether the proposed project would conflict with or obstruct implementation of an applicable air quality plan.

The 2017 Clean Air Plan includes Transportation Control Measure D3, Local Land Use Strategies. Transportation Control Measure D3 calls for promoting and supporting land use patterns, policies, and infrastructure investments that support high-density, mixed-use residential and employment development that facilitates walking, bicycling, and transit use. The proposed project's compact, dense commercial development, as well as its location in an area that has multiple transportation options that encourage visitors to bicycle, walk, or use transit to and from the project site instead of private automobiles, would ensure consistency with the goals of this Clean Air Plan control measure. In addition, Planning Code section 169 requires the project sponsor to develop a TDM plan to reduce the use of single-occupancy vehicles and encourage the use of transit and non-motorized travel. The proposed project would include the applicable control measures identified in the 2017 Clean Air Plan.

Examples of projects that could disrupt or delay implementation of the 2017 Clean Air Plan are projects that preclude extension of a transit line or bike path or propose excessive parking, beyond City parking requirements. The proposed project would include 198 hotel rooms with 24 vehicle parking spaces and therefore would not provide excessive parking. The proposed project would be located within a dense, walkable urban area that is well served by local and regional transit. The proposed project would encourage bicycling as a mode of transportation by providing 32 bicycle parking spaces. The proposed project would not preclude extension of a transit line or a bike path or any other transit improvement and, therefore, would not disrupt or hinder implementation of the control measures identified in the 2017 Clean Air Plan.

Based on this analysis, the proposed project would not interfere with implementation of the 2017 Clean Air Plan, and this impact would be *less than significant*. No mitigation measures are necessary.

**Impact AQ-6: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)**

The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. Although offensive odors do not cause any physical harm, they can be very unpleasant, leading to considerable distress among the public, and cause citizens to submit complaints to local governments and regulatory agencies.

Projects with the potential to expose a substantial number of people to objectionable odors are deemed to have a significant impact. Facilities that may generate objectionable odors affecting a substantial number of people typically include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities.

Project construction would include minor sources of odors. Exhaust odors from diesel engines, as well as ROG emissions from asphalt paving and the application of architectural coatings, may be considered offensive by some individuals. However, odors from these sources would be localized and generally confined to the immediate area. In addition, fumes from diesel exhaust, asphalt paving, and architectural coatings would be temporary and would disperse rapidly with distance from the source. Therefore, construction-generated odors would not result in frequent exposure of sensitive receptors to objectionable odor emissions.

Operational land uses associated with the proposed project would be typical urban retail and commercial uses, which are not typically generators of substantial odor emissions. Therefore, construction and operational odor impacts for the proposed project would be *less than significant*, and no mitigation is necessary.

**Impact C-AQ-1: The proposed project in combination with past, present, and reasonably foreseeable future projects would not result in a cumulatively considerable contribution to cumulative air quality impacts. (Less than Significant with Mitigation)**

Regional air pollution is, by its very nature, largely a cumulative impact. Emissions from past, present, and future projects contribute to the region's adverse air quality on a cumulative basis. No single project by itself would be large enough to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts. The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, because the proposed project's construction (Impact AQ-1) and operational (Impact AQ-3) emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not result in a cumulatively considerable contribution to regional air quality impacts.

As discussed above, the project site is in an area that already experiences poor air quality. The project would add DPM during construction as well as other TACs associated with the 665 net new daily vehicle trips as well as an emergency generator within an area already adversely affected by air quality, resulting in a considerable contribution to cumulative health risk impacts on nearby sensitive receptors. This would be a significant cumulative impact. The proposed project would be required to implement Mitigation Measure M-AQ-2, Construction Emissions Minimization Plan, which could reduce construction-period emissions by as much as 94 percent, and Mitigation Measure M-AQ-4, Best Available Control Technology for Diesel Generators, which would require use of the best available control technology to limit emissions from the project's emergency backup generator. Implementation of these mitigation measures would reduce the project's contribution to cumulative air quality impacts to *less than significant with mitigation*.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E8. GREENHOUSE GASES.</b>					
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Greenhouse gas (GHG) emissions and global climate change represent cumulative environmental impacts. GHG emissions cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate enough GHG emissions to noticeably change the global average surface temperature and, therefore, cause the resulting climate change effects; instead, the combination of GHG emissions from past, present, and future projects have contributed and will continue to contribute to global climate change and its associated environmental impacts.

The air district has prepared guidelines and methodologies for analyzing GHG emissions. These guidelines are consistent with CEQA Guidelines sections 15064.4 and 15183.5, which address the analysis and determination of significant impacts from a proposed project's GHG emissions. CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. Accordingly, San Francisco has prepared *Strategies to Address Greenhouse Gas Emissions*,<sup>78</sup> which presents a comprehensive assessment of policies, programs, and ordinances that collectively represent San Francisco's qualified GHG reduction strategy, in compliance with the CEQA Guidelines. These GHG reduction actions have resulted in a 28 percent reduction in GHG emissions in 2015 compared with 1990 levels,<sup>79</sup> exceeding the 2020 reduction goals outlined in the air district's 2017 Clean Air Plan, Executive Order (EO) S-3-05, and Assembly Bill 32 (also known as the Global Warming Solutions Act).<sup>80</sup>

<sup>78</sup> San Francisco Planning Department, *Strategies to Address Greenhouse Gas Emissions in San Francisco*, July 2017, <http://sf-planning.org/strategies-address-greenhouse-gas-emissions>, accessed October 30, 2018.

<sup>79</sup> San Francisco Department of the Environment, *San Francisco's Carbon Footprint*, <https://sfenvironment.org/carbon-footprint>, accessed January 30, 2020.

<sup>80</sup> Executive Order S-3-05, Assembly Bill 32, and the air district's 2017 Clean Air Plan (continuing the trajectory set in the 2010 Clean Air Plan) set a target of reducing GHG emissions to below 1990 levels by year 2020.

Given that the City has met the state's and region's 2020 GHG reduction targets and San Francisco's GHG reduction goals are consistent with or more aggressive than the long-term goals established under EO S-3-05,<sup>81</sup> EO B-30-15,<sup>82,83</sup> and Senate Bill 32,<sup>84,85</sup> the City's GHG reduction goals are consistent with EO S-3-05, EO B-30-15, Assembly Bill 32, Senate Bill 32, and the 2017 Clean Air Plan. Therefore, proposed projects that are consistent with the City's GHG reduction strategy would be consistent with the aforementioned GHG reduction goals, would not conflict with these plans or result in significant GHG emissions, and therefore would not exceed San Francisco's applicable GHG threshold of significance.

The following analysis of the impact of the proposed project on climate change focuses on the contribution of the proposed project to cumulatively significant GHG emissions. Because the analysis is in a cumulative context, this section does not include individual project-specific impact statements.

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<sup>81</sup> Office of the Governor, *Executive Order S-3-05*, June 1, 2005, [http://static1.squarespace.com/static/549885d4e4b0ba0bfff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+\(June+2005\).pdf](http://static1.squarespace.com/static/549885d4e4b0ba0bfff5dc695/t/54d7f1e0e4b0f0798cee3010/1423438304744/California+Executive+Order+S-3-05+(June+2005).pdf), accessed January 30, 2020. 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 [MTCO<sub>2</sub>E]); by 2020, reduce emissions to 1990 levels (approximately 427 million MTCO<sub>2</sub>E); and by 2050 reduce emissions to 80 percent below 1990 levels (approximately 85 million MTCO<sub>2</sub>E). 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.

<sup>82</sup> Office of the Governor, *Executive Order B-30-15*, April 29, 2015, <https://www.gov.ca.gov/news.php?id=18938>, accessed January 30, 2020. Executive Order B-30-15, issued on April 29, 2015, sets forth a target of reducing GHG emissions to 40 percent below 1990 levels by 2030 (estimated at 2.9 million MTCO<sub>2</sub>E).

<sup>83</sup> San Francisco's GHG reduction goals are codified in Section 902 of the Environment Code and include: (i) by 2008, determine City GHG emissions for year 1990; (ii) by 2017, reduce GHG emissions by 25 percent below 1990 levels; (iii) by 2025, reduce GHG emissions by 40 percent below 1990 levels; and by 2050, reduce GHG emissions by 80 percent below 1990 levels.

<sup>84</sup> Senate Bill 32 amends California Health and Safety Code Division 25.5 (also known as the California Global Warming Solutions Act of 2006) by adding Section 38566, which directs that statewide greenhouse gas emissions to be reduced by 40 percent below 1990 levels by 2030.

<sup>85</sup> Senate Bill 32 was paired with Assembly Bill 197, which would modify the structure of the State Air Resources Board; institute requirements for the disclosure of greenhouse gas emissions criteria pollutants, and toxic air contaminants; and establish requirements for the review and adoption of rules, regulations, and measures for the reduction of greenhouse gas emissions.

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

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

The proposed project would increase activity on the project site by replacing the internal structure of a three-story commercial building and adding an addition that would create a new 18-story, 200-foot-tall hotel with a ground-floor lobby and restaurant, providing 198 hotel rooms on 16 floors. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and hotel guest operations that result in an increase in energy use, water use, wastewater treatment, and solid waste disposal. Construction activities would also result in temporary increases in GHG emissions.

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

Compliance with the City's Commuter Benefits Program, Emergency Ride Home Program, transportation management programs, Transportation Sustainability Fee, and bicycle parking requirements would reduce the transportation-related emissions associated with the proposed project. These regulations reduce GHG emissions from single-occupancy vehicles by promoting the use of sustainable transportation modes with zero or lower GHG emissions on a per capita basis.

The proposed project would be required to comply with the energy efficiency requirements of the City's Green Building Code, Stormwater Management Ordinance, and Water Conservation and Irrigation Ordinance, which would promote energy and water efficiency, thereby reducing the energy-related GHG emissions associated with the proposed project.<sup>86</sup> In addition, the proposed project would be required to meet the renewable energy criteria of the Green Building Code, thereby further reducing energy-related GHG emissions.

The waste-related emissions associated with the proposed project would be reduced through compliance with the City's Recycling and Compositing Ordinance, Construction and Demolition Debris Recovery Ordinance, and Green Building Code requirements. These regulations reduce the

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<sup>86</sup> Compliance with water conservation measures reduce the energy (and GHG emissions) required to convey, pump, and treat water required for the project.

amount of materials sent to a landfill, thereby reducing GHGs emitted by landfill operations. These regulations also promote the reuse of materials, thereby conserving their embodied energy<sup>87</sup> and reducing the energy required to produce new materials.

Compliance with the City's street tree planting requirements would serve to increase natural carbon sequestration. Other regulations, including those limiting refrigerant emissions, would reduce emissions of GHGs and black carbon, respectively. Regulations requiring low-emitting finishes would reduce the use of volatile organic compounds.<sup>88</sup> Therefore, the proposed project were determined to be consistent with San Francisco's GHG reduction strategy.<sup>89</sup>

The project sponsor would be required to comply with the regulations, which have proven effective, because San Francisco's GHG emissions have measurably decreased compared with 1990 emissions levels, demonstrating that the City has met or exceeded the EO S-3-05, Assembly Bill 32, and Climate Action Plan GHG 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 reduction targets are consistent with the long-term GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the Climate Action Plan. Therefore, because the proposed project would be consistent with the City's GHG reduction strategy, it would also be consistent with the GHG reduction goals of EO S-3-05, EO B-30-15, Senate Bill 32, and the Climate Action Plan; would not conflict with these plans; and would, therefore, not exceed San Francisco's applicable GHG threshold of significance. As such, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerably contribution to GHGs and would result in a *less-than-significant* cumulative impact regarding compliance with plans established to reduce GHG emissions.

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<sup>87</sup> Embodied energy is the total energy required for the extraction, processing, manufacture, and delivery of building materials to the building site.

<sup>88</sup> Although they are not GHGs, volatile organic compounds are precursor pollutants that form ground level ozone. Increased ground level ozone is an anticipated effect of future global warming that would result in added health effects locally. Reducing emissions of volatile organic compounds would reduce the anticipated local effects of global warming.

<sup>89</sup> San Francisco Planning Department, *Greenhouse Gas Analysis: Compliance Checklist for 447 Battery Street Project*, 2020.



<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E9. WIND.</b>					
Would the project:					
a) Create wind hazards in publicly accessible areas of substantial pedestrian use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The information in this section is based on the *Wind Study Technical Memorandum* and the *Effects of the 530 Sansome Street Development on the Wind Hazard Potential and Compliance with Planning Code Section 148 Memorandum* prepared for the proposed project.<sup>90, 91</sup>

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

Average winds speeds in San Francisco are the highest in summer and lowest in winter. However, the strongest peak winds occur in winter. The highest average wind speeds occur in mid-afternoon, with the lowest in the early morning. Westerly to northwesterly winds are the most frequent and strongest winds during all seasons.

A wind-tunnel test was performed in June 2017 for the proposed project to describe the pedestrian wind environment that would exist in the immediate vicinity of the site after construction of the proposed project and enable evaluation of project compliance with Planning Code section 148.<sup>92</sup> Pedestrian-level wind speeds were measured at 19 selected points along the sidewalks on Washington, Battery, Sansome, Merchant, and Clay streets to quantify resulting pedestrian-level wind speeds in public spaces. Three development scenarios were modeled and tested: 1) existing setting scenario, 2) project scenario, and 3) cumulative development scenario.

<sup>90</sup> Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

<sup>91</sup> Environmental Science Associates, *Effects of the 530 Sansome Street Development on the Wind Hazard Potential and Compliance with Planning Code Section 148 Memorandum*, February 2020.

<sup>92</sup> Planning Code section 148 outlines wind reduction criteria for the Downtown Office (C-3-O) district. The planning code requires buildings to be shaped so as not to cause ground-level wind currents to exceed defined comfort and hazard criteria, which the code defines in terms of equivalent wind speeds (i.e., an average wind speed adjusted to include the level of gustiness and turbulence). Section 148 establishes an equivalent wind speed of 7 mph as the comfort criterion for seating areas and 11 mph as the comfort criterion for areas of substantial pedestrian use and states that new buildings and additions to buildings may not cause ground-level winds to exceed these levels more than 10 percent of the time year-round between 7 a.m. and 6 p.m. Section 148 also establishes a hazard criterion (i.e., an equivalent wind speed of 26 mph averaged for a single full hour of the year). Under section 148, new buildings and additions may not cause wind speeds to meet or exceed this hazard criterion, and no exception may be granted for buildings that result in winds that exceed the hazard criterion.

The subsequent discussion of wind speeds in relation to the pedestrian comfort criterion is for informational purposes only. However, the department uses the wind hazard criterion as the threshold for determining if a project would result in a significant impact under CEQA.

### ***Pedestrian Comfort Analysis***

**Table E9-1** summarizes the wind comfort results for the proposed project. Ten of the 19 test locations would comply with the pedestrian comfort criterion of section 148 under the existing and project scenarios, while nine locations would not. Under existing conditions, the 11 mph comfort criterion is exceeded 14 percent of the time. With the project, the 11 mph criterion would be exceeded 13 percent of the time, 1 percent less than under existing conditions.

**Table E9-1. Wind Comfort Results for the Project Scenario**

<b>Wind Comfort Results</b>	<b>Existing Scenario</b>	<b>Project Scenario</b>
Pedestrian locations measured	19	19
Pedestrian locations that meet the 11 mph comfort criterion	10	10
Highest wind speed	21 mph	19 mph
Average wind speed	12.3 mph	11.6 mph
Average percentage of time that wind speeds exceed 11 mph	14%	13%

Source: Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

The project would cause three new exceedances of the pedestrian comfort criterion and eliminate three existing exceedances; six existing exceedances would remain. Overall, nine of the 19 test points would exceed the planning code pedestrian comfort criterion of 11 mph, the same as under the existing conditions.

### ***Wind Hazard Analysis***

**Table E9-2** summarizes the wind hazard results for the proposed project. Under existing conditions, the planning code wind hazard criterion is currently exceeded at three locations on Washington Street, one on the south sidewalk, one mid-block between Battery and Sansome streets, and one on each side of Washington Street, east of Battery Street. The duration of the existing wind hazard is 43 hours per year. With the proposed project, the wind hazard criterion would be exceeded at three locations on Washington Street, the same number of locations as occurs under existing conditions. One existing hazard on the south sidewalk along Washington Street, east of Battery Street, would be eliminated, while a new hazard would occur at the corner of Washington and Battery Street. The total duration of the wind hazard exceedances would be five hours per year, a decrease of 38 hours per year from the existing wind hazard exceedances.

**Table E9-2. Wind Hazard Results for the Project Scenario**

Wind Comfort Results	Existing Scenario	Project Scenario
Number of test locations	19	19
Number of wind hazard locations	3	3
Total hours of wind hazard per year	43 hours	5 hours

Source: Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

### Conclusion

The proposed project would result in no change in the number of sidewalk locations that would exceed the pedestrian comfort criterion. The proposed project would also substantially reduce the duration of the existing wind hazard exceedances, from the existing 43 hours per year to five hours per year under the project scenario. Therefore, the proposed project would not create wind hazards in publicly accessible areas of substantial pedestrian use, and the impact would be *less than significant*. No mitigation measures are necessary.

**Impact C-WI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative wind impacts. (Less than Significant)**

The **cumulative** scenario includes the proposed project as well as 530 Sansome Street, a 19-story building proposed on the same block as, and adjacent to, the project site. This is the only project included in the cumulative analysis because it is the only cumulative project with potential for winds that could adversely interact with winds from the proposed project.

### Pedestrian Comfort Analysis

**Table E9-3** summarizes the wind comfort results. Under the cumulative scenario, 11 locations would meet the pedestrian comfort criterion, which is one more than under existing conditions.<sup>93</sup> In addition, the 11 mph comfort criterion is exceeded 14 percent of the time under existing

<sup>93</sup> This analysis did not include the proposal at 530 Sansome Street as currently designed, rather it included a previous project proposed at 439 Washington Street. The changes that the 530 Sansome Street tower could make in the wind environment would include overall reductions in wind speed downwind of the 530 Sansome Street tower, and localized wind speed increases on upwind sidewalks, primarily on those sidewalks on the east side of Sansome Street near the base of the tower. The wind sheltering and the anticipated reductions in wind speed at the 447 Battery Street project site would occur because some portion of the approaching winds would be intercepted or altered by the 530 Sansome Street tower. This sheltering would reduce the overall speed of winds that reach the 447 Battery Street project tower, and thereby reduce the proposed project's downwash and those resulting winds that could flow down to pedestrian level. As is demonstrated in the 2017 wind tests, the proposed 447 Battery Street Project would have little effect on wind speeds along the Sansome Street sidewalks. This lack of effect demonstrates that there is no mechanism for the 447 Battery Street building to contribute to pedestrian winds on Sansome Street in any meaningful way, given the location of the 530 Sansome Street Tower upwind of the 447 Battery Street project site. For these reasons, the results and conclusions of the *Wind Study Technical Memorandum* with respect to the wind effects of the 447 Battery Street project and its compliance with Planning Code Section 148 remain valid. Environmental Science Associates, *Effects of the 530 Sansome Street Development on the Wind Hazard Potential and Compliance with Planning Code Section 148 Memorandum*, February 2020.

conditions. Under cumulative conditions, the 11 mph criterion would be exceeded 15 percent of the time, 1 percent more than existing conditions.

**Table E9-3. Wind Comfort Results for the Cumulative Scenario**

Wind Comfort Results	Existing Scenario	Cumulative Scenario
Pedestrian locations measured	19	19
Pedestrian locations that meet 11 mph comfort criterion	10	11
Highest wind speed	21 mph	19 mph
Average wind speed	12.3 mph	12.3 mph
Average percentage of time that wind speeds exceed 11 mph	14%	15%

Source: Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

The cumulative scenario would add two pedestrian comfort criterion exceedances, one mid-block on Merchant Street and one on the north sidewalk of Washington Street, east of Battery Street. The cumulative scenario would also eliminate three other exceedances, one at the corner of Merchant and Sansome streets and two at the intersection of Battery and Washington streets. Therefore, the cumulative scenario would result in eight comfort criterion exceedances, one fewer than under the existing scenario.

### **Wind Hazard Analysis**

**Table E9-4** summarizes the wind hazard results. Under existing conditions, the planning code wind hazard criterion is currently exceeded at three locations on Washington Street; the duration of the existing wind hazard is 43 hours per year. With cumulative development, the wind hazard criterion would be exceeded at the same three locations on Washington Street sidewalks as under existing conditions. The duration of that wind hazard would be 24 hours per year, which would be 19 hours per year less than the existing hazard.

**Table E9-4. Wind Hazard Results for the Cumulative Scenario**

Wind Comfort Results	Existing Scenario	Cumulative Scenario
Number of test locations	19	19
Number of wind hazard locations	3	3
Total hours of wind hazard per year	43 hours	24 hours

Source: Environmental Science Associates, *Wind Study Technical Memorandum*, November 2019.

### **Conclusion**

The cumulative scenario would decrease the number of sidewalk locations that would exceed the pedestrian comfort criterion and increase by 1 percent the percentage of time the pedestrian comfort

criterion would be exceeded. However, given the existing wind speeds in the vicinity, these changes would not substantially alter the pedestrian wind environment. The cumulative scenario would also substantially reduce the duration of the existing wind hazard, from the existing 43 hours per year to 24 hours per year, a 44 percent decrease. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable wind impact. Accordingly, cumulative effects related to wind would be *less than significant*. No mitigation measures are necessary.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E10. SHADOW.</b>					
Would the project:					
a) Create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The information in this section is based on the *447 Battery Street Shadow Analysis* prepared for the proposed project.<sup>94</sup>

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

Planning Code section 295, which was adopted in response to Proposition K (passed November 1984), mandates that new structures above 40 feet in height that would cast additional shadows on properties under the jurisdiction of or designated to be acquired by the San Francisco Recreation and Park Commission cannot be approved by the Planning Commission (based on recommendation from the San Francisco Recreation and Park Commission) if the shadow “will have any adverse impact on the use” of the park, unless the impact is determined to be insignificant. Two public open spaces in the vicinity of the project site are protected under Planning Code section 295, Maritime Plaza, located directly across Battery Street (less than 0.01 mile east) from the project site, and Sue Bierman Park, approximately 0.15 mile east of the project site.<sup>95</sup> Under the proposed project, the height to the roof would be 200 feet, with up to an additional 20 feet for rooftop appurtenances. Therefore, a preliminary shadow fan analysis was conducted by the department. According to the shadow fan, shadow generated as a result of the proposed project would reach Maritime Plaza and Sue Bierman Park. The proposed project would also have the potential to cast minimal shadow on several existing privately owned public open spaces, including Transamerica Redwood Park and Sydney Walton Square.

<sup>94</sup> Fastcast, LLC, *447 Battery Street Shadow Analysis*, March 31, 2020.

<sup>95</sup> Under section 295, the shadow analysis period ranges from one hour after sunrise to one hour before sunset, 365 days per year. The analysis uses a "solar year" which is the half-year period between the summer and winter solstices because the path of the sun is roughly mirrored over the other half of the year.

### **Maritime Plaza**

Maritime Plaza is an above-grade open space on the east side of Battery Street, directly across from the project site. The plaza is used throughout the day and evening hours. It is open to the general public and visited by residents and surrounding workers.

New shadow cast by the proposed project would occur 43 weeks of the year, including summer, spring/fall, and portions of winter, from January 25 to November 15 but only after 1:45 p.m.

Net new shadows from the proposed project would begin later in the day and would last longer during the summer months, with 4 hours and 18 minutes being the longest duration. New shadows would start later in the day and have a shorter duration in the spring and the fall and would taper off to zero from mid-November to late January.

On average, the proposed project would increase the shadow cast on Maritime Plaza. Net new shadow would fall on an area in the northwest section of the plaza and would have an average duration of approximately 3 hours and 12 minutes at its maximum. Shadow would also cover a portion of the sidewalk on Battery and Clay streets and would partially cover open grass areas, pathways, and vegetation.

Surveys documenting the number of people engaged in various types of active and passive activities in Maritime Plaza were conducted by Fastcast on the following dates and times:<sup>96,97</sup>

- Monday, August 12, 2019: 12:00 – 4:30 p.m.
- Tuesday, August 13, 2019: 12:00 – 4:30 p.m.
- Thursday, August 15, 2019: 12:00 – 4:30 p.m.
- Saturday, August 17, 2019: 12:00 – 4:30 p.m.
- Monday, August 26, 2019: 12:00 – 4:30 p.m.
- Sunday, November 10, 2019: 1:30 – 5:00 p.m.
- Monday, November 11, 2019: 1:30 – 5:00 p.m.
- Thursday, November 21, 2019: 7:00 a.m. – 6:00 p.m.
- Saturday, November 23, 2019: 7:00 a.m. – 6:00 p.m.

The weekday surveys recorded an average of 357 people in the plaza between noon and 4:30 p.m.; the average number of people in the plaza at any one time was 19. The weekend surveys recorded an average of 92 people in the plaza between noon and 4:30 p.m.; the average number of people in the plaza at any one time was eight.

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<sup>96</sup> Fastcast, LLC, *447 Battery Street Shadow Analysis, Exhibit D*, October 2020.

<sup>97</sup> The survey dates and times were selected to observe park usage on both weekdays and weekends, and to focus on the times of day during which the proposed project would result in net new shadow on the park.

On both weekdays and weekends, the interior portions of the plaza on either side of the 1 Maritime Plaza building (e.g., the center grassy area, corner pavilions and sitting areas, and center fountain and paved open space) were the most heavily used parts of the plaza, with about 204 people using the areas between noon and 4:30 p.m. on a weekday and about 52 people using the areas between noon and 4:30 p.m. on a weekend.

The types of activities that people were engaged in within these areas of the plaza include both passive and active recreation, such as walking, dog walking, talking/socializing, or taking breaks during the workday within the seating areas and pavilions. During a weekday, use of this area peaks during lunchtime (11:15 a.m. to 1:45 p.m.), with about 224 people observed and at the end of the workday (4:45 p.m. to 6 p.m.) with about 143 people observed. During the weekend, use of these areas is fairly even throughout the day, with slightly higher use during lunchtime (11:45 a.m. through 1:45 p.m.) with about 62 people observed. This indicates that the times during which additional shadow would fall on Maritime Plaza (after 1:45 p.m.) overlaps with one period of time of less use (between 1:45 p.m. and 4:45 p.m.) and one period of time of greater use (4:45 p.m. to 6 p.m.).

Certain types of activities are more affected by changes in shadow than others. Of the activities that occur in Maritime Plaza, sitting on benches or within some of the seating areas would be more affected by changes in shadow because people would be in a single location for an extended period of time; however, people could easily move to an unshaded portion of the plaza if they desired sunlight during such activities. Approximately 10 percent of weekday users and 10 percent of weekend users are engaged in these passive types of activities.

Approximately 90 percent of weekday users and 90 percent of weekend users are engaged in more active uses such as talking/socializing, taking breaks during the workday within the plaza's seating areas, walking, and dog walking. These activities would be less affected by changes in shadow because people typically do not remain at any one location for an extended period of time; they are moving between shaded and unshaded portions of the plaza. In addition, many of the walking activities are passthrough trips; people using the plaza to access the 1 Maritime Plaza building or other Financial District destinations, rather than for recreational uses.

The largest new net shadow would not exceed 12.12 percent of the overall area of the plaza. This maximum shading would occur for only 15 minutes on May 24 and July 19 at 6:30 p.m., which is after the peak usage of the plaza. The new shading on the plaza may affect use and enjoyment of the plaza by users in the afternoon (after 1:45 p.m.), particularly those users who are sitting on benches or in some of the seating areas. However, the total amount of new shadow that these users would experience would still be relatively small compared to the size of the plaza, and only about 10 percent of plaza users are engaged in these types of activities. Furthermore, if users desire sunlight, they could choose an unshaded portion of the plaza. In addition, the new shading would



be unlikely to affect the 90 percent of users of the plaza who are engaged in more active recreational activities, such as talking/socializing, taking breaks, and walking.

### ***Sue Bierman Park***

Sue Bierman Park is an at-grade open space that is one block east of the project site. The proposed project's shadow fan indicates that shadow from the project would reach Sue Bierman Park. However, shadow from the proposed project would reach areas of the park that are already in shadow from the 398-foot-tall Alcoa building, which is located between Sue Bierman Park and the project site. Therefore, no net new shadow from the proposed project would affect Sue Bierman Park at any time throughout the year.

### ***Privately Owned Public Open Spaces and Sidewalks***

Some privately owned public open spaces in the vicinity of the project site would experience a minimal increase in shadow from the proposed project. These open spaces include Transamerica Redwood Park, approximately 0.08 mile west of the project site, and Sydney Walton Square, approximately 0.14 mile northeast of the project site. Transamerica Redwood Park, a 0.5-acre redwood grove nestled between the skyscrapers of San Francisco's Financial District, is a unique feature of Transamerica Pyramid Center. The proposed project could add a very small amount of new shadow on the western edge of Transamerica Redwood Park in the morning during the summer months, from approximately May to early August. The net new shadow would not occur after 9:00 a.m. This area of the park contains seating areas and a pathway.

Sydney Walton Square is a 2-acre public park west of The Embarcadero. The proposed project would not add net new shadow to Sydney Walton Square because of the existing shadows already being cast by the approximately 220-foot-tall Golden Gateway Tower that runs the length along Battery Street between Jackson and Washington Streets northeast of the project site.

The proposed project would add new shade to the surrounding sidewalks and properties. However, because of the configuration of existing buildings in the vicinity, the net new shading that would result from the project's construction would be limited in scope and would not increase the total amount of shading above levels that are common in urban areas. This would not be considered a significant impact under CEQA.

### ***Conclusion***

The proposed project would cast net new shadow on Transamerica Redwood Park and surrounding sidewalks and properties; however, the additional shadow would be minimal.

Although the increase in shadow would be noticeable at Maritime Plaza, it would add only a few additional hours of shading during the summer months in the northwestern section of the plaza and would not substantially and adversely affect use and enjoyment of Maritime Plaza because the

total amount of new shadow that users would experience would still be relatively small compared to the size of the plaza leaving areas unshaded for those who desire sunlight, and only about 10 percent of plaza users are engaged in passive activities that are more affected by shadow. In addition, many of the walking activities are passthrough trips; people using the plaza to access the 1 Maritime Plaza building or other Financial District destinations, rather than for recreational uses. Lastly, the new shading would be unlikely to affect users of the plaza who use it prior to 1:45 p.m. and those who engage in more active recreational activities, such as talking/socializing, taking breaks, and walking. Therefore, the proposed project would not result in new shadow that would substantially and adversely affect the use and enjoyment of publicly accessible open spaces, and this impact would be *less than significant*. No mitigation measures are necessary.

**Impact C-SH-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative shadow impacts. (Less than Significant)**

The only cumulative project that would affect shadow conditions is 530 Sansome Street. The 530 Sansome Street project, in combination with the proposed project, would cast minimal new net shadow on one park protected by Planning Code section 295 (Maritime Plaza). Under the cumulative condition, the maximum net new shadow cast by the 530 Sansome Street project, in combination with the proposed project, would occur on June 7 and July 5. On those days, the new shadow would be cast for approximately 4 hours and 3 minutes, from approximately 3:15 p.m. to 7:33 p.m. at the latest. On June 14 and 28, the largest shadow by area would cover 5.81 percent of the total open space at 6:15 p.m.; however, this maximum shading would occur for only 15 minutes. During this time, the western portion of the plaza would be shaded, including walkways, grassy areas with hedges/plants and planters, as well as a podium/statue area with steps. The area of shading under the cumulative scenario would be very similar to the area of shading that would occur under the proposed project, except there would be a small additional area of shading in the southwest portion of the plaza during the summer at 6 p.m. and at the northeast edge of the plaza during the fall at 6 p.m. The southwest portion of the plaza that would be shaded contains walking paths and vegetation, while the northeast edge of the plaza that would be shaded contains only vegetation.

Although some of the affected times are periods of greater use (at the end of the workday from 4:45 p.m. to 6 p.m.), the largest shadow by area is after 6 p.m., and the amount of new shadow is a small percentage of the total park area (5.81 percent). Based on the surveys conducted for the proposed project, approximately 30 people could be using the plaza at 6 p.m. on a weekday; these people could, for example, be walking to other areas of the plaza. This type of activity is considered active recreation and would not be greatly affected by changes in shadow because people would not be at any one location for an extended period of time, and many of the walking activities are passthrough trips; people using the plaza to access the 1 Maritime Plaza building or other Financial District destinations, rather than for recreational uses. and people typically focus on arriving at their

destinations. Therefore, the cumulative scenario would not add substantial new shadow to the usable open space, and the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative shadow impact. Cumulative effects related to shadow would be *less than significant*.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E11. RECREATION.</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project would consist of a hotel with 198 rooms. The hotel guests, restaurant patrons, and new users of the proposed project would be served by the San Francisco Recreation and Parks Department (RPD), which administers more than 220 parks, playgrounds, open spaces, recreational facilities, and athletic centers citywide.<sup>98</sup> The project site is in a densely developed urban neighborhood that does not contain large regional park facilities but does include a number of smaller neighborhood parks, open spaces, and other recreational facilities. The San Francisco General Plan Recreation and Open Space Element (ROSE), revised and updated in April 2014, does not identify the project site area as a high-needs open space area.

There are several facilities managed by the RPD near the project site:

- Maritime Plaza Park (285 Washington Street): An approximately 2.0-acre elevated rooftop park with seating areas, grassy areas, and walking paths located on top of a City-owned parking garage. The park, which surrounds the Alcoa Building at One Maritime Plaza, is less than 0.01 mile east of the project site, directly across Battery Street.<sup>99,100</sup>
- Transamerica Redwood Park (600 Montgomery Street): An approximately 0.5-acre park with benches, grassy areas, fountains, and walking paths located approximately 0.08 mile west of the project site.
- Sydney G. Walton Square (on Jackson Street between Front Street and Davis Street): An approximately 2.2-acre park with green space and walking paths as well as public art, a fountain, and a brick arch; the park is approximately 0.14 mile northeast of the project site.

<sup>98</sup> San Francisco Planning Department, *Recreation and Open Space Element*, April 2014, [http://generalplan.sfplanning.org/Recreation\\_OpenSpace\\_Element\\_ADOPTED.pdf](http://generalplan.sfplanning.org/Recreation_OpenSpace_Element_ADOPTED.pdf), accessed July 3, 2019.

<sup>99</sup> San Francisco Recreation and Parks Department, *Maritime Plaza*, 2019, <https://sfrecpark.org/destination/maritime-plaza/>, accessed July 19, 2019.

<sup>100</sup> San Francisco Parks Alliance, *Maritime Plaza/Golden Gate Way Plaza*, 2019, <https://sfrecpark.org/destination/maritime-plaza/>, accessed July 19, 2019.

- Sue Bierman Park (on Washington Street between Davis Street and The Embarcadero): An approximately 5.3-acre park with grassy areas, walking paths, and a playground located approximately 0.15 mile east of the project site.
- Empire Park (at 648 Commercial Street): An approximately 0.05-acre park with benches, located approximately 0.2 mile southwest of the project site.
- Portsmouth Square Plaza (at 733 Kearny Street): An approximately 1.1-acre park with benches and walking paths located approximately 0.25 mile west of the project site.
- St Mary's Square (at 651 California Street): An approximately 1.5-acre park with a playground located approximately 0.33 mile southwest of the project site.
- Willie “Woo Woo” Wong Playground (at 830 Sacramento Street): An approximately 0.6-acre park with playgrounds and sports facilities, including basketball, tennis, and volleyball courts, located approximately 0.35 mile southwest of the project site.<sup>101</sup>
- Market/Battery Plaza (at the intersection of Market Street and Battery Street): An approximately 0.23-acre plaza with tables and chairs located approximately 0.31 mile south of the project site.
- One Bush Plaza (at the intersection of Bush Street and Battery Street): An approximately 0.5-acre plaza with walking paths located approximately 0.31 mile south of the project site.

**Impact RE-1: The proposed project would not result in a substantial increase in the use of existing parks and recreational facilities such that substantial physical deterioration or degradation of recreational facilities would occur or be accelerated, nor would it include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (Less than Significant)**

As noted above, the ROSE does not identify the project site as a high-needs open space area of the city; it is located in an area of low to moderate need for recreational facilities. The ROSE defines a high-needs area of the city as an area “with high population densities, high concentrations of seniors and youth, and lower-income populations that are located outside of existing park service areas.”<sup>102</sup> The project site is in an area of primarily commercial and office land uses, which corresponds to lower population densities. As shown on Maps 4a through 4c of the ROSE, the project site is within the 0.5-mile service area of “Active Use/Sports Fields” and “Passive Use/Tranquil Spaces” and the 0.25-mile service area of “Playgrounds.” As shown on Maps 5a, 5c, and 5d in the ROSE, the project site is also within an area of the city that exhibits low population densities, low numbers of children and young people, and low numbers of seniors relative to the

<sup>101</sup> San Francisco Recreation and Parks Department, *Willie “Woo Woo” Wong Playground*, 2019, <https://sfrecpark.org/destination/willie-woo-woo-wong-playground/>, accessed July 19, 2019.

<sup>102</sup> San Francisco Planning Department, *Recreation and Open Space Element*, April 2014, [http://www.sfplanning.org/ftp/General\\_Plan/Recreation\\_OpenSpace\\_Element\\_ADOPTED.pdf](http://www.sfplanning.org/ftp/General_Plan/Recreation_OpenSpace_Element_ADOPTED.pdf), accessed July 3, 2019.

city as a whole. The project site is also within an area with a lower percentage of low-income households relative to the city as a whole (Map 5b) and an area that has been designated to absorb less future population growth compared with other areas in the city (Map 6 of the ROSE). Based on these variables, a composite map was generated to identify areas of the city that receive priority when opportunities to acquire land for development of new parks arise and when funding decisions for the renovation of existing parks are made (Map 7 of the ROSE).<sup>103</sup> As shown on Map 7, the project site is not within a high-needs area.

Because the proposed project would not contain any residential units, project implementation would not result in a permanent increase in demand for parks and recreational facilities in the vicinity. However, site visitors, including hotel and restaurant patrons and the approximately 50 employees who would work at the project site, may use nearby recreational facilities, as listed above. The proposed project would include open space amenities such as 2,720 square feet of publicly accessible open spaces along Merchant Street, 2,203 square feet of common commercial open space, and 3,934 square feet of private open space for hotel and restaurant guests. These open space amenities would partially offset the demand for open space generated by visitors and employees. In addition, the project site would not be within a high-needs area of the city, as designated by RPD. With the availability of open space on and near the project site, project-generated recreational demand could be accommodated by existing recreational facilities. Overall, the proposed project would not create a substantial increase in the use of existing recreational facilities such that physical deterioration or degradation of existing facilities would occur, nor would it result in the need for the expansion or construction of recreational facilities. Therefore, the proposed project would have a *less-than-significant* impact on existing recreational facilities, and no mitigation measures are necessary.

**Impact C-RE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative recreation impacts. (Less than Significant)**

Cumulative development in the project vicinity would result in an intensification of land uses and a corresponding increase in demand for recreational facilities and resources. The City has accounted for such growth as part of the ROSE.<sup>104</sup> In addition, San Francisco voters passed two bond measures, in 2008 and 2012, to fund acquisition, planning, and renovation efforts related to the City's recreational resources. Moreover, in June 2016, San Francisco voters approved Local Measure (Proposition) B, which extends until 2046 the funding set aside in the City budget for RPD and provides annual increases in general fund monies provided to RPD through 2026–2027, meaning that, going forward, RPD will have additional funding for programming and park maintenance. As discussed above, there are 10 parks, open spaces, or other recreational facilities in the project

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<sup>103</sup> Ibid.

<sup>104</sup> Ibid.

vicinity. It is expected that these existing recreational facilities would be able to accommodate the increase in demand for recreational resources generated by nearby cumulative development projects. For these reasons, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative impact on recreational resources. Impacts would be *less than significant*. No mitigation measures are necessary.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E12. UTILITIES AND SERVICE SYSTEMS.</b>					
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is within an urban area that is served by existing utility service systems, including water, wastewater and stormwater collection and treatment, solid waste collection and disposal, electric power, natural gas, and telecommunications facilities. The proposed project would add a new daytime and nighttime population to the site in the form of hotel and restaurant patrons; this increased non-residential population would subsequently increase the demand for utilities and service systems on the site. As discussed under Section E.2, Population and Housing, no residential development that would consistently increase utility demand at the project site is proposed. However, non-residential uses at the proposed project site, including the hotel and the two proposed restaurants, would require utility services for operations.

**Impact UT-1: The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, would not exceed the capacity of the wastewater treatment provider serving the project site, or require construction of new stormwater drainage facilities, wastewater treatment facilities, or electric power, natural gas, or telecommunications facilities or expansion of existing facilities. (Less than Significant)**

The project site is served by San Francisco's combined sewer system, which handles both sewage and stormwater runoff. The Southeast Water Pollution Control Plant (Southeast Plant) provides wastewater and stormwater treatment and management for the east side of the city, including the



project site. As described in Impact PH-1 in Section E.2, Population and Housing, the proposed project would not add any permanent residents to the area directly; however, project implementation would result in an estimated non-residential population of 396<sup>105</sup> when the hotel is fully occupied, which would not occur all of the time, plus 50 employees. This would increase the amount of wastewater generated at the project site by approximately 15,677 gallons per day.<sup>106,107,108</sup> This increase would represent only a 0.026 percent increase in the Southeast Plant's average daily treatment capacity of 60 million gallons per day.<sup>109</sup> This is a conservative estimate because it does not account for the existing wastewater currently generated at the project site, which would be eliminated under the proposed project. Overall, although the proposed project would add to wastewater flows in the area, it would not cause the capacity of the sewer system in the city to be exceeded.

The project site is also within a designated recycled water use area. Because the project would involve more than 40,000 square feet of alterations to an existing building, the project would comply with the Recycled Water Program<sup>110</sup> by installing recycled water systems for all applicable uses, including toilets and irrigation. In addition, the proposed project would comply with the Recycled Water Program by incorporating water-efficient fixtures, as required by Title 24 of the California Code of Regulations and the San Francisco Green Building Code (Ordinance 92-17).<sup>111, 112</sup> Compliance with these regulations would reduce wastewater flows as well as the amount of potable water used for building functions. The San Francisco Public Utilities Commission (SFPUC) also calls for the incorporation of water-efficient fixtures in new development because widespread adoption can lead to more efficient use of existing capacity. In addition, the proposed project would

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<sup>105</sup> Hotel guests are estimated to be 396 (198 rooms x 2 occupants).

<sup>106</sup> The 95 percent of water use (see Impact UT-2) assumed to be discharged to the combined sewer system is consistent with the SFPUC's standard assumption for multi-family residential buildings (SFPUC 2018). The SFPUC assumes that nonresidential (and single-family residential) uses discharge 90 percent of water used to the combined sewer. The 95 percent figure is used here for purposes of a conservative assessment of combined sewer system demand.

<sup>107</sup> SFPUC, *Wastewater Service Charge Appeal*, 2018, <http://www.sfwater.org/index.aspx?page=132>, accessed July 18, 2019.

<sup>108</sup> (37 gal/day for retail employees and hotel guests)(396 guests + 50 employees) = 16,502 gallons;  
(0.95)(16,502) = 15,676.9

<sup>109</sup> SFPUC, *San Francisco's Wastewater Treatment Facilities*, June, 2014, <http://sfwater.org/modules/showdocument.aspx?documentid=5801>, accessed July 18, 2019.

<sup>110</sup> SFPUC, *San Francisco Public Utilities Commission Recycled Water Installation Procedures for Developers*, 2015, <https://www.sfwater.org/modules/showdocument.aspx?documentid=1292>, accessed July 5, 2019.

<sup>111</sup> California Department of General Services, *Guide to Title 24: Based on the 2016 Edition of Title 24*, 2016, <https://www.documents.dgs.ca.gov/bsc/GuidesAndHelpDocs/2016GuideToTitle24-v01.24.2018.pdf>, accessed July 19, 2019.

<sup>112</sup> City and County of San Francisco, *San Francisco Green Building Code*, 2017, [http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2016edition?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca\\$sanc=JD\\_GreenBuilding](http://library.amlegal.com/nxt/gateway.dll/California/sfbuilding/greenbuildingcode2016edition?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$sanc=JD_GreenBuilding), accessed July 19, 2019.

not exceed the wastewater treatment requirements of the Regional Water Quality Control Board because it would meet the wastewater pre-treatment requirements of the SFPUC, as required by the San Francisco Industrial Waste Ordinance (see discussion under Impact HYD-1, in Section E.16, for additional stormwater management requirements).<sup>113</sup> Although the proposed project would add new hotel guests and employees to the project site, this additional population would be within the growth projections included in long-range plans, and the wastewater generated by the proposed project would not exceed the capacity of the wastewater treatment provider. Therefore, the incremental increase in wastewater with the proposed project would not require construction of new wastewater treatment facilities or expansion of existing facilities.

The project site is currently covered with impervious surfaces; thus, the proposed project would not create any additional impervious surfaces. Therefore, the proposed project would not result in an increase in stormwater runoff that would require construction of new stormwater drainage facilities. Compliance with the City's Stormwater Management Ordinance (Ordinance No. 83-10),<sup>114</sup> adopted in 2010 and amended in 2016, and the 2016 Stormwater Management Requirements and Design Guidelines<sup>115</sup> would require the proposed project to reduce or eliminate the existing volume and rate of stormwater runoff discharged from the project site. Furthermore, because more than 50 percent of the project site is currently covered by impervious surfaces, some of which would be replaced by non-impervious surfaces as part of project design, and because the project site is currently served by the combined sewer system, the stormwater management approach must reduce the existing runoff flow rate and volume for a two-year 24-hour design storm by 25 percent. The Stormwater Management Requirements and Design Guidelines set forth a hierarchy of BMPs to meet stormwater runoff requirements. First-priority BMPs involve reductions in stormwater runoff through approaches such as rainwater harvesting and reuse (e.g., for toilets and urinals and/or irrigation); infiltration through a rain garden, swale, trench, or basin; or the use of permeable pavement or a green roof. Second-priority BMPs include biotreatment approaches such as the use of flow-through planters or, for large sites, constructed wetlands. Third-priority BMPs, permitted only under special circumstances, involve use of a filter to treat stormwater.

To achieve compliance with the Stormwater Management Requirements and Design Guidelines, the proposed project would implement and install appropriate stormwater management systems. These could include low-impact design approaches, rainwater reuse, a green roof, or other systems or approaches to manage stormwater onsite and limit demand resulting from stormwater

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<sup>113</sup> City and County of San Francisco, *Ordinance No. 19-92*, San Francisco Municipal Code (Public Works), Part II, Chapter X, Article 4.1 (amended), January 13, 1992, 2008, [https://sfpublicworks.org/sites/default/files/Industrial\\_Waste\\_Ordinance-19-92.pdf](https://sfpublicworks.org/sites/default/files/Industrial_Waste_Ordinance-19-92.pdf), accessed July 18, 2019.

<sup>114</sup> City and County of San Francisco, *Ordinance No. 83-10, Requiring the Development and Maintenance of Stormwater Management Controls*, 2010.

<sup>115</sup> City and County of San Francisco, *Stormwater Management Guidelines*, 2016, <https://sfwater.org/Modules/ShowDocument.aspx?documentID=9026>, accessed July 18, 2019.

discharges for both collection system and wastewater facilities. A Stormwater Control Plan, required per the City's Stormwater Management Ordinance (Ordinance No. 83-10), would be designed for review and approval by the SFPUC because the proposed project would result in ground disturbance of an area greater than 5,000 square feet. The Stormwater Control Plan would also include a maintenance agreement, signed by the project sponsor, to ensure proper care of the necessary stormwater controls. Therefore, the proposed project would not substantially increase the amount of stormwater runoff to the extent that existing facilities would need to be expanded or new facilities would need to be constructed. Impacts on stormwater infrastructure would be less than significant.

Pacific Gas & Electric (PG&E) provides electrical and natural gas services in the city, including the project site. CleanPowerSF, a community choice aggregation energy service operated by the SFPUC, purchases energy directly from PG&E to maximize renewable energy use within the city. Customers are automatically enrolled in the service.<sup>116</sup> As described above, the proposed hotel and restaurant uses would very likely require more electric and natural gas services than the existing commercial and office uses at the project site. However, this incremental increase in demand for electrical and natural gas services on the project site would not require construction of new electric or natural gas conveyance facilities. Impacts on electric and natural gas infrastructure would be less than significant.

The project site and the broader San Francisco Bay Area region is well served by existing broadband and fiber optic telecommunications systems.<sup>117</sup> Currently, the project site houses technology offices, which have substantial telecommunications capacity. Proposed project implementation is therefore not expected to increase telecommunications demand substantially beyond existing conditions. Therefore, the incremental increase in demand for telecommunications services within the project site would not require construction of new telecommunications facilities, nor would it require the expansion of existing telecommunications facilities.

Because proposed project implementation would not require the expansion of existing or construction of new wastewater treatment, stormwater, electrical, natural gas, and/or telecommunications facilities, impacts would be less than significant, and no mitigation measures are required.

**Impact UT-2: The SFPUC has adequate water supplies available to serve the project from existing entitlements and resources, and the proposed project would not require expansion or construction of new water supply resources or facilities. (Less than Significant)**

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<sup>116</sup> SFPUC, *What Is CleanPowerSF?*, 2018, <https://sfwater.org/index.aspx?page=998>, accessed July 18, 2019.

<sup>117</sup> California Public Utilities Commission, *California Interactive Broadband Map*, 2017, <http://www.broadbandmap.ca.gov/>, accessed April 15, 2020.

As noted above, the proposed project would add hotel and restaurant uses to the project site. Although the project site currently supports a wine bar, the proposed project would include new restaurants that, in addition to the proposed hotel uses, would increase the demand for water on the site beyond current levels. However, this increase would not be in excess of amounts planned and provided for in the project area. The SFPUC currently provides an average of approximately 219 million gallons of water to 2.6 million users in Tuolumne, Alameda, Santa Clara, San Mateo, and San Francisco counties.<sup>118</sup> The proposed project's maximum estimated 396 hotel guests and 50 employees would use an estimated 18,103 gallons of water per day.<sup>119</sup> This is a conservative estimate because it does not account for the existing water currently used at the project site, which would be eliminated under the proposed project. The SFPUC's 2015 *Urban Water Management Plan* uses 2040 growth projections that were prepared by the department and ABAG to estimate future water demand.<sup>120</sup> The SFPUC estimates an additional 19.8 million gallons of water per day will be needed to meet future demand, based on long-term population growth estimates. The population generated by the proposed project would account for 0.09 percent of this additional demand. Therefore, although the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase in demand could be accommodated and would not be significant. As such, the proposed project could be served by existing water supplies and infrastructure.

As described above under Impact UT-1, the proposed project would also be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the San Francisco Green Building Ordinance, Non-potable Water Ordinance, and the Recycled Water Program, as defined in the Recycled Water Ordinance (Ordinance 390-91 and Ordinance 393-94).<sup>121</sup> Pursuant to the Non-potable Water Ordinance, the project would be required to install a recycled water system and use non-potable water (rainwater, graywater, foundation drainage, and/or treated blackwater) for toilet and urinal flushing.<sup>122</sup> Because the proposed project's water demand could be

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<sup>118</sup> SFPUC, *2013 Water Availability Study for the City and County of San Francisco*, May 2013, p. 2, <http://www.sfwater.org/modules/showdocument.aspx?documentid=4168>, accessed January 12, 2017.

<sup>119</sup> SFPUC, *2015 Urban Water Management Plan for the City and County of San Francisco*, June 2016, <https://www.sfwater.org/Modules/ShowDocument.aspx?documentID=8839>, accessed July 5, 2019. The current consumption rate for retail employees, including hotel guests, is 37 gallons per day. Hotel guests are estimated to be 396 (198 rooms x 2 occupants). The 50 employees x 37 gallons per day yields 1,850 gallons per day; the 396 hotel guests x 37 gallons per day yields 14,652 gallons per day. A 10 percent water loss factor is also included in the total water usage. Therefore, anticipated total gallons per day usage for the proposed project would be 1,805 + 14,652 + 1,646 (10 percent of 16,457) = 18,103 gallons per day.

<sup>120</sup> *Ibid.*, p. 4-3.

<sup>121</sup> SFPUC, *San Francisco Health Code, Article 12C: Alternate Water Sources for Non-Potable Applications*, 2015, <https://sfwater.org/Modules/ShowDocument.aspx?documentID=10422>, accessed July 18, 2019.

<sup>122</sup> Graywater is wastewater from bathtubs, showers, bathroom sinks, lavatories, clothes washing machines, laundry tubs, and the like. Blackwater is wastewater containing bodily or biological wastes, such as water from toilets, dishwashers, kitchen sinks, and utility sinks.

accommodated by existing and planned supplies and conveyance infrastructure, no expansion or construction of new water supply resources or facilities would be required. The proposed project would result in *less-than-significant* impacts on water supplies and conveyance systems, and no mitigation measures are necessary.

**Impact UT-3: The proposed project would be served by a landfill with adequate permitted capacity to accommodate the project's solid waste disposal needs and comply with all applicable statutes and regulations related to solid waste. (Less than Significant)**

In September 2015, the City approved an agreement with Recology for transport and disposal of municipal solid waste at the Recology Hay Road Landfill in Solano County. The City began disposing its municipal solid waste at the Recology Hay Road Landfill in January 2016; that practice is expected to continue for approximately nine years, with an option to renew the agreement for an additional six years.<sup>123</sup> The Hay Road Landfill is permitted by Solano County and the California Department of Resources Recycling and Recovery (CalRecycle) to accept up to 2,400 tons per day of municipal solid waste for disposal and operate up to 24 hours per day, seven days per week. The landfill has 30,433,000 cubic yards of remaining capacity and a closure date of 2077.<sup>124</sup> Therefore, the proposed project would be served by landfills with adequate permitted capacity to accommodate its solid waste disposal needs and would not result in a significant impact related to solid waste disposal.

The California Integrated Waste Management Act of 1989 requires municipalities to adopt an Integrated Waste Management Plan to establish objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. Reports filed by the San Francisco Department of the Environment showed that the city generated approximately 872,000 tons of waste material in 2000. Based on a daily disposal rate for non-construction solid waste of 1,200 tons, the amount that San Francisco disposes of at the Recology Hay Road Landfill, the city sends approximately 438,000 tons of material to the landfill annually.<sup>125</sup> Waste diverted from landfills is defined as recycled or composted. The Recology Hay Road landfill is required to meet federal, state, and local solid waste regulations. The City achieved its goal of diverting 75 percent of its landfill

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<sup>123</sup> 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](https://sfenvironment.org/sites/default/files/notice/attach/sfe_zw_landfill_memo_coe_7_22_15.pdf), accessed: November 8, 2019.

<sup>124</sup> 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: November 8, 2019.

<sup>125</sup> CalRecycle, *Disposal Rate Calculator*, <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed April 15, 2020.

waste by 2010 and, under Resolution No. 679-02,<sup>126</sup> has a goal of 100 percent diversion by 2020; however, these values do not include waste generated from construction projects. As of 2012, 80 percent of San Francisco's solid waste was being diverted from landfills, which exceeds the 2010 diversion target.<sup>127</sup>

San Francisco Ordinance No. 27-06 requires a minimum of 65 percent of all construction and demolition debris to be recycled and diverted from landfills. The San Francisco Green Building Code also requires certain projects to submit a recovery plan to the San Francisco Department of the Environment to demonstrate recovery or diversion of at least 75 percent of all demolition debris. Furthermore, the project would be required to comply with the City's Mandatory Recycling and Composting Ordinance (Ordinance 100-09), which requires everyone in San Francisco to separate their refuse into recyclables, compostables, and trash.<sup>128</sup> The proposed project would comply with all such regulations and policies and, therefore, would have a *less-than-significant* impact. No mitigation measures are necessary.

**Impact C-UT-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative utility or service systems impacts. (Less than Significant)**

The cumulative development projects identified in **Table B-1**, p. B-2, and overall projected growth in the city would increase the demand on citywide utilities, such as water, water and wastewater conveyance and treatment facilities, solid waste services, electric power, natural gas, and telecommunications facilities. As noted above, the SFPUC has accounted for such growth in its water demand and wastewater service projections, and the City has implemented various programs to achieve 100 percent landfill diversion by 2020. As with the proposed project, nearby cumulative development projects would be subject to water conservation, wastewater discharge, recycling and composting, and construction demolition and debris ordinances. Compliance with these ordinances would reduce the effects of nearby cumulative development projects. Moreover, the cumulative development projects in the area would also not result in population or employment growth in excess of planned growth for the project vicinity, the city, or the region. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative impact on utilities and service systems. Impacts would be *less than significant*.

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<sup>126</sup> City and County of San Francisco, *Resolution For 75% Waste Diversion Goal*, 2002, <http://sfbos.org/ftp/uploadedfiles/bdsupvrs/resolutions02/r0679-02.pdf>, accessed July 5, 2019.

<sup>127</sup> San Francisco Department of the Environment, *San Francisco Sets North American Record for Recycling & Composting with 80 Percent Diversion Rate*, 2019, <https://sfenvironment.org/news/update/san-francisco-sets-north-american-record-for-recycling-composting-with-80-percent-diversion-rate>, accessed July 19, 2019.

<sup>128</sup> City and County of San Francisco, *Ordinance 100-09: Mandatory Recycling and Composting*, 2009, [https://sfenvironment.org/sites/default/files/policy/sfe\\_zw\\_sf\\_mandatory\\_recycling\\_composting\\_ord\\_100-09.pdf](https://sfenvironment.org/sites/default/files/policy/sfe_zw_sf_mandatory_recycling_composting_ord_100-09.pdf), accessed July 5, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E13. PUBLIC SERVICES.</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project's impacts on parks and open spaces are discussed in Section E.11, Recreation. Impacts on other public services are discussed below.

**Impact PS-1: The proposed project would not result in an increase in demand for police protection, fire protection, schools, or other services to an extent that would result in substantial adverse physical impacts associated with the construction or alteration of governmental facilities. (Less than Significant)**

### ***Police Protection***

The proposed project would result in a more intensive use at the project site compared with current conditions with the addition of hotel rooms and restaurant space; therefore, it would most likely incrementally increase the number of police service calls in the project area. Police protection for the project site is provided by the Central Station at 766 Vallejo Street (between Stockton and Powell Streets), approximately 0.54 mile northwest of the project site). Although the proposed project would most likely increase the number of calls received from the area, the incremental increase in responsibilities would not be substantial in light of the existing demand for police protection services. The Central Station would be able to provide the necessary police services for crime prevention in the area.<sup>129</sup> Meeting this additional service demand would not require the construction of new police facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts. Hence, the proposed project would have *less-than-significant* impacts related to the provision of police services.

<sup>129</sup> San Francisco Police Department, 2014 Annual Report, p. 111, <http://sanfranciscopolice.org/annual-reports>, accessed July 22, 2019.

### **Fire Protection**

The proposed project would result in a more intensive use at the project site compared with current conditions; therefore, as with police service calls, it would most likely incrementally increase fire service calls in the project area. The project site receives fire protection services from the San Francisco Fire Department. Fire stations located nearby include Station 13, at 530 Sansome Street (at Washington Street, approximately 0.03 mile west of the project site); Station 2, at 1340 Powell Street (at Broadway, approximately 0.5 mile northwest of the project site); Station 28, at 1814 Stockton Street (at Greenwich Street, approximately 0.66 mile northwest of the project site); and Station 35, at Pier 22½ (at The Embarcadero and Harrison Street, approximately 0.75 mile southeast of the project site).

Although the proposed project would most likely increase the number of calls received from the area, this increase would not be substantial in light of existing demand for fire protection services and would not require the construction of new facilities or alteration of existing facilities, which could result in significant environmental impacts.

Because the anticipated increase in the number of calls for fire protection services would be minor, the proposed project would have *less-than-significant* impacts related to the provision of fire protection services.

### **Schools**

John Yehall Chin Elementary School, at 350 Broadway (about 0.22 mile north of the project site); Gordon J. Lau Elementary School, at 950 Clay Street (about 0.44 mile west of the project site); and Garfield Elementary School, at 420 Filbert Street (about 0.54 mile northwest of the project site) are the nearest public elementary schools to the project site. The closest middle school is Francisco, about 0.83 mile to the northwest.

The proposed project would not include any residential dwelling units and, thus, would not contribute to San Francisco Unified School District enrollment numbers. Therefore, implementation of the proposed project would not necessitate the need for new or physically altered schools, which could result in significant environmental impacts. Therefore, there would be *no impact* on school facilities associated with implementation of the proposed project.

### **Other Government Services**

Because the proposed project would not include new residential dwelling units, substantially increased demand for government services and facilities, such as public libraries, is not anticipated with project implementation. Although some hotel patrons and employees may use government services and facilities, such use would not be expected to rise to a level that could not be accommodated by existing facilities. Anticipated impacts on such facilities would therefore be minor. The proposed project would have a *less-than-significant* impact on other government service facilities.



## Conclusion

Based on the above discussion, anticipated impacts on public services would be minor. The proposed project would have a *less-than-significant* impact on public services, and no mitigation measures are necessary.

**Impact C-PS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts on public service facilities. (Less than Significant)**

Development of the proposed project, combined with cumulative projects and projected population growth in the area and the city, would increase overall demand for police protection, fire protection, and other government services, such as public libraries; however, this growth would not exceed growth projections for the area or the region, as discussed in Section E.2, Population and Housing. Furthermore, the San Francisco Police Department, San Francisco Fire Department, and other agencies have accounted for and planned for such growth in order to continue to provide public services to San Francisco residents. Because the proposed project would have no impact on schools, it would not contribute to a cumulative impact on San Francisco Unified School District facilities.

No new police or fire facilities are currently proposed in the project vicinity. The proposed project would not contribute considerably to the demand for these services or require the construction of other public service facilities. For these reasons, the proposed project would not combine with past, present, and reasonably foreseeable future projects in the project vicinity to create a considerable cumulative impact on public services such that new or expanded facilities would be required. This impact would be *less than significant*, and no mitigation measures are necessary.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E14. BIOLOGICAL RESOURCES</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is located within a built urban environment. As such, the project area does not include riparian habitat or other sensitive natural communities, as defined by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish and Wildlife Service (USFWS); therefore, topic 14b is not applicable to the proposed project. In addition, the project area does not contain any federal or state protected wetlands; therefore, topic 14c is not applicable to the proposed project. Moreover, the proposed project does not fall within any local, regional, or state habitat conservation plan areas; therefore, topic 14f is also not applicable to the proposed project.

**Impact BI-1: The proposed project would not 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. (Less than Significant)**

The CDFW California Natural Diversity Database (CNDDDB), USFWS Environmental Conservation Online System (ECOS), and California Native Plant Society (CNPS) Rare Plant Inventory were reviewed to determine the potential special-status plant and wildlife species that could occur near the project site. The USFWS identifies 21 endangered species, 10 threatened species, and one candidate species within San Francisco County.<sup>130</sup> In addition to identifying documented occurrences of federally protected species, the CNDDDB identified an additional 23 special-status species within the San Francisco North quadrant that are not otherwise federally protected;<sup>131</sup> these species are protected as California threatened or endangered species, species of special concern, fully protected species, or special-status watch list species. The CNPS Rare Plant Inventory identified 52 rare plants that occur in San Francisco County.<sup>132</sup>

The project site is fully developed and entirely covered with impervious surfaces; it does not include trees or other vegetation. Therefore, it does not provide habitat for any special-status plant or wildlife species. Thus, project implementation would not affect the habitat of any such species. However, migrating birds regularly pass through San Francisco, which is situated along the Pacific Flyway, a migratory route that is used by numerous avian species.<sup>133</sup> Nesting birds, their nests, and eggs are fully protected by California Fish and Game Code (Sections 3503, 3503.5) and the federal Migratory Bird Treaty Act (MBTA).<sup>134, 135</sup> Although the proposed project would be subject to the MBTA, the site does not contain habitat that supports migratory birds. In addition, because the project site is not in an urban bird refuge,<sup>136</sup> it is not expected to attract migratory avian species. Regardless, the location, building height, and building materials, particularly transparent or reflective glass, may present risks for birds as they travel along their migratory paths. The City has

<sup>130</sup> USFWS, *ECOS Environmental Conservation Online System, Species by County Report, San Francisco, CA*, 2017, <https://www.fws.gov/endangered/>, accessed January 25, 2017.

<sup>131</sup> California Department of Fish and Wildlife, *CNDDDB Quad Species List*, 2019, <https://apps.wildlife.ca.gov/bios/?tool=cnddbQuick>, accessed July 19, 2019.

<sup>132</sup> CNPS, *Rare Plant Program, Inventory of Rare and Endangered Plants* (online edition, v8-03.45), Sacramento, CA, 2019, <http://www.rareplants.cnps.org/advanced.html#cnps=1A:1B:2A:2B:3:4&ccl=SFO>, accessed July 19, 2019.

<sup>133</sup> Audubon Society, *The Flyways: Pacific Flyway*, <https://www.audubon.org/pacific-flyway>, accessed July 19, 2019.

<sup>134</sup> California Department of Fish and Game, *Section 681, Title 14, California Code of Regulations*, 2015, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=105302&inline>, accessed January 25, 2017.

<sup>135</sup> USFWS, *Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service: Migratory Bird Treaty Act of 1918*, 2017, <https://www.fws.gov/laws/lawsdigest/migtrea.html>, accessed July 19, 2019.

<sup>136</sup> An urban bird refuge is defined as any open space of at least 2 acres that is dominated by vegetation, vegetated landscaping, forests, meadows, grassland, wetlands, or open water.

adopted guidelines to address this issue and provided regulations for bird-safe designs within the city. Planning Code section 139, Standards for Bird-Safe Buildings, establishes building design standards to reduce avian mortality rates associated with bird strikes.<sup>137</sup> The proposed project would comply with the feature-related hazards standards<sup>138</sup> of section 139 by using bird-safe glazing on 100 percent of any feature-related hazards.

Overall, the proposed project would be subject to, and would comply with, City-adopted regulations for bird-safe buildings as well as federal and state migratory bird regulations. Therefore, because implementation of the proposed project would not have a substantial adverse effect on migratory avian species, and because the project site does not support habitat for any special-status species, impacts would be *less than significant*, and mitigation measures are not necessary.

**Impact BI-2: The proposed project 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)**

No trees would be removed as part of the proposed project because none currently exist at the project site. Because there would be no tree removal activities under the proposed project, disturbance of nesting birds protected under the California Fish and Game Code or the MBTA is not anticipated.<sup>139</sup>

As described above under Impact BI-1, although the site does not contain habitat that supports migratory birds, migratory birds that are protected under the MBTA regularly migrate through San Francisco. Converting the current three-story building to 18 stories may present a hazard for migrating birds, which could collide with the building. The likelihood of migratory bird collisions would increase because of the proposed façade, which would include a contemporary glass design from floors 3 to 18. If migratory birds were to collide with the 18-story building, avian injuries or mortalities could occur. However, the proposed project would be required to comply with Planning Code section 139, Standards for Bird-Safe Buildings, which contains design suggestions (e.g., glass etching and lighting restrictions), which improve bird safety and substantially reduce the potential for bird collisions.<sup>140</sup> Therefore, because compliance with the design standards would substantially

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<sup>137</sup> San Francisco Planning Department, *Standards for Bird-Safe Buildings*, July 14, 2011, [http://default.sfpplanning.org/publications\\_reports/bird\\_safe\\_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf](http://default.sfpplanning.org/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf), accessed July 19, 2019.

<sup>138</sup> Feature-related hazards are defined as the uninterrupted glazed segments of a building that measure 24 square feet or larger.

<sup>139</sup> California Fish and Game Code, *Section 3503*, California Code of Regulations, Section 681, Title 14.

<sup>140</sup> San Francisco Planning Department, *Standards for Bird-Safe Buildings*, July 14, 2011, [http://208.121.200.84/ftp/files/publications\\_reports/bird\\_safe\\_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf](http://208.121.200.84/ftp/files/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf), accessed on July 19, 2019.

reduce potential project interference with migratory bird passage, and because no other migratory species are known to occur in the project area, impacts would be *less than significant*, and mitigation measures are not required.

**Impact BI-3: The proposed project would not conflict with the City's local tree ordinance. (No Impact)**

No trees would be removed as part of the proposed project because none currently exist at the project site. Because there would be no tree removal activities under the proposed project, disturbance of nesting birds protected under the California Fish and Game Code or the MBTA is not anticipated.<sup>141</sup>

Public Works Code section 806(d)(2) requires one 24-inch box tree to be planted for every 20 feet of property frontage along each street, with any remaining frontage of 10 feet or more requiring one additional tree. This would require the proposed project to plant five street trees.<sup>142</sup> As part of the proposed project, three new trees would be planted on Battery Street, and eight new trees would be planted on Merchant Street, in accordance with Public Works Code section 806 and the Better Streets Plan. Because the proposed project would not conflict with the City's local tree ordinance, there would be *no impact*, and no mitigation measures are necessary.

**Impact C-BI-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative biological resources impacts. (Less than Significant)**

The cumulative development projects noted in **Table B-1**, p. B-2, coupled with projected local and regional growth, would result in an overall intensification of land uses within the surrounding dense urban environment, as is typical of infill development. The project site does not currently support any candidate, sensitive, or special-status species; any riparian habitat; or any other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS; therefore, it is not expected to contribute to cumulative impacts on such resources. However, the proposed project and other nearby development projects would add numerous tall buildings in the vicinity, which could, in the event of a bird strike, injure or kill birds. In addition, although the proposed project would not involve the removal of any street trees, nearby cumulative development projects would very likely result in the removal of existing street trees and/or other vegetation. However, as with the proposed project, nearby cumulative development projects would be subject to the MBTA, which protects special-status bird species; the California Fish and Game Code; and the bird-safe building and urban forestry ordinances. As with the proposed project, compliance with these ordinances would reduce the effects of other development

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<sup>141</sup> California Fish and Game Code, *Section 3503*, California Code of Regulations, Section 681, Title 14.

<sup>142</sup> San Francisco Public Works, *Plant a Street Tree*, <http://sfpublicworks.org/plant-street-tree>, accessed July 19, 2019.

projects to less-than-significant levels. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in cumulatively considerable impacts on biological resources. Cumulative impacts on biological resources would be *less than significant*, and no mitigation measures are necessary.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E15. GEOLOGY AND SOILS.</b>					
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismically related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The proposed project would connect to the existing sewer system; there would be no use of septic tanks or alternative wastewater disposal systems for the proposed project. Therefore, topic 15e is not applicable to the proposed project.

This section describes the geology, soils, and seismicity characteristics of the project area as they relate to the proposed project. The analysis in this section is based on the geotechnical report prepared for the proposed project by an independent consultant.<sup>143</sup> This report is the primary source of information included in this section. The scope of the geotechnical investigation included cone penetration tests and evaluation; evaluation of soil and groundwater conditions at the site as

<sup>143</sup> Langan Treadwell Rollo, *Preliminary Geotechnical Consultation*, 447 Battery Street, San Francisco, CA, April 7, 2016.

well as seismic hazards, including ground rupture, liquefaction, and differential compaction; and design recommendations concerning foundation types, foundation design criteria, the estimated foundation and surrounding ground surface settlement site class and seismic design criteria per the 2016 San Francisco Building Code, excavation, temporary shoring, soil subgrade preparation, and construction considerations, including underpinning at adjacent structures.

### ***Site Geology***

The project site is underlain by Franciscan Complex bedrock, which is locally overlain by native clay and sand deposits, Bay Mud, and artificial fill. The fill consists of loose to medium-dense sands and significant amounts of debris. The Bay Mud is a compressible, very soft to medium-stiff clay and may be normally consolidated (i.e., has not experienced higher overburden pressure in its depositional past). Thin layers of loose to medium-dense marine sand may be present within the Bay Mud; the thickness of Bay Mud would be expected to increase to the east (toward the Bay). Underlying the artificial fill and Bay Mud, dense to very dense clayey sands/medium stiff to hard sandy clays and dense to very dense sands were previously encountered in the project vicinity. Maps of historically highest groundwater levels indicate a depth to groundwater of approximately 10 feet below the ground surface (bgs), or an elevation of -8 feet. Monitoring wells north and west of the site measured water at about -10 feet. Groundwater levels would be expected to fluctuate, based on rainfall and seasonal variations.

### ***Project Features***

The proposed project would involve retaining the existing building façade, as seen by the public. The interior would be reconfigured to comply with the current building code and accommodate additional space at the project site. The project would convert the existing three-story building into an 18-story, 200-foot-tall hotel. The project's deep foundation is anticipated to require the use of auger pressure-grouted displacement piles, drilled shafts, auger cast piles, Fundex piles, or torque-down piles. The project site would be excavated up to approximately 55 feet bgs to accommodate the four subterranean levels and the building's foundation. The proposed project would require approximately 15,000 cubic yards of excavated soil to be removed from the project site and disposed of at an appropriate facility. Groundwater was encountered on the project site at 12 to 13 feet bgs; therefore, dewatering will most likely be required.

### ***Regulatory Framework***

Under the direction and management of the seven-member Building Inspection Commission, the mission of the Department of Building Inspection (the building department) is to oversee effective, efficient, fair, and safe enforcement of the City's Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soil, and seismic hazards is adequately addressed, San Francisco relies on state and local regulatory processes for review and approval of building



permits, pursuant to the California Building Standards Code (state building code) (California Code of Regulations, title 24); the San Francisco Building Code (local building code), which is the state building code plus local amendments that supplement the state code; the building department's implementing procedures, including administrative bulletins and information sheets; and the state Seismic Hazards Mapping Act of 1990 (Seismic Hazards Act), located in Public Resources Code sections 2690 to 2699.6.

The state building code is codified in title 24 of the California Code of Regulations. The state building code provides standards that must be met to safeguard life and limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the state. The state building code generally applies to all occupancies in California, with modifications adopted in some instances by state agencies or local governing bodies. The current state building code incorporates, by adoption, the 2016 edition of the International Building Code of the International Code Council, with the California amendments. The amendments include significant building design and construction criteria that have been tailored for California earthquake conditions.

Chapter 16 of the state building code addresses structural design requirements governing seismically resistant construction (section 1604), including, but not limited to, factors and coefficients used to establish a seismic site class and seismic occupancy category appropriate for the soil/rock at the building location and the proposed building design (sections 1613.5 through 1613.7). Chapter 18 includes, but is not limited to, the requirements for foundation and soil investigations (section 1803); excavation, grading, and fill (section 1804); allowable loadbearing values of soils (section 1806); foundations and retaining walls (section 1807); and foundation support systems (sections 1808 through 1810). Chapter 33 includes, but is not limited to, requirements for safeguards at work sites to ensure stable excavations and cut-and-fill slopes (section 3304) as well as the protection of adjacent properties, including requirements for noticing (section 3307). Appendix J of the state building code includes, but is not limited to, grading requirements for the design of excavations and fills (sections J106 and J107), specifying maximum limits on the slope of cut-and-fill surfaces and other criteria, required setbacks and slope protection for cut-and-fill slopes (J108), and erosion control in general and regarding the provision of drainage facilities and terracing (sections J109 and J110). San Francisco has adopted Appendix J of the state building code, with amendments to J103, J104, J106, and J109 as articulated in the local building code.

The Seismic Hazards Act, enacted in 1990, requires the California State Geologist to create maps that identify seismic hazard zones, which cities and counties use in preparation of the safety elements of their general plans, and encourage land use management policies and regulations to reduce and mitigate hazards and protect public health and safety. The Seismic Hazard Act includes guidelines for the preparation of seismic hazard maps; policies and criteria regarding

the responsibilities of city, county, and state agencies; criteria for project approval; and guidelines for evaluating seismic hazards and recommending mitigation measures.<sup>144</sup>

All projects within a state-designated seismic hazard zone associated with liquefaction or landslide hazards are subject to state Seismic Hazards Act requirements, including preparation of a geotechnical investigation to delineate the area of hazard and development of mitigation measures to address any identified seismic hazards. The local building official must incorporate the recommended mitigation measures to address such hazards into the conditions of the building permit. The project site is within a seismic hazard zone (liquefaction zone), as discussed below; therefore, site design and construction must comply with the requirements of the Seismic Hazard Act.

In addition to compliance with the building code and Seismic Hazards Act, the proposed project would follow the building department's local implementing procedures, including Administrative Bulletins, which are part of the local building code, and Information Sheets, which clarify building department requirements and procedures. On November 21, 2018, the building department issued Administrative Bulletin AB-083, Guidelines and Procedures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review,<sup>145</sup> superseding AB-082, originally issued March 25, 2008, and revised December 19, 2016. The guidelines describe the review process for structural, geotechnical, and seismic hazard engineering design, including the project characteristics considered in determining whether review is required and, if so, which reviews are required.

The project sponsor's engineer of record for the project would work with the two-member review team to review and 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 review team shall be provided to the director of the building department. The report will provide findings and address 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 that, prior to the completion of the proposed project, the project sponsor contract with 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

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<sup>144</sup> In the context of the Seismic Hazards Act, "mitigation" refers to measures that are consistent with established practice that will reduce seismic risk to acceptable levels rather than the mitigation measures identified in the California Environmental Quality Act to reduce or avoid the environmental impacts of a proposed project.

<sup>145</sup> San Francisco Department of Building Inspection, *Administrative Bulletin 082*, Guidelines and Procedures for Structural Design Review, November 21, 2018, <http://sfdbi.org/sites/default/files/AB-082.pdf>, accessed July 15, 2019.

findings from the post-occupancy surveys shall be provided to the building department annually within this 10-year period.

### ***Approach to Analysis***

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,<sup>146</sup> 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 where the project would significantly exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future seismic hazard area or an area with unstable soils are not considered impacts under CEQA, unless the project would significantly exacerbate the seismic hazard or unstable soil conditions. Therefore, the following analysis evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact would be significant if the proposed project were to exacerbate existing or future seismic hazards or unstable soils by increasing the severity of hazards that would occur or be present without the project.

#### **Impact GE-1: The proposed project would not exacerbate the potential to expose people or structures to seismic and geologic hazards, including the risk of loss, injury, or death involving rupture, ground shaking, liquefaction, or landslides. (Less than Significant)**

As discussed above under Regulatory Framework, the building department oversees effective, efficient, fair and safe enforcement of the City's Building, Housing, Plumbing, Electrical, and Mechanical Codes, along with the Disability Access Regulations. To ensure that the potential for adverse geologic, soil, and seismic hazards is adequately addressed, San Francisco relies on state and local regulatory processes for review and approval of building permits, pursuant to the state building code, California Code of Regulations, title 24; the local building code, which is the state building code plus local amendments that supplement the state code; the building department's implementing procedures, including administrative bulletins and information sheets; and the Seismic Hazards Act (Public Resources Code sections 2690 to 2699.6).

The project site is within a seismic hazard zone (liquefaction zone), as discussed below; therefore, site design and construction must comply with the requirements of the Seismic Hazards Act.

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<sup>146</sup> *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal.4th 369, opinion filed December 17, 2015.

### **Fault Rupture**

The project site is not within an earthquake fault zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known fault or potentially active fault exists within the project site.<sup>147</sup> In a seismically active area, such as the San Francisco Bay Area, the remote possibility exists for future faulting in areas where no faults were previously known to exist, but the likelihood of such fault rupture is extremely low. Therefore, this impact would be *less than significant*.

### **Ground Shaking**

The San Andreas, Hayward, San Gregorio, and Calaveras faults are the closest major faults. The site is approximately 13 miles east of the San Andreas fault, 16 miles west of the Hayward fault, 19 miles east of the San Gregorio fault, and 34 miles west of the Calaveras fault. In addition, according to the U.S. Geological Survey, the overall probability of moment magnitude 6.7 or greater earthquake to occur within the San Francisco Bay Area during the next 30 years, beginning in 2014, is 72 percent.<sup>148</sup> The proposed project would most likely experience periodic minor earthquakes and perhaps a major earthquake (moment magnitude greater than 6) on one of the nearby faults during its service life. The intensity of earthquake ground motion at the site would depend upon the characteristics of the generating fault, distance to the earthquake epicenter, magnitude, and duration of the earthquake. Ground shaking at the project site during a major earthquake on one of the nearby faults would be very strong.

ABAG has classified the Modified Mercalli Intensity Shaking Severity Level of ground shaking in vicinity of the proposed project due to an earthquake on the North San Andreas fault as VIII-Very Strong.<sup>149</sup> *Very strong* is defined as shaking that would damage some masonry buildings, cause stucco and some masonry walls to fall, cause chimneys and elevated tanks to fall, and shift unbolted wood-frame structures off their foundations. In accordance with the state and local building code requirements described above, the geotechnical investigation analyzed the potential for very strong seismic shaking and recommended that the proposed project's seismic design be in accordance with the provisions of the building code.<sup>150</sup> With implementation of these recommendations, as incorporated into and required by the building code, the impact of strong seismic ground shaking would be less than significant.

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<sup>147</sup> Department of Conservation, California Geological Survey, *Fault Activity Map of California*, 2010, <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed January 8, 2017.

<sup>148</sup> U.S. Geological Survey, *Uniform California Earthquake Rupture Forecast (UCERF3), Fact Sheet 2015-3009, UCERF3: A New Earthquake Forecast for California's Complex Fault System*, March 2015, <https://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>.

<sup>149</sup> Association of Bay Area Governments, *Resilience Program: San Francisco County Earthquake Hazard*, 2019, <http://resilience.abag.ca.gov/earthquakes/sanfrancisco/>, accessed: July 15, 2019.

<sup>150</sup> It should be noted that the proposed building must be built to the California Building Standards Code standards in effect at the time of application.

The proposed project would comply with the latest requirements of the state and local building codes, the building department's implementing guidance and procedures, as well as the Seismic Hazards Act. The final building plans (construction documents) and the structural report would be reviewed by the building department for conformance with recommendations in the site-specific design-level geotechnical investigation(s) to ensure compliance with state and local building code provisions related to structural safety. Furthermore, the proposed project would follow the requirements of AB-082 related to structural, geotechnical, and seismic hazard design review.<sup>151</sup> As discussed under Regulatory Framework, this 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 a 10-year period after the certificate of final completion and occupancy is issued.

Additional information related to vibration impacts on adjacent structures is discussed in Section E.6, Noise, and the historic architectural resources section of the EIR.

Because of the building department's permit review process, ensuring that structural and foundation plans comply with applicable building code provisions and conform to the measures recommended in the project-specific geotechnical report, and the recommendations made by the engineering design review team, as required by AB-082,<sup>152</sup> the impacts of the proposed project related to strong seismic ground shaking would be *less than significant*.

### ***Landslides, Liquefaction, Lateral Spreading, and Seismic Settlement***

With respect to landslides, based on the general plan, the project site is relatively level and not within a mapped landslide zone.<sup>153</sup> The site is also not within a designated earthquake-induced landslide zone, as shown on the California Geological Survey seismic hazard zone map for the area.<sup>154</sup> Therefore, the proposed project would have no impact with respect to the potential for landslides, and this topic is not discussed further.

Lateral spreading typically occurs on gentle slopes. Rapid fluid-like movement can occur where there is potential for liquefaction in underlying saturated soils. Liquefaction occurs when saturated soils lose strength and stiffness under applied stress, such as the stress from an earthquake, which causes solid soils to behave like a liquid because there is no cohesion, resulting in ground

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<sup>151</sup> San Francisco Department of Building Inspection, *Administrative Bulletin 082*, Guidelines and Procedures for Structural Design Review, November 21, 2018, <http://sfdbi.org/sites/default/files/AB-082.pdf>, accessed July 15, 2019.

<sup>152</sup> Ibid.

<sup>153</sup> San Francisco General Plan, *Community Safety Element*, Map 4, [http://generalplan.sfplanning.org/Community\\_Safety\\_Element\\_2012.pdf](http://generalplan.sfplanning.org/Community_Safety_Element_2012.pdf), accessed on January 5, 2017.

<sup>154</sup> 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](http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf), accessed: July 16, 2019.

deformation. Ground deformations can take on many forms, including, but not limited to, flow failure, lateral spreading, lowering of the ground surface, ground settlement, loss of bearing strength, ground fissures, and sand boils. Liquefaction of subsurface layers, which could occur during ground shaking associated with an earthquake, could result in ground settlement.

As described above, the project site is mapped as situated within a state-designated liquefaction hazard zone, according to the seismic hazards map for the area.<sup>155</sup> This means that there is potential for permanent ground displacement onsite, such as liquefaction.<sup>156</sup> In addition, because the site is bayward of the historic shoreline and has been previously documented for earthquake-induced ground deformation, the preliminary geotechnical consultation concluded that the potential for liquefaction during a future seismic event at the site is very high. The California Geological Survey provided recommendations for the content of site investigation reports within seismic hazard zones in Special Publication 117A, which recommends that at least one exploration point extend to a depth of at least 50 feet to evaluate liquefaction potential.<sup>157</sup> Boring data from the geotechnical investigation indicate that loose to medium-dense sand is very likely present both above (as fill) and below (as marine sand) the natural groundwater table in the site area. Loose sand above the groundwater table may densify and loose to medium-dense sand below the groundwater table may liquefy during strong ground shaking due to a seismic event on a nearby fault.

Based on the geotechnical investigation borings, the potential for liquefaction was analyzed. The analysis determined that soils in the fill, marine sand, Bay Mud, and isolated zones within the Colma Formation contain potentially liquefiable material to a maximum depth of approximately 45 feet bgs. The soil encountered below this depth within the Colma Formation has a low likelihood to liquefy or settle. Because the upper approximately 55 feet of soil is to be excavated at the site, the soils susceptible to liquefaction would be removed. As a result, it was concluded that the potential for significant liquefaction-induced settlement to affect the proposed building foundation is low. However, on the order of 4 inches of liquefaction-induced settlement could occur outside the building footprint. In addition, because the planned excavation would remove soils within the building footprint that are susceptible to liquefaction, the potential for lateral spreading to affect the proposed building foundation is low.

Seismic densification (also referred to as cyclic densification and differential compaction) can occur during strong ground shaking in loose, granular deposits above the water table, resulting in ground surface settlement. The degree of susceptibility to seismic densification is directly related to the relative density of the existing granular soils.

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<sup>155</sup> California Department of Conservation, Division of Mines and Geology, *City and County of San Francisco, State of California Seismic Hazard Zones, Official Map*, November 17, 2001.

<sup>156</sup> California Geological Survey, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*, 2008, [https://www.conservation.ca.gov/cgs/Documents/SP\\_117a.pdf](https://www.conservation.ca.gov/cgs/Documents/SP_117a.pdf), accessed: July 15, 2019.

<sup>157</sup> Ibid.

In general, the granular deposits encountered at the site above the groundwater level are susceptible to cyclic densification, particularly within the loose to medium-dense sandy fill. Settlement due to cyclic densification of these materials could result in settlement on the order of 0.5 inch outside the building footprint. This settlement would be in addition to any post-earthquake settlement due to liquefaction. However, the planned excavation would remove soils within the building footprint that are susceptible to cyclic densification. Accordingly, the potential for cyclic densification to affect the proposed building foundation is low.

Although the risk of liquefaction, lateral spreading, and seismic densification is low, in accordance with the provisions of the 2016 state building code and Special Publication 117A, the building department permit review process would ensure that the project's structural and foundation plans comply with applicable building code provisions and conform to the measures recommended in the project-specific geotechnical report. Conformance with the review process and recommendations made by the engineering design review team, as required by AB-082, would ensure that the proposed project would not exacerbate the potential for seismic-related ground failure, including liquefaction and lateral spreading. Therefore, this impact would be *less than significant*.

### **Conclusion**

Though it would be located in a seismically active area, the proposed project would not exacerbate the potential for fault rupture, ground shaking, or liquefaction-related geologic hazards. Though future hotel occupants could be subjected to such hazards in a future geologic event, the proposed project design and compliance with applicable building standards, Administrative Bulletin AB-083, and the Seismic Hazards Act would minimize potential hazards. Therefore, this impact would be *less than significant*, and no mitigation measures are required.

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

The project site is generally flat, with an elevation of approximately 1 to 2 feet, San Francisco City Datum,<sup>158</sup> and almost entirely covered with impervious surfaces. The proposed project, which would not substantially change the general topography of the site, would include building demolition followed by construction of a mixed-use building with four below-grade levels; the mixed-use building would cover the majority of the site. As stated under Project Features, the project site would be excavated to a depth of approximately 55 feet bgs, which would require excavation of approximately 15,000 cubic yards of material.

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<sup>158</sup> This corresponds to approximately 14 feet above sea level.

Relevant regulations related to erosion prevention include the following:

- National Pollutant Discharge Elimination System
- San Francisco Public Works Code, article 4.2, section 146.7, Erosion and Sediment Control Plan
- San Francisco Environment Code, chapter 14, Construction and Demolition Debris Recovery Ordinance

Because the project site is presently covered with impervious surfaces and underlain by artificial fill, it does not contain native topsoil. Removal of the existing impervious surfaces during grading and excavation would expose soils to erosive forces such as wind and water, potentially resulting in soil erosion. However, compliance with the Construction Dust Control Ordinance would reduce the risk of erosion (see Impact AQ-1).

As described in Section E.16, Hydrology and Water Quality, during construction and operation of the proposed project, all wastewater and stormwater runoff from the project site would be treated at the Southeast Water Pollution Control Plant. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System (NPDES) permit for the plant. During construction and operation, the proposed project would be required to comply with all local wastewater discharge, stormwater runoff, and water quality requirements, including the SFPUC's 2016 San Francisco Stormwater Management Requirements and Design Guidelines<sup>159</sup> and the Stormwater Management Ordinance. The construction contractor would also be required to implement an erosion and sediment control plan for construction activities, in accordance with article 4.2 of the Public Works Code. The SFPUC must review and approve the erosion and sediment control plan before the plan's implementation. Contractors and site supervisors are responsible for ensuring that BMPs are implemented and maintained throughout the construction process; failure to comply would result in citation and civil penalties. Compliance with these requirements would ensure that the proposed project would not result in a substantial loss of topsoil or soil erosion. Therefore, impacts related to loss of topsoil or substantial soil erosion would be *less than significant*. No mitigation measures would be required.

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<sup>159</sup> City of San Francisco, San Francisco Public Utilities Commission, Port of San Francisco, Lotus Water, and Water Resources Engineering, *San Francisco Stormwater Management Requirements and Design Guidelines*, 2016, <https://sfwater.org/Modules/ShowDocument.aspx?documentID=9026>, accessed: July 16, 2019.



**Impact GE-3: The proposed project would not be located on a 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. (Less than Significant)**

The project site is not within a state-designated landslide hazard zone<sup>160</sup> or an area that is subject to the Slope and Seismic Hazard Zone Protection Act.<sup>161</sup> The project site and vicinity do not include any hills or cut slopes that could cause or be subject to a landslide. As discussed above, the project site is within a state-designated seismic hazard zone for liquefaction and would be subject to the requirements of the Seismic Hazards Act.<sup>162</sup>

The project sponsor would be required to provide geotechnical reports prepared by a qualified geotechnical professional that include recommendations for demolition and site preparation, excavation, and construction of the proposed project, based on site and soil conditions. These recommendations, which would address the potential for onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse, would be implemented by the project sponsor's engineer of record and peer reviewed as required by AB-082.

During excavation, the shoring system could yield and deform laterally if not properly designed, which would cause the surrounding improvements to settle and move laterally. This would result in a potentially significant impact associated with soil instability. To avoid settlement and lateral deformation, as discussed in the geotechnical studies, the project would require the installation of shoring systems during basement excavation on all sides of the property. Furthermore, the building department permit review process, ensuring that the project's structural and foundation plans comply with applicable building code provisions and conform to the measures recommended in the project-specific geotechnical reports, as well as recommendations made by the engineering design review team, would ensure that the proposed project would not result in unstable soil conditions that could result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, through compliance with these regulations, the proposed project would not exacerbate the potential for soil to become unstable or result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse as a result of the project. This impact would be *less than significant*, and no mitigation measures are required.

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<sup>160</sup> 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](http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf), accessed: July 16, 2019.

<sup>161</sup> San Francisco Department of Building Inspection, *Slope Protection*, <https://sfdbi.org/slopeprotection>, accessed: July 15, 2019.

<sup>162</sup> 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](http://gmw.conservation.ca.gov/SHP/EZRIM/Maps/SAN_FRANCISCO_NORTH_EZRIM.pdf), accessed: July 16, 2019.

**Impact GE-4: The proposed project would not be located on expansive soil, as defined in the California Building Code, creating substantial risks to life or property. (Less than Significant)**

Expansive soils expand and contract in response to changes in soil moisture, most notably when near-surface soils fluctuate from saturated to low-moisture-content conditions and back again. Determinations regarding the presence of expansive soils are typically based on site-specific data. As noted above, the site is underlain by fill, Bay Mud, and dense to very dense clayey sands/medium-stiff to hard sandy clays and dense to very dense sands. Because of the clay content within the sands, areas that are not excavated, including sidewalks and other adjacent improvements, may be affected by expansive soils, if present. The local building code requires the project applicant to include an analysis of impacts related to the potential for soil expansion for review and approval by the building department as part of the design-level geotechnical investigation and address the effects in the design documents prepared for the proposed project. Accordingly, potential impacts related to expansive soils would be *less than significant*. No mitigation measures are required.

**Impact GE-5: The proposed project could directly or indirectly destroy a unique paleontological resource or site. (Less than Significant with Mitigation)**

Paleontological resources include fossilized remains or traces of animals, plants, and invertebrates from a previous geological period. Paleontological resources are deposited and preserved within particular lithologic (rock) units. Lithologic units that may contain fossils include sedimentary and volcanic formations. Collecting localities and the geologic formations containing those localities are also considered paleontological resources because they represent a limited, nonrenewable resource that, once destroyed, cannot be replaced. Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered have high potential for containing additional significant paleontological resources.<sup>163</sup>

Paleontological resources are lithologically dependent (i.e., the deposition and preservation of paleontological resources are related to the lithologic unit in which they occur). Particularly important are fossils found in situ (undisturbed) in the primary context (e.g., fossils that have not been subjected to disturbance subsequent to their burial and fossilization). As such, they aid in stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphological evolution, paleoclimatology, the relationships between aquatic and terrestrial species, and evolution in general. Note that significance may also be stated for a particular rock unit, predicated on the research potential of fossils suspected to occur in that unit. Such significance is often stated as “sensitivity” or “potential.” In most cases decisions

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<sup>163</sup> 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](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx), accessed July 16, 2019.

about how to manage paleontological resources must be based on this potential because the actual situation cannot be known until construction excavation for the project is under way.

The results of the geotechnical investigation indicate that the project site is underlain by fill to a depth of between 12 and 17 feet below the ground surface. Bay Mud underlies the fill to an anticipated depth of between 8 to 39 feet. Underlying the Bay Mud is dense to very dense clayey sands/medium-stiff to hard sandy clays and dense to very dense sands to depths of approximately 87 feet. Previous occurrences of large late Pleistocene vertebrate remains from three individuals of Colombian mammoth (*Mammuthus columbi*) and remains from a single giant bison (*Bison latifrons*) have been recovered from gravelly sandy clay of the Colma Formation exposed in an excavation at the intersection of Pacific Avenue and Kearny Street, approximately 0.3 mile northwest of the project site.

The maximum depth of excavation for the project's planned basements is 55 feet, which would extend into the Colma Formation. As a result, the project has a moderate potential to destroy as-yet unknown paleontological resources. Mitigation Measure M-GE-5, Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources, would be implemented to reduce potentially significant adverse effects on paleontological resources, including fossils and associated contextual data.

**M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources.** Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find, and a qualified paleontologist shall be notified to evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and the San Francisco Planning Department. There shall be no construction work in the area to allow recovery of fossil remains in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan in accordance with the standards of the Society of Vertebrate

Paleontology.<sup>164</sup> The recovery plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City shall determine which of the recommendations in the recovery plan are necessary and feasible; these recommendations shall be implemented before construction activities resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

With implementation of Mitigation Measure M-GE-5, impacts on paleontological resources would be *less than significant with mitigation*.

**Impact GE-6: Construction activities for the proposed project would not directly or indirectly result in damage to, or destruction of, unique geologic features. (No Impact)**

The project site is in an urbanized area and almost entirely developed with impervious surfaces. There are no undisturbed soil or rock outcroppings on or near the project site that would constitute unique geologic features. As mentioned above, the proposed project would not substantially change the general topography of the site and therefore would have *no impact* on unique geologic features.

**Impact C-GE-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative geology and soil impacts. (Less than Significant)**

Geology, soil, and paleontological impacts are generally site specific and localized. Past, present, and reasonably foreseeable projects could require various levels of excavation or cut-and-fill activity, which would affect local geologic conditions and could affect paleontological resources. However, the cumulative projects would also be subject to building department requirements regarding geotechnical review and the state and local building codes. In addition, site-specific geotechnical review and monitoring for paleontological resources would reduce each project's impacts associated with geology, seismic safety, and paleontological resources. Furthermore, site-specific mitigation would be developed, when necessary, based on site conditions. Similar to the proposed project, all projects listed in **Table B-1**, p. B-2, would be subject to these mandatory seismic safety standards and design review procedures. Compliance with these standards and procedures would ensure that the effects from nearby cumulative projects would be reduced to less-than-significant levels. Cumulative impacts would be *less than significant*.

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<sup>164</sup> 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](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx), accessed July 16, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E16. HYDROLOGY AND WATER QUALITY.</b>					
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or the addition of impervious surfaces, in a manner that would:	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation onsite or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) 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; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk a release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The project site is located well inland from both the San Francisco Bay and the Pacific Ocean. It would not be subject to seiche or potential inundation in the event of a tsunami occurring along the San Francisco coast (see Maps 5 and 6 of the San Francisco General Plan Community Safety Element). The San Francisco Interim Floodplain Map indicates that the site is not within a Special Flood Hazard Area,<sup>165</sup> an area subject to a 100-year flood. Therefore, topic 16d does not apply.

<sup>165</sup> City and County of San Francisco, *San Francisco Interim Floodplain Map*, Citywide Final Draft, November 12, 2015, [https://sfgsa.org/sites/default/files/Document/SF\\_Citywide.pdf](https://sfgsa.org/sites/default/files/Document/SF_Citywide.pdf), accessed July 3, 2019.

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

Construction associated with the proposed project would disturb soil during excavation and grading, which could adversely affect water quality. Contaminants from construction vehicles and equipment as well as sediment from soil erosion could increase the pollutant load in runoff being transported to receiving waters during construction.

As discussed in Section E.12, Utilities and Service Systems, wastewater and stormwater from the project site would continue to flow into the City's combined stormwater and sewer system and be treated to the standards contained within the City's NPDES permit for the Southeast Water Pollution Control Plant prior to discharge into San Francisco Bay. Treatment would be provided pursuant to the effluent discharge standards included within the City's NPDES permit for the plant. In addition, as new construction, the proposed project would be required to meet the standards for stormwater management identified in the San Francisco Stormwater Management Ordinance and meet the SFPUC stormwater management requirements, per the 2016 Stormwater Management Requirements and Design Guidelines.

The project sponsor would be required to submit for approval by the SFPUC a Stormwater Control Plan that complies with the City's 2016 Stormwater Management Requirements and Design Guidelines. As described in Section E.12, Utilities and Service Systems, the stormwater management approach must reduce the existing runoff flow rate and volume of a two-year 24-hour design storm by 25 percent through employment of a hierarchy of BMPs, as set forth in the Stormwater Management Requirements and Design Guidelines. Because the project would disturb more than 5,000 square feet of ground surface, the project would be required to comply with Public Works Code article 4.2, section 146 et seq. (Construction Site Runoff Control). A Construction Site Runoff Control Permit would be obtained prior to any land-disturbing activities and would include an Erosion and Sediment Control Plan.

Groundwater encountered during construction of the proposed project would be subject to the requirements of article 4.1 of the Public Works Code, Industrial Waste, which requires groundwater to meet specified water quality standards before it is discharged to the combined sewer system. These measures ensure the protection of water quality during construction, which represents a temporary condition. Therefore, the proposed project would not substantially degrade surface water or groundwater quality; water quality standards and waste discharge requirements would not be violated. The proposed project would have *less-than-significant* impacts on water quality, and no mitigation measures are necessary.

**Impact HY-2: The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. (Less than Significant)**

The project site is entirely covered with impervious surfaces; the proposed project would not increase the amount of impervious surface on the site. Therefore, the proposed project would not result in any change in infiltration on or increase runoff from the project site.

Although groundwater was located approximately 10 feet below the ground surface, this distance may vary with the seasons and the amount of rainfall. Because the proposed project would require excavation for the four basement levels, it is likely that groundwater would be encountered; therefore, dewatering would be required during construction. The Bureau of Systems Planning, Environment, and Compliance of the SFPUC must be notified regarding projects that necessitate dewatering. In this case, the SFPUC may require water quality analysis prior to discharge. The proposed project would be required to obtain a Batch Wastewater Discharge Permit from the SFPUC Wastewater Enterprise Collection System Division prior to any dewatering activities.

The project is in the downtown San Francisco groundwater basin. All groundwater resources are managed by the SFPUC's groundwater management program, ensuring that local groundwater resources designated for current or future beneficial uses are properly protected to prevent overdraft, pollution, or contamination.

Project operation would extract underlying groundwater supplies. Therefore, groundwater resources would not be substantially depleted, and the proposed project would not otherwise substantially interfere with groundwater recharge or impede sustainable groundwater management. The proposed project would have a *less-than-significant* impact on groundwater, and no mitigation measures are necessary.

**Impact HY-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or the addition of impervious surfaces that would result in substantial erosion, siltation, or flooding; substantially increase the rate or amount of surface runoff and result in flooding onsite or offsite; or 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)**

The project site is covered with impervious surfaces; no streams or creeks are present on the project site. The proposed project would be designed to incrementally reduce the amount of impervious surface material on the project site through implementation of low-impact development and other measures identified in the Stormwater Management Ordinance, which also requires a decrease in the amount of stormwater runoff associated with a proposed project, per the City's Stormwater Management Requirements and Design Guidelines. Overall, impervious surfaces on the site would not change substantially as part of the proposed project, drainage patterns would generally remain the same, and, ultimately, drainage would be improved. As such, the proposed project would not be expected to result in substantial erosion

or flooding associated with changes in drainage patterns; the potential to result in erosion or flooding would be similar to existing conditions. The impact would be *less than significant*.

During construction and operation of the proposed project, all wastewater and stormwater runoff from the project site would be treated at the Southeast Water Pollution Control Plant. As noted above, treatment would be provided pursuant to the effluent discharge standards contained in the City's NPDES permit for the plant. During construction and operation, the proposed project would be required to comply with all local wastewater discharge, stormwater runoff, and water quality requirements, including the 2016 Stormwater Management Requirements and Design Guidelines, described above under Impact HY-1, and the Stormwater Management Ordinance. Compliance with the Stormwater Management Requirements and Design Guidelines would ensure that stormwater generated by the proposed project would be managed onsite to reduce the runoff flow rate and volume for a two-year 24-hour design storm by 25 percent such that the proposed project would not contribute additional volumes of polluted runoff to the City's stormwater infrastructure. Compliance with the Stormwater Management Ordinance would ensure that the design of the proposed project would include the installation of appropriate stormwater management systems that would retain runoff onsite, promote stormwater reuse, and limit discharges from the site to the City's combined stormwater/sewer system. Furthermore, the addition of new street trees in open space would allow runoff to infiltrate, thereby minimizing runoff that could exceed the capacity of existing or planned stormwater drainage systems. Therefore, the proposed project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Furthermore, the proposed project would not impede or redirect floodflows. Therefore, this impact would be *less than significant*, and no mitigation measures are necessary.

**Impact HY-4: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)**

As described above, the proposed project would be required to meet the standards for stormwater management as well as the City's NPDES permit and SFPUC stormwater management requirements. In addition, the proposed project would also have to comply with the appropriate water quality objectives for the region. Commonly practiced BMPs would be implemented to control construction site runoff and reduce the discharge of pollutants to storm drain systems from stormwater and other nonpoint-source runoff. As part of compliance with permit requirements during ground-disturbing or other construction activities, implementation of water quality control measures and BMPs would ensure that water quality standards would be achieved, including the water quality objectives that protect designated beneficial uses of surface and groundwater, as defined in the basin plan.



The NPDES Construction General Permit also 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. In addition, implementation of the SFPUC's groundwater management program and general plan policies would require protection for groundwater recharge areas and groundwater resources, as required by a sustainable groundwater management plan. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The impacts would be *less than significant*, and no mitigation measures are necessary.

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

Cumulative development in the project area and across the city could result in an increase in polluted runoff and stormwater discharges. However, other development projects would be subject to the same water conservation and stormwater management ordinances that are applicable to the proposed project. Because other development projects would be required to follow drainage, dewatering, and water quality regulations, similar to the proposed project, peak stormwater drainage rates and volumes for the design storm would gradually decrease over time with new development, meaning that no substantial cumulative effects would occur. Compliance with these ordinances would reduce the effects of cumulative projects to less-than-significant levels. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative hydrology and water quality impact. Impacts would be *less than significant*. No mitigation measures are necessary.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E17. HAZARDS AND HAZARDOUS MATERIALS.</b>					
Would the project:					
a) Create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would be located on a site that requires a Maher application prior to commencing grading or building activities.<sup>166</sup> The Maher application for the project site was submitted in 2017. On October 28, 2017, the San Francisco Department of Public Health verified receipt of the application and stated that soil samples must be taken to the depth of the proposed excavation. The project sponsor has prepared both a Phase I environmental site assessment and an updated Phase I environmental site assessment to determine the potential for site contamination.<sup>167,168</sup> The Phase I environmental site assessment included (1) a reconnaissance-level site visit to look for evidence of a release of hazardous materials or petroleum products; (2) inquires by telephone, in-person visits, online database searches, and/or written correspondence regarding

<sup>166</sup> San Francisco Planning Commission, *San Francisco Property Information Map – Map Viewer*, 2019 <https://sfplanninggis.org/pim/map.html?layers=Maher%20Ordinance>, accessed January 27, 2020

<sup>167</sup> AEI Consultants Environmental and Engineering Services, *Phase I Environmental Site Assessment, Property Identification*, 447 Battery Street, San Francisco, CA, August 16, 2013.

<sup>168</sup> EDI Consultants, *Database Review*, 447 Battery Street, San Francisco, CA, June 22, 2015.

building or environmental permits, environmental violations, incidents, and/or the status of enforcement actions at the project site; (3) review of local, state, and federal records pertinent to a Phase I environmental site assessment; (4) review of relevant documents and maps regarding local geologic and hydrogeologic conditions; and (5) review of historical documents, including aerial photographs and topographical maps. A 2015 update to the original 2013 Phase I environmental site assessment included a new search of database records.

The project site is not within an airport land use plan area, included on list of hazardous materials sites compiled pursuant to Government Code section 65962.5,<sup>169,170</sup> or within or adjacent to a wildland fire area. Therefore, topics 17d, 17e, and 17g are not applicable.

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

The proposed project would involve demolition of a structure, excavation of the site, and construction of a hotel with retail spaces and four basement levels. Construction activities would require the use and transport of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials. These materials could be released during transport or disposal of building materials and could cause a hazard for the public. However, the City requires a project sponsor and contractor to implement BMPs as part of grading permit requirements, including hazardous materials management measures, which would reduce short-term construction-related impacts pertaining to the transport, use, and disposal of hazardous materials. The project sponsor's contractors would be required to comply with Occupational Health and Safety Administration (OSHA) and California Division of Occupational Safety and Health (Cal/OSHA) health and safety requirements, all of which would be specified in the construction contracts. These regulations are effective in reducing potential risks to workers by requiring the contractor to adhere to safety standards and provide safety training to workers. In addition, hazardous materials must be transported to and from the project site in accordance with the Resource Conservation and Recovery Act (RCRA) and U.S. Department of Transportation regulations and disposed of in accordance with the RCRA and the California Code of Regulations at a facility that is permitted to accept the waste. These regulations provide a framework for controlling hazardous waste from cradle to grave, ensuring the safe transport, use, and disposal of hazardous materials during construction. These regulations govern record-keeping for all aspects of the hazardous materials lifecycle, mitigating and cleaning up existing contamination and hazardous materials spills, closing facilities with hazardous waste in place, describing requirements

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<sup>169</sup> Ibid.

<sup>170</sup> State Water Resources Control Board, *GeoTracker*, 447 Battery Street, San Francisco, CA, 2019, <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=447+Battery%2C+San+Francisco+CA>, accessed: April 15, 2020.

for emergency response, and ensuring that workers are trained to handle hazardous materials and respond appropriately to hazardous materials incidents. Because compliance with existing regulations is mandatory, construction of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Accordingly, impacts associated with short-term construction-related transport, use and, disposal of hazardous materials would be *less than significant*.

Once constructed, the proposed project would very likely result in the use of common types of hazardous materials that are typically associated with retail/commercial uses, such as cleaning products, disinfectants, and solvents, somewhat similar to the materials that are currently used on the project site. These products are labeled to inform users of their potential risks and instruct them regarding appropriate handling procedures. However, most of these materials are consumed through use, resulting in relatively little waste. Businesses are required by law to ensure employee safety by identifying hazardous materials in the workplace, providing safety information to workers who handle hazardous materials, and adequately training workers. For these reasons, hazardous materials used during project operation would not pose substantial public health or safety hazards resulting from routine use, transport, or disposal. Therefore, the project would result in *less-than-significant* impacts related to the use, transport, or disposal of hazardous materials during project construction or operation.

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

The Phase I environmental site assessment identified no recognized environmental conditions,<sup>171</sup> historical recognized environmental conditions,<sup>172</sup> or *de minimis* environmental conditions<sup>173</sup> at or

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<sup>171</sup> Recognized environmental conditions are defined by ASTM Standard Practice E1527-05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

<sup>172</sup> Historical recognized environmental conditions are defined by ASTM Standard Practice E1527-05 as environmental conditions that, in the past, would have been considered a recognized environmental condition but may or may not be considered a recognized environmental condition currently.

<sup>173</sup> De minimis environmental conditions include environmental concerns identified by the consultant preparing the Phase I environmental site assessment that warrant discussion but do not qualify as recognized environmental conditions, as defined by ASTM Standard Practice E1527-05.

near the project site.<sup>174</sup> Two business environmental risks<sup>175</sup> were identified at or near the project site, the potential presence of asbestos-containing materials and lead-based paint.

Certain areas of San Francisco that are located on fill are subject to article 22A of the San Francisco Health Code (also known as the Maher Ordinance), which is administered and overseen by the San Francisco Department of Public Health. These areas, which were once highly industrialized, are possibly contaminated because of debris from the 1906 earthquake in the underlying imported fill. As such, the sites often contain lead and other pollutants. To protect the public and workers during projects that disturb more than 50 cubic yards of soil, investigation, site management, and reporting are required, subject to the Maher Ordinance.<sup>176</sup> The proposed project would disturb more than 50 cubic yards of soil and is located in a Maher area; therefore, the proposed project would be subject to the Maher Ordinance.

The Maher Ordinance requires the project sponsor to retain the services of a qualified professional to prepare an environmental site assessment that meets the requirements of San Francisco Health Code section 22.A.6. A site assessment determines the potential for site contamination and the level of exposure risk as a result of a project. Based on that information, the project sponsor may be required to conduct soil and groundwater sampling and analysis; where such analysis reveals the presence of hazardous substances in excess of state or federal standards, the project sponsor is required to submit a site mitigation plan to the San Francisco Department of Public Health or other appropriate state or federal agency and remediate any site contamination in accordance with the approved site mitigation plan prior to issuance of a building permit.

The 2013 Phase I environmental site assessment found that the project site is not listed in any of the regulatory databases. However, the assessment found that the 425 Battery Street property, located south of the project site, was in regulatory databases, including the Environmental Data Resources (EDR) U.S. Historical Cleaners, California Cleaners, and California Underground Storage Tank databases. However, the updated 2015 report found that the adjoining property was no longer listed in the regulatory databases. Both reports confirm that no further action is needed at the project site.

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<sup>174</sup> AEI Consultants Environmental and Engineering Services, *Phase I Environmental Site Assessment, Property Identification, 447 Battery Street, San Francisco, CA*, August 16, 2013.

<sup>175</sup> Business environmental risks include risks that can have a material environmental or environmentally driven impact on the business associated with the current or planned use of the subject property; the risks are not necessarily limited to those environmental issues required to be investigated in the standard ASTM scope. Business environmental risks may affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the subject property.

<sup>176</sup> San Francisco Planning Department, *Expanded Maher Area Map*, March 2015, [http://www.sf-planning.org/ftp/files/publications\\_reports/library\\_of\\_cartography/Maher%20Map.pdf](http://www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Maher%20Map.pdf), accessed: January 8, 2017.

The Phase I environmental site assessment and updated environmental site assessment determined that there was:

- No observed evidence of significant staining, spillage, and/or ponded liquids or unconfined solids on the project site during site reconnaissance.
- No recognized environmental condition associated with the storage of hazardous materials on the project site during site reconnaissance.
- No potential underground storage tank, fill port, or groundwater monitoring well at adjacent properties.
- No apparent sign of chemical releases or leaks at any of the nearby facilities.

According to the updated Phase I environmental site assessment, the probability of documented nearby offsite sources of chemical constituents affecting environmental conditions at the project site was determined to be very unlikely. The chief transport mechanism for the migration of offsite chemical impacts to the onsite environment would most likely be groundwater flows. The Phase I environmental site assessment found that no site in the EDR database report had an adverse environmental impact on the project site. As a result, the EDR listings are not expected to pose an environmental risk to the project site and are not discussed.

Although the project site does not include any underground storage areas that contain hazardous materials, according to the environmental assessment<sup>177</sup> and updated environmental site assessment,<sup>178</sup> demolition of the structure would involve the removal of building materials that could contain asbestos and lead-based paint. Therefore, such materials could be released into the environment during construction and result in a hazard for the public. However, any hazardous materials currently on the site, such as asbestos or lead-based paint, would be removed during or prior to demolition of the building and project construction. The materials would be handled in compliance with applicable laws and regulations.

The project site is occupied by a building that was constructed in 1907. According to the Phase I environmental site assessment report, given the age of the building, asbestos-containing materials may be present in building materials. However, all suspect asbestos-containing materials were observed to be in good condition and not expected to pose a health and safety concern for the occupants of the subject property at this time.<sup>179</sup>

The California Department of Toxic Substance Control considers asbestos to be hazardous and requires removal. Asbestos-containing materials must be removed in accordance with local and state regulations as well as air district, Cal/OSHA, and California Department of Health Services

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<sup>177</sup> AEI Consultants, *Phase I Environmental Site Assessment*, 447 Battery Street, San Francisco, CA, AEI Project No. 322214, August 16, 2013.

<sup>178</sup> EDI Consultants, *Database Review*, 447 Battery Street, San Francisco, CA, June 22, 2015.

<sup>179</sup> AEI Consultants Environmental and Engineering Services, *Phase I Environmental Site Assessment, Property Identification*, 447 Battery Street, San Francisco, CA, August 16, 2013.

requirements. Specifically, section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with the notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos.

The California legislature vests the air district with the authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. The air district is to be notified 10 days in advance of any proposed demolition or abatement work. Any disturbance of asbestos-containing material at the project site would be subject to the requirements of air district regulation 11, rule 2, Hazardous Materials—Asbestos Demolition, Renovation, and Manufacturing. The local office of Cal/OSHA must also be notified of asbestos abatement. Asbestos abatement contractors must follow state regulations contained in California Code of Regulations title 8, section 1529 and sections 341.6 through 341.14, when their work involves 100 gross square feet or more of asbestos-containing material. Pursuant to California law, the department of building inspection would not issue the required permit until the applicant has complied with the requirements described above.

For buildings constructed prior to 1978, such as the existing building, it is highly likely that lead-based paint was used during their construction. Work that could result in any disturbance of lead-based paint must comply with section 3423 of the San Francisco Building Code, Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Section 3423 identifies prohibited practices that may not be used when removing lead-based paint as well as notification requirements. Where work would disturb or remove lead-based paint on the exterior of a building, or the interior of occupied buildings built prior to or on December 31, 1978, section 3407 requires specific notification and work standards and identifies prohibited work methods and penalties.

Section 3423 applies to the exterior of all buildings or steel structures where original construction was completed prior to 1979, which are assumed to have lead-based paint on their surfaces, unless demonstrated otherwise through laboratory analysis, and the interior of residential buildings, hotels, and child care centers. The ordinance contains performance standards (e.g., the use 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 the evaluation and control of lead-based paint hazards) and identifies prohibited practices that may not be used when removing lead-based paint. 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-based paint contaminants beyond containment barriers during the course of the work. Cleanup standards require the removal of visible work debris, including use of a high-efficiency particulate air filter vacuum following interior work.

Section 3423 also includes notification requirements as well as requirements for signs. Prior to the commencement of work, the responsible party must provide written notice to the director of the

department of building inspection and include the address and location of the project; the scope of work, including the specific location within the site; the methods and tools to be used; the approximate age of the structure; anticipated start and completion dates for the work; whether the building is residential or nonresidential, owner-occupied or rental property; the date when the responsible party fulfilled or will fulfill any tenant or adjacent property notification requirements; and the name, address, telephone number, and pager number of the party who will perform the work. Further requirements include a posted sign to notify the public of restricted access to the work area, a notice to residential occupants, a pamphlet related to lead protection in the home, notice of early commencement of work (by owner, requested by tenant), and notice of lead-contaminated dust or soil, if applicable. Section 3423 contains provisions regarding inspection by the department of building inspection and sampling for compliance, as well as enforcement, and describes penalties for non-compliance with the requirements of the ordinance.

Demolition would also be subject to the Cal/OSHA lead in construction standard (California Code of Regulations title 8, section 1532.1). This standard requires development and implementation of a lead compliance plan when materials containing lead are disturbed during construction. The plan must describe activities that could emit lead, 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. Cal/OSHA would require 24-hour notification if more than 100 square feet of lead-containing material would be disturbed.

All observed painted surfaces were in good condition and not expected to pose a health or safety concern for the occupants of the subject property at this time.<sup>180</sup>

No other contaminants were identified during the environmental site assessment<sup>181</sup> or updated environmental site assessment<sup>182</sup> on or adjacent to the property.

Implementation of the above-described procedures and regulations would ensure that any potential impacts due to the presence of asbestos or lead-based paint on the project site would be reduced to a *less-than-significant* level. No mitigation measures are necessary.

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<sup>180</sup> Ibid.

<sup>181</sup> AEI Consultants, *Phase I Environmental Site Assessment, 447 Battery Street, San Francisco, CA*, AEI Project No. 322214, August 16, 2013.

<sup>182</sup> EDI Consultants, *Database Review, 447 Battery Street, San Francisco, CA*, EDI Project # 215-0175, June 22, 2015.



**Impact HZ-3: The proposed project 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)**

One school is within a 0.25 mile of the project site, John Yehall Chin Elementary School at 350 Broadway, about 1,200 feet northwest (0.23 mile) of the project site.<sup>183</sup> However, the proposed project would not store, handle, or dispose of significant quantities of hazardous materials or otherwise include any uses that would result in the emission of hazardous substances. Any hazardous materials currently on the site, such as asbestos and lead-based paint, would be removed before or during demolition of the existing building and prior to project construction. The materials would be handled in compliance with applicable laws and regulations, as described above. With adherence to these regulations, there would be no potential for such materials to affect the nearest school. Therefore, the proposed project would have a *less-than-significant* impact related to hazardous emissions or materials within 0.25 mile of a school. No mitigation measures are necessary.

**Impact HZ-4: The proposed project would not interfere with implementation of an adopted emergency response plan or evacuation plan. (Less than Significant)**

The City's Emergency Management Program is part of a jurisdiction-wide system that provides emergency management guidance related to prevention, preparedness, response, and recovery. The City's Emergency Response Plan uses an all-hazards approach to emergency planning and, therefore, encompasses all hazards that are applicable to the city and county, both natural and man-made, ranging from planned events to large-scale disasters.<sup>184</sup> Different types of emergencies, such as fires, a release of hazardous materials, or other incidents, may require evacuation actions. Because of the geography and particular vulnerabilities of the Bay Area, evacuation is considered a last resort.<sup>185</sup> In the event of an emergency evacuation, accessible routes would be established by the San Francisco Police Department in collaboration with the San Francisco Public Works, the SFMTA, Caltrans, and the California Highway Patrol (CHP).<sup>186</sup>

The proposed project would not be expected to interfere with the City's Emergency Response Plan because it would not permanently alter or impede access to existing roads in the area. Therefore, the proposed project would have a *less-than-significant* impact on existing emergency response and evacuation plans. No mitigation measures are necessary.

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<sup>183</sup> San Francisco Unified School District, *School District Map 2019–2020*, September 7, 2018, [http://www.sfusd.edu/en/assets/sfusd-staff/enroll/files/2019-20/2019-20\\_schools\\_map.pdf](http://www.sfusd.edu/en/assets/sfusd-staff/enroll/files/2019-20/2019-20_schools_map.pdf), accessed: July 17, 2019.

<sup>184</sup> City and County of San Francisco, *Emergency Response Plan*, December 2010.

<sup>185</sup> Governor's Office of Emergency Services; Cities of Oakland, San Francisco, and San José; Counties of Alameda, Contra Costa, Marin, Napa, San Mateo Santa Clara, Santa Cruz, Solano, and Sonoma, *San Francisco Bay Area Regional Emergency Coordination Plan*, March 2008.

<sup>186</sup> City and County of San Francisco, *Emergency Response Plan*, December 2010.

**Impact C-HZ-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative impacts related to hazards and hazardous materials. (Less than Significant)**

Impacts from hazardous materials are generally site specific and typically do not result in cumulative impacts. Any hazards occurring at surrounding sites would be subject to the same safety requirements discussed for the proposed project, which would reduce hazardous impacts to *less than significant*. Therefore, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in cumulative impacts related to hazards and hazardous materials. The cumulative impact would be *less than significant*.

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<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E18. MINERAL RESOURCES.</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

All land in the city of San Francisco, including the project site, is designated by the California Geological Survey as Mineral Resource Zone 4 (MRZ-4) under the Surface Mining and Reclamation Act of 1975. The MRZ-4 designation indicates that adequate information does not exist to assign the area to any other Mineral Resource Zone; therefore, the area is not designated as having significant mineral deposits.<sup>187</sup> No sites in San Francisco, including the project site, are designated areas of significant mineral deposits. Therefore, topics 18a and 18b are not applicable to the proposed project.

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<sup>187</sup> California Department of Conservation, Division of Mines and Geology, *Special Report 146, Part II (1987)*, [ftp://ftp.conservation.ca.gov/pub/dmg/pubs/sr/SR\\_146-2/SR\\_146-2\\_Text.pdf](ftp://ftp.conservation.ca.gov/pub/dmg/pubs/sr/SR_146-2/SR_146-2_Text.pdf), accessed July 19, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E19. ENERGY.</b>					
Would the project:					
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Impact EN-1: The proposed project 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)**

The proposed project would increase the population and intensity of the use on the project site. However, this increased intensity would not exceed anticipated growth in the area. As a new building in San Francisco, the proposed hotel would be subject to the energy conservation standards included in the San Francisco Green Building Ordinance. This would require the project to meet a number of conservation standards (e.g., install water-efficient fixtures and energy-efficient appliances) and provide features that encourage alternative modes of transportation, such as bicycle racks. Documentation showing compliance with the San Francisco Green Building Ordinance would be submitted with the project's building permit and be enforced by the Department of Building Inspection. In addition, the proposed project would be required to comply with title 24 of the California Code of Regulations, which regulates energy consumption associated with heating, cooling, and ventilation as well as lighting in residential and nonresidential buildings; it is enforced by the Department of Building Inspection. Compliance with title 24 and the San Francisco Green Building Ordinance would ensure a reduction in the use of fuel, water, and energy by the proposed project. Further, the project, by its character, would conserve fuel and energy because it would provide hotel and retail uses in an urban area that is accessible by transit and is also bicycle and pedestrian friendly. Therefore, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with state or local plans for renewable energy and energy efficiency. The impact would be *less than significant*, and no mitigation would be required.

**Impact C-EN-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulatively considerable contribution to cumulative energy impacts. (Less than Significant)**

The demand for energy created by the proposed project would be insubstantial in the cumulative context of citywide demand and would not require an expansion of power facilities. The overall

demand for energy in California is commensurate with the increase in population. Therefore, the state is engaged in concerted energy conservation efforts. Although the demand for energy and fuel in San Francisco is substantial, City and state policies seek to minimize increases in demand through conservation and energy efficiency regulations and policies so that energy will not be used in a wasteful manner.

The cumulative impacts with respect to energy and fuel use would be less than significant. Because San Francisco is substantially built out, development in the city's urban core focuses on densification, which effectively reduces per capita use of energy and fuel by concentrating utilities and services in locations where they can be used efficiently. Similarly, the City recognizes the need for water conservation and has instituted programs and policies to maximize water conservation. San Francisco has one of the lowest per capita water use rates in the state<sup>188</sup> and routinely implements water conservation measures through code requirements and policy.

The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a cumulative energy impact. Cumulative effects related to energy would be *less than significant*. No mitigation is required.

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<sup>188</sup> San Francisco Public Utilities Commission, *Water Resources Division Annual Report, Fiscal Year 2018–19*, <https://sfwater.org/Modules/ShowDocument.aspx?documentid=14560>, accessed September 20, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E20. AGRICULTURE AND FORESTRY RESOURCES.</b>					
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is within an urbanized area of San Francisco. No land in San Francisco County has been designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as agricultural land. Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not require the conversion of any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The proposed project would not conflict with any existing agricultural zoning or Williamson Act contracts.<sup>189</sup> No land in San Francisco is designated as forestland or timberland by the California Public Resource Code. Therefore, the proposed project would not conflict with zoning for forestland, cause a loss of forestland, or convert forestland to a different use. For these reasons, topics 20a, 20b, 20c, 20d, and 20e are not applicable to the proposed project.

<sup>189</sup> San Francisco is identified as "Urban and Built-Up Land" on the California Department of Conservation *Important Farmland in California Map*, 2017, <https://maps.conservation.ca.gov/dlrp/ciff/>, accessed on July 19, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E21. WILDFIRE.</b>					
Would the project:					
a) Substantially impair an adopted emergency response plan or emergency evacuation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.<sup>190</sup> Therefore, this topic is not applicable and not discussed further.

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<sup>190</sup> California Department of Forestry and Fire Protection, *Draft Fire Hazard Severity Zones in LRA: San Francisco County*, 2007, [https://frap.fire.ca.gov/media/6404/fhszl06\\_1\\_map38.pdf](https://frap.fire.ca.gov/media/6404/fhszl06_1_map38.pdf), accessed July 19, 2019.

<u>Topics:</u>	<u>Potentially Significant Impact</u>	<u>Less than Significant with Mitigation Incorporated</u>	<u>Less-than- Significant Impact</u>	<u>No Impact</u>	<u>Not Applicable</u>
<b>E22. MANDATORY FINDINGS OF SIGNIFICANCE.</b>					
Would 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a) As discussed in the various topics in this initial study, the proposed project is anticipated to have less-than-significant impacts on most of the environmental topics discussed. Where necessary, mitigation measures have been identified to reduce impacts to less-than-significant levels. Mitigation measures are included for the following topics: cultural resources, tribal cultural resources, noise, air quality, and geology and soils (paleontology). However, the proposed project could have potentially significant impacts related to historic architectural resources. These impacts are discussed and analyzed further in the EIR.					
b) The proposed project, in combination with the past, present and foreseeable projects, as described in Section B, would not result in significant cumulative impacts on land use, population and housing, tribal cultural resources, transportation and circulation, noise, air quality, GHG emissions, wind, shadow, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral resources, energy resources, agricultural and forest resources, and wildfire with implementation of identified mitigation, if required. However, the proposed project, in combination with the past, present and foreseeable projects, could result in cumulative impacts related to historic architectural resources. These cumulative impacts will be discussed and analyzed further in the EIR.					



- c) As discussed above, the proposed project has the potential to result in significant impacts with respect to historic architectural resources, which could adversely affect human beings. The EIR assesses this topic and identify mitigation measures where applicable.
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## F. MITIGATION MEASURES AND IMPROVEMENT MEASURES

The following mitigation measures have been identified to reduce potentially significant impacts resulting from the proposed project to a less-than-significant level. Improvement measures recommended to reduce or avoid less-than-significant impacts are also identified below. Accordingly, the project sponsor has agreed to implement the mitigation measures and all improvement measures described below.

### 1. MITIGATION MEASURES

**M-CR-3: Conduct Archaeological Testing and, if Required, Archaeological Monitoring.** Based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources and on human remains and associated or unassociated funerary objects. The project sponsor shall retain the services of an archaeological consultant from the rotational qualified archaeological consultants list maintained by the department's archaeologist. After the first project approval action, or as directed by the Environmental Review Officer, the project sponsor shall contact the department archaeologist to obtain the names and contact information for the next three archaeological consultants on the qualified archaeological consultants list. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the Environmental Review Officer for review and comment and be considered draft reports subject to revision until final approval by the Environmental Review Officer. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the Environmental Review Officer, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means for reducing potential effects on a significant archaeological resource, as defined in CEQA Guidelines sections 15064.5(a) and (c), to a less-than-significant level.

*Consultation with Descendant Communities:* On discovery of an archaeological site associated with descendant Native Americans, the overseas Chinese, or other potentially interested descendant group, an appropriate representative of the descendant group and the Environmental Review Officer shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archaeological field investigations of the site and offer recommendations to the Environmental Review Officer regarding appropriate archaeological treatment of the site, recovered data from the site, and, if applicable, any interpretative treatment of the associated

archaeological site. A copy of the final archaeological resources report shall be provided to the representative of the descendant group.

*Archaeological Testing Program.* The archaeological consultant shall prepare and submit to the Environmental Review Officer for review and approval an archaeological testing plan. The archaeological testing program shall be conducted in accordance with the approved archaeological testing plan. The archaeological testing plan shall identify the archaeological resource(s) that could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program is to determine, to the extent possible, the presence or absence of archaeological resources and identify and evaluate whether any archaeological resource encountered on the site constitutes a historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to the Environmental Review Officer. If, based on the archaeological testing program, the archaeological consultant finds that significant archaeological resources may be present, the Environmental Review Officer, in consultation with the archaeological consultant, shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. No archaeological data recovery shall be undertaken without the prior approval of the Environmental Review Officer or the department archaeologist. If the Environmental Review Officer determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor, either:

- The proposed project shall be redesigned to avoid any adverse effect on the significant archaeological resource, or
- A data recovery program shall be implemented, unless the Environmental Review Officer determines that the archaeological resource is of greater interpretive significance rather than research significance and that interpretive use of the resource is feasible.

*Archaeological Monitoring Program.* If the Environmental Review Officer, in consultation with the archaeological consultant, determines that an archaeological monitoring program shall be implemented, the archaeological monitoring program shall include, at a minimum, the following provisions:

- The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult regarding the scope of the archaeological monitoring program reasonably prior to commencement of any project-related soil-disturbing activities. The Environmental Review Officer, in consultation with the archaeological consultant, shall determine which project activities shall be archaeologically monitored. In most cases, any soil-disturbing activities (e.g., demolition, foundation removal, excavation, grading, utility installation, site remediation) shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and their depositional context.

- The archaeological consultant shall undertake a worker training program for soil-disturbing workers that shall include an overview of expected resource(s), how to identify the evidence of the expected resource(s), and the appropriate protocol in the event of apparent discovery of an archaeological resource.
- The archaeological monitor(s) shall be present on the project site, according to a schedule agreed upon by the archaeological consultant and the Environmental Review Officer, until the Environmental Review Officer has, in consultation with project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits.
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis.
- If an intact archaeological deposit is encountered, all soil-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/construction activities and equipment until the deposit is evaluated. If the archaeological monitor has cause to believe that deep foundation activities (e.g., foundation work, shoring) may affect an archaeological resource, such activities shall be terminated until an appropriate evaluation of the resource has been made in consultation with the Environmental Review Officer. The archaeological consultant shall immediately notify the Environmental Review Officer of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit and present the findings of this assessment to the Environmental Review Officer.

Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the Environmental Review Officer.

*Archaeological Data Recovery Program.* The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan. The archaeological consultant, project sponsor, and Environmental Review Officer shall meet and consult on the scope of the archaeological data recovery plan prior to preparation of a draft archaeological data recovery plan. The archaeological consultant shall submit a draft archaeological data recovery plan to the Environmental Review Officer. The archaeological data recovery plan shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the archaeological data recovery plan shall identify which scientific/historical research questions are applicable to the expected resource, which data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, shall be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

The scope of the archaeological data recovery plan shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloging and Laboratory Analysis. Descriptions of selected cataloging systems and artifact analysis procedures.
- Discard and Deaccession Policy. Descriptions of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an onsite/offsite public interpretive program during the course of the archaeological data recovery program.
- Security Measures. Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report. Descriptions of proposed report format and distribution of results.
- Curation. Descriptions of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

*Human Remains and Associated or Unassociated Funerary Objects.* The treatment of human remains and associated or unassociated funerary objects discovered during any soil-disturbing activity shall comply with applicable state and federal laws, including immediate notification of the Office of the Chief Medical Examiner of the City and County of San Francisco and, in the event of the medical examiner's determination that the human remains are Native American remains, notification of the California Native American Heritage Commission, which shall appoint a most likely descendant (Public Resources Code section 5097.98). The Environmental Review Officer shall also be immediately notified upon discovery of human remains.

The archaeological consultant, project sponsor, Environmental Review Officer, and most likely descendent shall make all reasonable efforts to develop an agreement for the treatment of human remains and associated or unassociated funerary objects with appropriate dignity (CEQA Guidelines section 15064.5[d]) within six days of the discovery of the human remains. This proposed timing shall not preclude the Public Resources Code section 5097.98 requirement that descendants make recommendations or preferences for treatment within 48 hours of being granted access to the site. The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects. Nothing in existing state regulations or in this mitigation measure compels the project sponsor and the Environmental Review Officer to accept the recommendations of a most likely descendant. The archaeological consultant shall retain possession of any Native American human remains and associated or unassociated burial objects until completion of any scientific analyses of the human remains or objects, as specified in the treatment agreement, if such as agreement has been made, or, otherwise, as determined by the archaeological consultant and the Environmental Review Officer. If no agreement is reached, state

regulations shall be followed, including reburial of the human remains and associated burial objects with appropriate dignity on the property, in a location not subject to further subsurface disturbance (Public Resources Code section 5097.98).

*Final Archaeological Resources Report.* The archaeological consultant shall submit a final archaeological resources report to the Environmental Review Officer that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. The final archaeological resources report shall include a curation and deaccession plan for all recovered cultural materials. The final archaeological resources report shall also include an interpretation plan for public interpretation of all significant archaeological features.

Copies of the final archaeological resources report shall be sent to the Environmental Review Officer for review and approval. Once approved by the Environmental Review Officer, the consultant shall also prepare a public distribution version of the final archaeological resources report. Copies of the final archaeological resources report shall be distributed as follows: California Archaeological Site Survey, Northwest Information Center, shall receive one copy, and the Environmental Review Officer shall receive a copy of the transmittal of the final archaeological resources report to the Northwest Information Center. The Environmental Planning Division of the department shall receive one bound copy of the final archaeological resources report as well as one unlocked, searchable portable document format copy on compact disc, along with copies of any formal site recordation forms (California Department of Parks and Recreation 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of public interest in the resource or high interpretive value, the Environmental Review Officer may require different, or additional, content for the final report, a different format, and a different distribution plan.

**M-TCR-1: Project-Specific Tribal Cultural Resources Assessment for Projects Involving Ground Disturbance.** If the Environmental Review Officer determines that a significant archeological resource is present and, in consultation with the affiliated Native American tribal representatives, that the resource constitutes a tribal cultural resource that could be adversely affected by the proposed project, the proposed project shall be redesigned to avoid any adverse effect on the significant tribal cultural resource, if feasible.

If the Environmental Review Officer determines that preservation in place 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 is not an adequate or feasible option, then the project sponsor shall implement an interpretive program 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 for those displays or installations, the producers or artists involved with the displays or installations, and a long-term maintenance program. The interpretive program may include artist installations, preferably by local Native American artists; oral histories from local Native Americans; artifact displays and interpretation; and educational panels or other informational displays.

**M-NOI-1: Construction Noise Control.** The project sponsor shall develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant to ensure that maximum feasible noise attenuation shall be achieved for the duration of construction activities. Prior to commencement of demolition and construction activities, the project sponsor shall submit the construction noise control plan to the department for review and approval. Noise attenuation measures shall be implemented to meet a goal of not increasing noise levels from construction activities by more than 10 dBA above the ambient noise level at sensitive receptor locations. Noise measures may include, but are not limited to, those listed below.

- Require that all construction equipment powered by gasoline or diesel engines have sound control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Prohibit gasoline or diesel engines from having unmuffled exhaust systems.
- Ensure that equipment and trucks for project construction use the best available noise control techniques (e.g., improved mufflers, redesigned equipment, intake silencers, ducts, engine enclosures, acoustically attenuating shields or shrouds) wherever feasible. According to FHWA, the use of shields or barriers around noise sources can reduce noise by 5 to 10 dBA, depending on the type of barrier used.
- Use “quiet” gasoline-powered or electrically powered compressors as well as electric rather than gasoline- or diesel-powered forklifts for small lifting, where feasible.
- Locate stationary noise sources, such as temporary generators, concrete saws, and crushing/processing equipment, as far from nearby receptors as possible; muffle and enclose noise sources within temporary enclosures and shield with barriers, which reduces construction noise by as much as 5 dB; or implement other measures, to the extent feasible.
- Undertake the noisiest activities during times of least disturbance to surrounding residents and occupants, such as midday or early afternoon when residents are more likely to be at work and less likely to be sleeping, as feasible.
- In response to noise complaints received from people in the project area, monitor the effectiveness of noise attenuation measures by taking noise measurements. A plan for noise monitoring shall be provided to the City for review prior to the commencement of each construction phase.

The construction noise control plan must include the following measures for responding to and tracking complaints pertaining to construction noise:

- A procedure and phone numbers for notifying the Department of Building Inspection, health department, or the police department of complaints (during regular construction hours and off hours).
- A sign posted onsite describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction.
- Designation of an onsite construction complaint and enforcement manager for the project.
- A plan for notification of neighboring residents and nonresidential building managers within 300 feet of the project construction area at least 30 days in advance of activities that could increase daytime ambient noise levels at sensitive receptor locations by 10 dBA or more. The notification must include the associated control measures that will be implemented to reduce noise levels.

**M-AQ-2: Construction Emissions Minimization Plan.**

The project sponsor or the project sponsor's contractor shall comply with the following:

*A. Engine Requirements.*

1. All off-road equipment greater than 25 horsepower (hp) and operating for more than 20 total hours over the entire duration of construction activities shall have engines that meet or exceed either USEPA or CARB Tier 2 off-road emission standards and have been retrofitted with a CARB Level 3 VDECS. Equipment with engines meeting Tier 4 Interim or Tier 4 Final off-road emission standards automatically meet this requirement.
2. Where access to alternative sources of power are available, portable diesel engines shall be prohibited.
3. Diesel engines, whether for off-road or on-road equipment, shall not be left idling for more than two minutes at any location, except as provided in exceptions to the applicable state regulations regarding idling for off-road and on-road equipment (e.g., traffic conditions, safe operating conditions). The contractor shall post legible and visible signs in English, Spanish, and Chinese in designated queuing areas and at the construction site to remind operators of the two-minute idling limit.
4. The contractor shall instruct construction workers and equipment operators regarding the maintenance and tuning of construction equipment and require that such workers and operators properly maintain and tune equipment in accordance with manufacturers' specifications.

*B. Waivers.*



1. The department's environmental review officer (ERO) or designee may waive the alternative source of power requirement of subsection (A)(2) if an alternative source of power is limited or infeasible at the project site. If the ERO grants the waiver, the contractor must submit documentation that the equipment used for onsite power generation meets the requirements of Subsection (A)(1).
2. The ERO may waive the equipment requirements of Subsection (A)(1) if a particular piece of off-road equipment with a CARB Level 3 VDECS is technically not feasible, the equipment would not produce the desired emissions reduction because of the expected operating modes, installation of the equipment would create a safety hazard or impair the operator's vision, or a compelling emergency need requires the use of off-road equipment that is not retrofitted with a CARB Level 3 VDECS. If the ERO grants the waiver, the contractor must use the next-cleanest piece of off-road equipment, according to Table M-AQ-2.

**Table M-AQ-2: Off-Road Equipment Compliance Step-down Schedule**

Compliance Alternative	Engine Emission Standard	Emissions Control
1	Tier 2	CARB Level 2 VDECS
2	Tier 2	CARB Level 1 VDECS

*C. Construction Emissions Minimization Plan.*

Before starting onsite construction activities, the contractor shall submit a Construction Emissions Minimization Plan (Plan) to the ERO for review and approval. The Plan shall state, in reasonable detail, how the contractor will meet the requirements of Section A.

1. The Plan shall include estimates of the construction timeline by phase, with a description of each piece of off-road equipment required for every construction phase. The description may include, but is not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, engine serial number, expected fuel usage, and hours of operation. For VDECS, the description may include technology type, serial number, make, model, manufacturer, CARB verification number level, installation date, and hour meter reading on installation date. For off-road equipment using alternative fuels, the description shall also specify the type of alternative fuel being used.
2. The project sponsor shall ensure that all applicable requirements of the Plan have been incorporated into the contract specifications. The Plan shall include a certification statement, indicating that the contractor agrees to comply fully with the Plan.
3. The contractor shall make the Plan available to the public for review onsite during working hours. The contractor shall post a legible and visible sign at the construction site summarizing the Plan. The sign shall also state that the public may ask to inspect

the Plan for the project at any time during working hours and shall explain how to request to inspect the Plan. The contractor shall post at least one copy of the sign in a visible location on each side of the construction site facing a public right-of-way.

- D. *Monitoring*. After the start of construction activities, the contractor shall submit quarterly reports to the ERO, documenting compliance with the Plan. After completion of construction and prior to receiving a final certificate of occupancy, the project sponsor shall submit a final report to the ERO, summarizing construction activities, including the start and end dates, duration of each construction phase, and the specific information required in the Plan.

**M-AQ-4: Best Available Control Technology for Diesel Generators.** The project sponsor shall ensure that the backup diesel generator meets or exceeds one of the following emission standards for particulate matter: (1) the generator is equipped with a Tier 4 certified engine or (2) the generator is equipped with a Tier 2 or Tier 3 certified engine with a CARB Level 3 VDECS. A non-verified diesel emission control strategy may be used if the filter has the same particulate matter reduction as the identical CARB verified model and if the air district approves of its use. The project sponsor shall submit documentation of compliance with the air district New Source Review permitting process (Regulation 2, Rule 2, and Regulation 2, Rule 5) and the emission standard requirement of this mitigation measure to the department for review and approval prior to issuance of a permit for a backup diesel generator from any City agency.

**M-GE-5: Implement Appropriate Measures in Case of Inadvertent Discovery of Paleontological Resources.** Before ground disturbance, the project sponsor shall retain a qualified paleontologist, as defined by the Society of Vertebrate Paleontology, to instruct construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance of fossils that may be unearthed during construction, and proper notification procedures should fossils be encountered. A qualified paleontologist shall monitor construction activities in the areas where construction activities have the potential to disturb previously undisturbed native sediment or sedimentary rocks. Construction shall be halted within 50 feet of any potential fossil find, and a qualified paleontologist shall be notified to evaluate the significance.

If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the resource and notify the project sponsor and the San Francisco Planning Department. There shall be no construction work in the area to allow recovery of fossil remains in a timely manner. A qualified paleontologist shall evaluate the resource and prepare a recovery plan in accordance with the standards of the Society of Vertebrate Paleontology.<sup>191</sup> The recovery plan may include a field survey, construction monitoring, sampling

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<sup>191</sup> 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](http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx), accessed July 16, 2019.

and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. The City shall determine which of the recommendations in the recovery plan are necessary and feasible; these recommendations shall be implemented before construction activities resume at the site where the paleontological resources were discovered. The City shall be responsible for ensuring that the qualified paleontologist's recommendations regarding treatment and reporting are implemented.

## 2. IMPROVEMENT MEASURES

**I-TR-5a: Management of Freight Loading/Service Vehicle Activities.** The Project Sponsor should ensure that building management deploys attendant(s) during all vehicle movements into and out of the project's off-street freight loading dock along Merchant Street. The attendant's primary duties would include ensuring that these movements occur without negatively affecting traffic, bicycle, and pedestrian safety and minimizing any disruptions to traffic, bicycle, and pedestrian circulation. The attendant would be responsible for ensuring that there are no conflicts with bicyclists, pedestrians, or other motorists before the freight loading/service vehicle operator begins his or her movement into or out of the elevator. While the vehicle is maneuvering into or out of the space, the attendant would also be responsible for helping to guide the vehicle into and out of the elevator, including providing instructions or guidance to the vehicle operator and holding any arriving bicyclists, pedestrians, and other motorists until it is safe to pass. The Project Sponsor should also ensure that tenants report any expected use of the off-street freight loading dock to building management and that building management coordinates these activities to maximize use of the off-street dock (in lieu of disruptive alternatives such as double parking on-street) to the extent feasible and minimizes any scheduling conflicts.

**I-TR-5b: Management of Passenger Loading Activities.** It should be the responsibility of the project sponsor to ensure that project-generated passenger loading activities along Battery Street are accommodated within the confines of the proposed on-street white zone or in available on-street parking spaces. Specifically, the project sponsor should monitor passenger loading activities at the proposed zone to ensure that such activities are in compliance with the following requirements:

- Double parking, queuing, or other project-generated activities should not result in intrusions into the adjacent travel lane or obstruction of the adjacent sidewalk. Any project-generated vehicle conducting, or attempting to conduct, passenger pickup or drop-off activities should not occupy the adjacent travel lane such that traffic, transit, or bicycle circulation is inhibited, and associated passenger and pedestrian activity should not occupy the adjacent sidewalk such that pedestrian circulation is inhibited.
- Project-generated activities should not result in a vehicle queue, defined as one or more vehicles blocking any portion of any public right-of-way for a combined period of 15 minutes a day for at least three days a week observed during a one-month period.

- Should passenger loading activities at the proposed on-street passenger loading zone not be in compliance with the above requirements, the project sponsor should employ abatement methods as needed to ensure compliance. Suggested abatement methods may include, but are not limited to, employment or deployment of staff members to direct passenger loading activities; use of off-site parking facilities or shared parking with nearby uses; additional TDM measures, as described in the Planning Commission's TDM Program Standards; and/or limited hours for access to the passenger loading zones. Any new abatement measures should be reviewed and approved by the department.
- If the planning director, or his or her designee, suspects that project-generated passenger loading activities in the proposed passenger loading zone are not in compliance with the above requirements, the department should notify the property owner in writing. The property owner, or his or her designated agent (such as building management), should hire a qualified transportation consultant to evaluate conditions at the site for no less than seven total days. The consultant should submit a report to the department, documenting conditions. Upon review of the report, the department should determine whether or not project-generated passenger loading activities are in compliance with the above requirements and notify the property owner of the determination in writing.
- If the department determines that passenger loading activities are not in compliance with the above requirements, upon notification, the property owner, or his or her designated agent, should have 90 days from the date of the written determination to carry out abatement measures. If, after 90 days, the department determines that the property owner, or his or her designated agent, has been unsuccessful in ensuring compliance with the above requirements, use of the on-street passenger loading zone should be restricted during certain time periods or events to ensure compliance. These restrictions should be determined by the department in coordination with the SFMTA, as deemed appropriate, based on the consultant's evaluation of site conditions, and communicated to the property owner in writing. The property owner, or his or her designated agent, should be responsible for relaying these restrictions to building tenants to ensure compliance.

**I-TR-5c: Event-Related Transportation Strategies.** In addition to the measures described under Improvement Measure I-TR-5b, Management of Passenger Loading Activities, other measures may be warranted to minimize any potential disruptions to traffic, transit, and bicycle and pedestrian circulation as a result of events at the project site. When booking or hosting events in the proposed hotel's function/conference spaces, the hotel operator and building management should work together with event sponsors to identify the expected transportation needs of the event and implement improvement measures to assist with event-related passenger loading. Potential measures could include (but are not limited to) the following:

- For events that may generate substantial demand for curbside passenger loading, in excess of regular (non-event) conditions, manage use of the proposed passenger loading zone to ensure that adequate space is provided to accommodate the additional vehicles while maintaining regular (non-event) use of the zone. If necessary, apply for (temporary) extended hours for the passenger loading zone through the SFMTA to accommodate event-related passenger

loading. If additional space is necessary, apply for temporary signage through the SFMTA to convert on-street parking in the immediate vicinity of the project site (including on-street commercial loading zones, if not in use) into additional space for event-related passenger loading. If warranted, implement a temporary curbside valet program or deploy staff members to direct and facilitate passenger loading activities to maximize efficient use of the zone and minimize disruptions to traffic, transit, and bicycle and pedestrian circulation. If substantial passenger queuing is expected at the zone during the post-event period, encourage event attendees to wait inside the hotel lobby and avoid obstructing pedestrian circulation along the sidewalk adjacent to the zone.

- Provide general transit information (e.g., directions to/from key transit hubs, routes, schedules, fares) to event sponsors and hosts (i.e., organizations or individuals renting the event space) for distribution to event attendees, and encourage attendees to take transit, bike, or walk when traveling to/from the event. If necessary, provide general information about nearby public parking facilities (e.g., maps, directions, rates, etc.) to event sponsors for distribution to event attendees. Any information should be provided to event sponsors and hosts in advance of events to ensure adequate time for dissemination to event attendees through online websites, email communications, mailings, and/or other means.
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## G. PUBLIC NOTICE AND COMMENT

On August 7, 2019, the department mailed a notice of preparation of an EIR to property owners within 300 feet of the project site, adjacent tenants, and other potentially interested parties. During the public review and comment period on the notice of preparation, a total of four comment letters and emails were submitted to the department. The written comments raised the following issues:

- Project Description
  - Unclear about the need for the project
  - Expressed opinion that a housing project with affordable units would be preferable to a hotel
  - Expressed hope that project design would be innovate to avoid traffic, parking issues, and loading problems and instead promote privileges to cyclists, pedestrians, and shared transportation users.
- Transportation and Traffic
  - Request to update ingress/egress plans to consider the future proposed fire station
  - Request to analyze the project's impact and impact of transportation network companies (TNC) on public transit
  - Concern regarding adequate parking being provided on an already-busy street for employees, hotel guests, and retail shoppers
  - Concern about increased traffic and congestion
  - Concern about TNC loading
- Noise
  - Concern about noise from construction and construction schedule hours
  - Concern about increased street noise during project operation
- Air Quality
  - Concern about pollution from construction
- Shadow
  - Consider the social and public health impact of shadow cast on Maritime Plaza
- Public Services
  - Requests to analyze impacts on Sansome Street fire station
  - Requests to consider the cumulative impact on fire services from the following two proposed projects: reconstruction of Fire Station 13 at Washington Street and construction of a mixed-use high-rise building at the southeast corner of Sansome and Washington
- Hazards
  - Concern about unearthing of rats during construction

The issues raised in the written comments have either been addressed in this initial study or in the EIR, as appropriate.

## H. 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.

10/21/2020  
Date

*Devyani Jain* for  
Lisa Gibson  
Environmental Review Officer for Rich Hillis,  
Director of Planning

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**Senior Project Planner:** Christy J. Alexander

**Preservation Planner:** Jørgen G. Cleemann

**Archeologist:** Allison Vanderslice

**Air Quality and Noise:** Jessica Range

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Jeffrey Heller

Eric Lundquist

## **APPENDIX C: NOISE DATA**

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- Long-Term Noise Monitoring Data – LT-1, LT-2, and LT-3
- Construction Data
- Construction Noise Calculation Sheets by Activity
- Hourly Turning Movement Volumes



## Long-Term Noise Monitoring Data – LT-1, LT-2, and LT-3

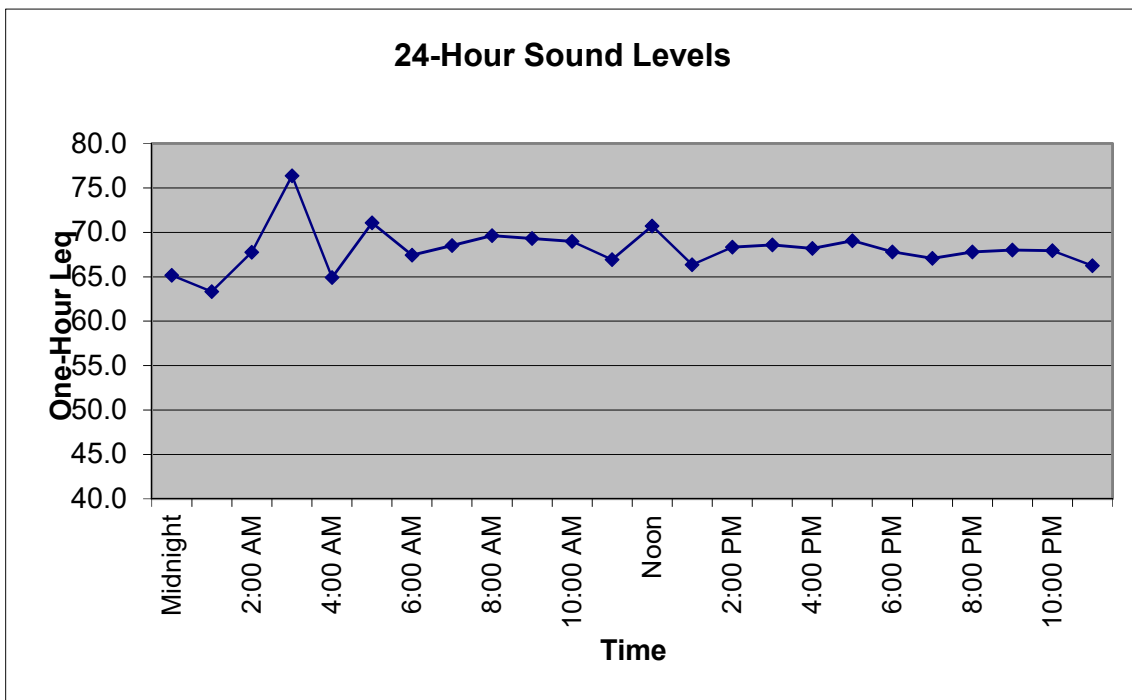


# Ldn/CNEL Calculation Spreadsheet

Project: 447 Battery Street		Date: 8/28/2019		Analyst: C. Matsui				
Location: LT-1								
					Worst Hour	Ldn minus	CNEL minus	
Time		Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	65.2	69.0	76.1	76.2	76.4	-0.3	0.2	Evening
1:00 AM	63.3		7.6	7.7				Night
2:00 AM	67.7							
3:00 AM	76.4							
4:00 AM	64.9							
5:00 AM	71.1							
6:00 AM	67.4							
7:00 AM	68.5							
8:00 AM	69.6							
9:00 AM	69.3							
10:00 AM	69.0							
11:00 AM	66.9							
Noon	70.7							
1:00 PM	66.4							
2:00 PM	68.3							
3:00 PM	68.6							
4:00 PM	68.2							
5:00 PM	69.0							
6:00 PM	67.8							
7:00 PM	67.1							
8:00 PM	67.8							
9:00 PM	68.0							
10:00 PM	67.9							
11:00 PM	66.3							

### 24-Hour Sound Levels

Time	One-Hour Leq
Midnight	65.2
1:00 AM	63.3
2:00 AM	67.7
3:00 AM	76.4
4:00 AM	64.9
5:00 AM	71.1
6:00 AM	67.4
7:00 AM	68.5
8:00 AM	69.6
9:00 AM	69.3
10:00 AM	69.0
11:00 AM	66.9
Noon	70.7
1:00 PM	66.4
2:00 PM	68.3
3:00 PM	68.6
4:00 PM	68.2
5:00 PM	69.0
6:00 PM	67.8
7:00 PM	67.1
8:00 PM	67.8
9:00 PM	68.0
10:00 PM	67.9
11:00 PM	66.3

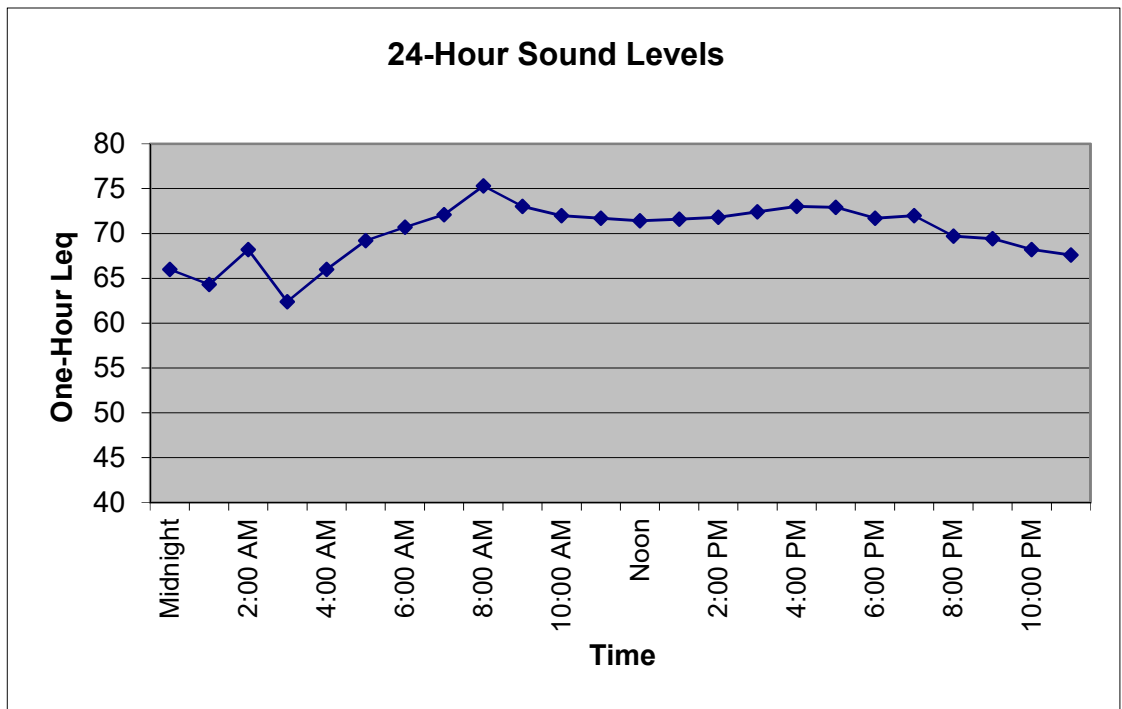


# Ldn/CNEL Calculation Spreadsheet

Project:	447 Battery Street	Date:	8/28/2019	Analyst:	C. Matsui		
Location:	LT-2						
				Worst Hour	Ldn minus	CNEL minus	
Time	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	66	71.0	75.0	75.3	-0.3	0.4	Evening
1:00 AM	64.3	2.9	3.3				Night
2:00 AM	68.2						
3:00 AM	62.4						
4:00 AM	66						
5:00 AM	69.2						
6:00 AM	70.7						
7:00 AM	72.1						
8:00 AM	75.3						
9:00 AM	73						
10:00 AM	72						
11:00 AM	71.7						
Noon	71.4						
1:00 PM	71.6						
2:00 PM	71.8						
3:00 PM	72.4						
4:00 PM	73						
5:00 PM	72.9						
6:00 PM	71.7						
7:00 PM	72						
8:00 PM	69.7						
9:00 PM	69.4						
10:00 PM	68.2						
11:00 PM	67.6						

### 24-Hour Sound Levels

Time	One-Hour Leq
Midnight	66
1:00 AM	64.3
2:00 AM	68.2
3:00 AM	62.4
4:00 AM	66
5:00 AM	69.2
6:00 AM	70.7
7:00 AM	72.1
8:00 AM	75.3
9:00 AM	73
10:00 AM	72
11:00 AM	71.7
Noon	71.4
1:00 PM	71.6
2:00 PM	71.8
3:00 PM	72.4
4:00 PM	73
5:00 PM	72.9
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7:00 PM	72
8:00 PM	69.7
9:00 PM	69.4
10:00 PM	68.2
11:00 PM	67.6



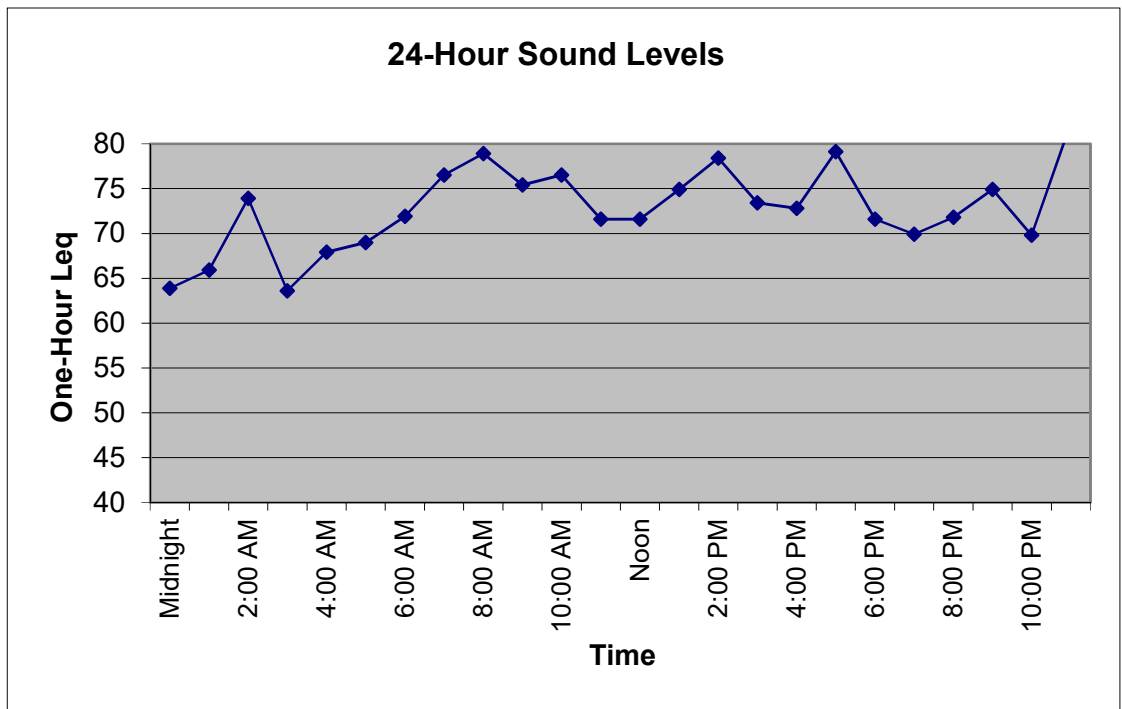


# Ldn/CNEL Calculation Spreadsheet

Project:	447 Battery Street	Date:	8/28/2019	Analyst:	C. Matsui		
Location:	LT-3						
				Worst Hour	Ldn minus	CNEL minus	
Time	Leq(24)	Ldn	CNEL	Leq	Worst Hour Leq	Ldn	Day
Midnight	63.9	75.0	80.9	81.1	82.3	-1.4	0.2
1:00 AM	65.9	4.4	4.6				Evening
2:00 AM	73.9						Night
3:00 AM	63.6						
4:00 AM	67.9						
5:00 AM	69						
6:00 AM	71.9						
7:00 AM	76.5						
8:00 AM	78.9						
9:00 AM	75.4						
10:00 AM	76.5						
11:00 AM	71.6						
Noon	71.6						
1:00 PM	74.9						
2:00 PM	78.4						
3:00 PM	73.4						
4:00 PM	72.8						
5:00 PM	79.1						
6:00 PM	71.6						
7:00 PM	69.9						
8:00 PM	71.8						
9:00 PM	74.9						
10:00 PM	69.8						
11:00 PM	82.3						

24-Hour Sound Levels

Time	One-Hour Leq
Midnight	63.9
1:00 AM	65.9
2:00 AM	73.9
3:00 AM	63.6
4:00 AM	67.9
5:00 AM	69
6:00 AM	71.9
7:00 AM	76.5
8:00 AM	78.9
9:00 AM	75.4
10:00 AM	76.5
11:00 AM	71.6
Noon	71.6
1:00 PM	74.9
2:00 PM	78.4
3:00 PM	73.4
4:00 PM	72.8
5:00 PM	79.1
6:00 PM	71.6
7:00 PM	69.9
8:00 PM	71.8
9:00 PM	74.9
10:00 PM	69.8
11:00 PM	82.3



**Construction Equipment**

Phase Name	Off-Road Equipment Type	Equipment Amount	Usage Hours per Day	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	6	81	0.73
	Excavators	3	6	158	0.38
	Rubber Tired Dozers	2	6	247	0.4
Site Preparation	Rubber Tired Dozers	3	6	247	0.4
	Tractors/Loaders/Backhoes	4	6	97	0.37
Grading	Excavators	1	6	158	0.38
	Graders	1	6	187	0.41
	Rubber Tired Dozers	1	6	247	0.4
	Tractors/Loaders/Backhoes	3	6	97	0.37
Building Construction	Cranes	1	6	231	0.29
	Forklifts	3	6	89	0.2
	Generator Sets	1	6	84	0.74
	Tractors/Loaders/Backhoes	3	6	97	0.37
	Welders	1	6	46	0.45
Paving	Pavers	2	6	130	0.42
	Paving Equipment	2	6	132	0.36
	Rollers	2	6	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

# Construction Data



		Demolition	Site Preparation	Grading/Excavation	Building Construction	Paving	Architectural Coating	
2 Loudest Pieces @ 50 Feet								
L <sub>max</sub>			91	87	88	87	93	78
L <sub>eq</sub>			84	83	84	83	86	74
L <sub>max</sub> @ distances (feet):								
	25		98	95	95	95	101	86
	50		91	87	88	87	93	78
	100		83	79	80	79	85	70
	150		79	75	76	75	81	66
	200		76	72	72	72	78	63
	250		73	70	70	70	76	61
	300		71	68	68	68	74	59
	400		68	64	65	64	70	55
	500		66	62	63	62	68	53
	600		64	60	61	60	66	51
	700		62	58	59	58	64	49
	800		61	57	57	57	63	48
	900		59	56	56	56	62	47
	1000		58	54	55	54	60	45
	1200		56	53	53	53	59	43
	1400		54	51	51	51	57	42
	1600		53	49	50	49	55	40
	1800		52	48	49	48	54	39
	2000		51	47	47	47	53	38
L <sub>eq</sub> @ distances (feet):								
	25		92	91	91	91	94	82
	50		84	83	84	83	86	74
	100		77	76	76	76	78	66
	150		72	71	72	71	74	62
	200		69	68	69	68	71	59
	250		67	66	66	66	69	57
	300		65	64	64	64	67	55
	400		62	60	61	60	63	51
	500		59	58	59	58	61	49
	600		57	56	57	56	59	47
	700		56	54	55	54	57	45
	800		54	53	53	53	56	44
	900		53	52	52	52	55	43
	1000		52	51	51	51	53	41
	1200		50	49	49	49	52	40
	1400		48	47	47	47	50	38
	1600		47	45	46	45	48	36
	1800		45	44	45	44	47	35
	2000		44	43	44	43	46	34



## Construction Noise Calculation Sheets by Activity





# Construction Noise

## Demolition

		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Source Data:				
Concrete/Industrial Saws		90	20%	83.0
Rubber Tired Dozers		82	40%	78.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				91
All Sources Combined - Leq sound level (dBA) at 50 feet =				84
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	98	92
50	0	0.0	91	84
100	-6	-1.5	83	77
150	-10	-2.4	79	72
200	-12	-3.0	76	69
250	-14	-3.5	73	67
300	-16	-3.9	71	65
400	-18	-4.5	68	62
500	-20	-5.0	66	59
600	-22	-5.4	64	57
700	-23	-5.7	62	56
800	-24	-6.0	61	54
900	-25	-6.3	59	53
1000	-26	-6.5	58	52
1200	-28	-6.9	56	50
1400	-29	-7.2	54	48
1600	-30	-7.5	53	47
1800	-31	-7.8	52	45
2000	-32	-8.0	51	44
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

# Construction Noise

## Site Preparation

		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Source Data:				
Tractors/Loaders/Backhoes		84	40%	80.0
Tractors/Loaders/Backhoes		84	40%	80.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				87
All Sources Combined - Leq sound level (dBA) at 50 feet =				83
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	95	91
50	0	0.0	87	83
100	-6	-1.5	79	76
150	-10	-2.4	75	71
200	-12	-3.0	72	68
250	-14	-3.5	70	66
300	-16	-3.9	68	64
400	-18	-4.5	64	60
500	-20	-5.0	62	58
600	-22	-5.4	60	56
700	-23	-5.7	58	54
800	-24	-6.0	57	53
900	-25	-6.3	56	52
1000	-26	-6.5	54	51
1200	-28	-6.9	53	49
1400	-29	-7.2	51	47
1600	-30	-7.5	49	45
1800	-31	-7.8	48	44
2000	-32	-8.0	47	43
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

# Construction Noise

## Grading/Excavation

		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Source Data:				
Graders		85	40%	81.0
Tractors/Loaders/Backhoes		84	40%	80.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				88
All Sources Combined - Leq sound level (dBA) at 50 feet =				84
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	95	91
50	0	0.0	88	84
100	-6	-1.5	80	76
150	-10	-2.4	76	72
200	-12	-3.0	72	69
250	-14	-3.5	70	66
300	-16	-3.9	68	64
400	-18	-4.5	65	61
500	-20	-5.0	63	59
600	-22	-5.4	61	57
700	-23	-5.7	59	55
800	-24	-6.0	57	53
900	-25	-6.3	56	52
1000	-26	-6.5	55	51
1200	-28	-6.9	53	49
1400	-29	-7.2	51	47
1600	-30	-7.5	50	46
1800	-31	-7.8	49	45
2000	-32	-8.0	47	44
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

# Construction Noise

## Building Construction

		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Source Data:				
Forklifts		84	40%	80.0
Tractors/Loaders/Backhoes		84	40%	80.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				87
All Sources Combined - Leq sound level (dBA) at 50 feet =				83
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	95	91
50	0	0.0	87	83
100	-6	-1.5	79	76
150	-10	-2.4	75	71
200	-12	-3.0	72	68
250	-14	-3.5	70	66
300	-16	-3.9	68	64
400	-18	-4.5	64	60
500	-20	-5.0	62	58
600	-22	-5.4	60	56
700	-23	-5.7	58	54
800	-24	-6.0	57	53
900	-25	-6.3	56	52
1000	-26	-6.5	54	51
1200	-28	-6.9	53	49
1400	-29	-7.2	51	47
1600	-30	-7.5	49	45
1800	-31	-7.8	48	44
2000	-32	-8.0	47	43
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

# Construction Noise

## Paving

		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Source Data:				
Paving Equipment		90	20%	83.0
Paving Equipment		90	20%	83.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				93
All Sources Combined - Leq sound level (dBA) at 50 feet =				86
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	101	94
50	0	0.0	93	86
100	-6	-1.5	85	78
150	-10	-2.4	81	74
200	-12	-3.0	78	71
250	-14	-3.5	76	69
300	-16	-3.9	74	67
400	-18	-4.5	70	63
500	-20	-5.0	68	61
600	-22	-5.4	66	59
700	-23	-5.7	64	57
800	-24	-6.0	63	56
900	-25	-6.3	62	55
1000	-26	-6.5	60	53
1200	-28	-6.9	59	52
1400	-29	-7.2	57	50
1600	-30	-7.5	55	48
1800	-31	-7.8	54	47
2000	-32	-8.0	53	46
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

# Construction Noise

## Architectural Coating

Source Data:		Maximum Sound Level (dBA)	Utilization Factor	Leq Sound Level (dBA)
Air Compressors		78	40%	74.0
Calculated Data:				
All Sources Combined - Lmax sound level (dBA) at 50 feet =				78
All Sources Combined - Leq sound level (dBA) at 50 feet =				74
Distance Between Source and Receiver (ft.)	Geometric Attenuation (dB)	Ground Effect Attenuation (dB)	Calculated Lmax Sound Level (dBA)	Calculated Leq Sound Level (dBA)
25	6	1.5	86	82
50	0	0.0	78	74
100	-6	-1.5	70	66
150	-10	-2.4	66	62
200	-12	-3.0	63	59
250	-14	-3.5	61	57
300	-16	-3.9	59	55
400	-18	-4.5	55	51
500	-20	-5.0	53	49
600	-22	-5.4	51	47
700	-23	-5.7	49	45
800	-24	-6.0	48	44
900	-25	-6.3	47	43
1000	-26	-6.5	45	41
1200	-28	-6.9	43	40
1400	-29	-7.2	42	38
1600	-30	-7.5	40	36
1800	-31	-7.8	39	35
2000	-32	-8.0	38	34
Geometric attenuation based on 6 dB per doubling of distance.				
Ground affect attenuation based on 1.5 dB per doubling of distance				
Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.				

## Hourly Turning Movement Volumes





# Existing Volumes - PM Peak Hour

	1	2	3	4
INTERSECTION---->	Battery Street Washington Street	Batttery Street Clay Street	Sansome Street Washington Street	Sansome Street Clay Street
TIME	PM	PM	PM	PM
Eastbound	Eastbound	Eastbound	Eastbound	Eastbound
LT	0	0	0	148
TH	0	458	0	537
RT	0	165	0	50
<b>TOTAL</b>	<b>0</b>	<b>623</b>	<b>0</b>	<b>735</b>
Westbound	Westbound	Westbound	Westbound	Westbound
LT	107	0	35	0
TH	354	0	330	0
RT	0	0	90	0
<b>TOTAL</b>	<b>461</b>	<b>0</b>	<b>455</b>	<b>0</b>
Southbound	Southbound	Southbound	Southbound	Southbound
LT	0	342	0	10
TH	806	532	32	60
RT	110	0	20	0
<b>TOTAL</b>	<b>916</b>	<b>874</b>	<b>52</b>	<b>70</b>
Northbound	Northbound	Northbound	Northbound	Northbound
LT	0	0	170	0
TH	0	0	480	508
RT	0	0	0	86
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>650</b>	<b>594</b>
<b>WEST LINK (Total)</b>	<b>464</b>	<b>623</b>	<b>520</b>	<b>735</b>
-WB (Leave)	464	0	520	0
-EB (Approach)	0	623	0	735
<b>EAST LINK (Total)</b>	<b>461</b>	<b>800</b>	<b>455</b>	<b>633</b>
-EB (Leave)	0	800	0	633
-WB (Approach)	461	0	455	0
<b>NORTH LINK (Total)</b>	<b>916</b>	<b>874</b>	<b>622</b>	<b>726</b>
-NB (Leave)	0	0	570	656
-SB (Approach)	916	874	52	70
<b>SOUTH LINK (Total)</b>	<b>913</b>	<b>697</b>	<b>717</b>	<b>704</b>
-SB (Leave)	913	697	67	110
-NB (Approach)	0	0	650	594
INTERSECTION---->	Battery Street Washington Street	Batttery Street Clay Street	Sansome Street Washington Street	Sansome Street Clay Street

100% = Vehicle Percentage

Total Intersection Volume

2,754

2,994

2,314

2,798

Existing + Project Volumes - PM Peak Hour

	1	2	3	4
INTERSECTION---->	Battery Street Washington Street	Battery Street Clay Street	Sansome Street Washington Street	Sansome Street Clay Street
TIME	PM	PM	PM	PM
Eastbound	Eastbound	Eastbound	Eastbound	Eastbound
LT	0	0	0	148
TH	0	458	0	537
RT	0	165	0	50
<b>TOTAL</b>	<b>0</b>	<b>623</b>	<b>0</b>	<b>735</b>
Westbound	Westbound	Westbound	Westbound	Westbound
LT	113	0	35	0
TH	354	0	330	0
RT	0	0	90	0
<b>TOTAL</b>	<b>467</b>	<b>0</b>	<b>455</b>	<b>0</b>
Southbound	Southbound	Southbound	Southbound	Southbound
LT	0	356	0	10
TH	856	585	32	60
RT	110	0	20	0
<b>TOTAL</b>	<b>966</b>	<b>941</b>	<b>52</b>	<b>70</b>
Northbound	Northbound	Northbound	Northbound	Northbound
LT	0	0	180	0
TH	0	0	517	525
RT	0	0	0	86
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>697</b>	<b>611</b>
<b>WEST LINK (Total)</b>	<b>464</b>	<b>623</b>	<b>530</b>	<b>735</b>
-WB (Leave)	464	0	530	0
-EB (Approach)	0	623	0	735
<b>EAST LINK (Total)</b>	<b>467</b>	<b>814</b>	<b>455</b>	<b>633</b>
-EB (Leave)	0	814	0	633
-WB (Approach)	467	0	455	0
<b>NORTH LINK (Total)</b>	<b>966</b>	<b>941</b>	<b>659</b>	<b>743</b>
-NB (Leave)	0	0	607	673
-SB (Approach)	966	941	52	70
<b>SOUTH LINK (Total)</b>	<b>969</b>	<b>750</b>	<b>764</b>	<b>721</b>
-SB (Leave)	969	750	67	110
-NB (Approach)	0	0	697	611
INTERSECTION---->	Battery Street Washington Street	Batttery Street Clay Street	Sansome Street Washington Street	Sansome Street Clay Street

	1	2	3	4
100% = Vehicle Percentage				
Total Intersection Volume	2,866	3,128	2,408	2,832

# Cumulative Volumes - PM Peak Hour

	1	2	3	4
INTERSECTION---->	Battery Street Washington	Batttery Stre Clay Street	Sansome St Washington	Sansome Str Clay Street
TIME	PM	PM	PM	PM
Eastbound	Eastbound	Eastbound	Eastbound	Eastbound
LT	0	0	0	202
TH	0	501	0	650
RT	0	239	0	68
<b>TOTAL</b>	<b>0</b>	<b>740</b>	<b>0</b>	<b>920</b>
Westbound	Westbound	Westbound	Westbound	Westbound
LT	167	0	40	0
TH	407	0	380	0
RT	0	0	103	0
<b>TOTAL</b>	<b>574</b>	<b>0</b>	<b>523</b>	<b>0</b>
Southbound	Southbound	Southbound	Southbound	Southbound
LT	0	393	0	17
TH	927	612	53	100
RT	127	0	33	0
<b>TOTAL</b>	<b>1,054</b>	<b>1,005</b>	<b>86</b>	<b>117</b>
Northbound	Northbound	Northbound	Northbound	Northbound
LT	0	0	213	0
TH	0	0	600	584
RT	0	0	0	99
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>813</b>	<b>683</b>
<b>WEST LINK (Total)</b>	<b>534</b>	<b>740</b>	<b>626</b>	<b>920</b>
-WB (Leave)	534	0	626	0
-EB (Approach)	0	740	0	920
<b>EAST LINK (Total)</b>	<b>574</b>	<b>894</b>	<b>523</b>	<b>766</b>
-EB (Leave)	0	894	0	766
-WB (Approach)	574	0	523	0
<b>NORTH LINK (Total)</b>	<b>1,054</b>	<b>1,005</b>	<b>789</b>	<b>903</b>
-NB (Leave)	0	0	703	786
-SB (Approach)	1,054	1,005	86	117
<b>SOUTH LINK (Total)</b>	<b>1,094</b>	<b>851</b>	<b>906</b>	<b>851</b>
-SB (Leave)	1,094	851	93	168
-NB (Approach)	0	0	813	683
INTERSECTION---->	Battery Street Washington	Batttery Stre Clay Street	Sansome St Washington	Sansome St Clay Street

	1	2	3	4
100% = Vehicle Percentage				
Total Intersection Volume	3,256	3,490	2,844	3,440



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Rachel Schuett  
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San Francisco, CA 94103

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**REQUEST FOR FINAL ENVIRONMENTAL IMPACT REPORT**

447 Battery Street Project, Planning Department Case

No. 2014.1036E

*Check one box:*      ☐ Please send me a copy of the Final EIR on CD.  
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