DEIR

DRAFT ENVIRONMENTAL IMPACT REPORT

1601 Mariposa Street Mixed Use Project

PLANNING DEPARTMENT
CASE NO. 2012.1398E

STATE CLEARINGHOUSE NO. 2014052044

Draft EIR Publication Date:	**DECEMBER 17, 2014**
Draft EIR Public Hearing Date:	**JANUARY 22, 2015**
Draft EIR Public Comment Period:	**DECEMBER 17, 2014 - FEBRUARY 17, 2015**

SAN FRANCISCO
PLANNING
DEPARTMENT

Written comments should be sent to:
Sarah Jones, Environmental Review Officer | 1650 Mission Street, Suite 400 | San Francisco, CA 94103
or sarah.b.jones@sfgov.org

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DATE: December 17, 2014

TO: Distribution List for the 1601 Mariposa Street Mixed-Use Project Draft EIR

FROM: Sarah B. Jones, Environmental Review Officer

SUBJECT: Request for the Final Environmental Impact Report for the 1601 Mariposa Street Mixed-Use Project (Planning Department File No. 2012.1398E)

This is the Draft of the Environmental Impact Report (EIR) for the 1601 Mariposa Street Mixed-Use 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 "Response to Comments," which will contain a summary of all relevant comments on this Draft EIR and our responses to those comments, along with copies of the letters received and a transcript of the public hearing. The Response to Comments document may also specify changes to this Draft EIR. Public agencies and members of the public who testify at the hearing on the Draft EIR will automatically receive a copy of the Response to Comments document, along with notice of the date reserved for certification; others may receive a copy of the Response to Comments and notice by request or by visiting our office. This Draft EIR together with the Response 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 Response 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 Response 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 Response 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 compact disk (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 Major Environmental Analysis 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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GLOSSARY

40 CFR	Title 40 of the Code of Federal Regulations
AB 389	Assembly Bill 389, California Land Reuse and Revitalization Act of 2004
ADA	Americans with Disabilities Act
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Cal/EPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCR	California Code of Regulations
CDMG	California Division of Mines and Geology
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CGP	Construction General Stormwater Permit
CHHSL	California Human Health Screening Levels
CLRA	California Land Use and Revitalization Act
CMP	Congestion Management Program
CPE	Community Plan Exemption
CUPA	Certified Unified Program Agency
DBI	San Francisco Department of Building Inspection
DPW	San Francisco Department of Public Works
DTSC	California Department of Toxic Substance Control

EIR	Environmental Impact Report
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
ENTRIPS	Eastern Neighborhood Transportation Implementation Planning Study
EP	San Francisco Planning Department, Environmental Planning Division
FAR	floor area ratio
FTE	Full-time-equivalent employees; refers to the number of employees working the equivalent of 40-hour work weeks.
gsf	Gross square feet of floor area, calculated pursuant to Planning Code Section 102.9. Gsf for all proposed buildings includes gross building areas above existing street grades, and excludes basement accessory parking areas and mechanical penthouses as defined by Planning Code Sections 102.9(b)(1) and (b)(9), and other parking areas. Gsf is calculated to include external building walls, and no deductions are made to gsf for internal elevator or service cores. All gsf numbers in this document are approximate.
HCM	Highway Capacity Manual
HDMT	Healthy Development Measurement Tool
LOP	Local Oversight Program
LOS	level of service
MCL	Maximum Contaminant Levels
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
Muni Metro	Light rail/streetcar hybrid system
Muni	San Francisco Municipal Railway
NOA	Notice of Availability
NOP	Notice of Preparation

NPDES	National Pollutant Discharge Elimination System
NPRA	National Parks and Recreation Association
OEHHA	California Office of Environmental Health and Hazard Assessment
OPR	State of California Governor's Office of Planning and Research
ORC	oxygen releasing compound
PAH	polynuclear aromatic hydrocarbon
PDR	Production, Distribution and Repair Zone
POPOS	Privately-Owned Public Open Spaces
PRC	State of California Public Resources Code
RCRA	Resource Conservation and Recovery Act of 1976
RDIP	Remedial Design and Implementation Plans
Regional Water Board	San Francisco Bay Regional Water Quality Control Board
SARA	Superfund Amendment and Reauthorization Act of 1986
SB	California Senate Bill
SD1-SD4	Superdistrict transit areas
SF Datum	Establishes the City's zero point for surveying purposes at approximately 8.6 feet above the zero elevation for the National Geodetic Vertical Datum of 1929, which was based on the sea level datum in 1929. Since 1929, the mean sea level has increased by approximately 0.44 feet.
SFDPH	San Francisco Department of Public Health
SFFD	San Francisco Fire Department
SFIA	San Francisco International Airport
SFMTA	San Francisco Metropolitan Transportation Agency
SFPD	San Francisco Police Department

SFRPD	San Francisco Recreation and Parks Department
Shared public ways	Streets "designed along a single plane (i.e., typically the sidewalk-level grade) that share space among pedestrians, bicycles, and vehicles
Showplace Square/Potrero Hill Plan Area	As used in this document, the area defined by the Showplace Square/Potrero Hill Area Plan is an irregularly shaped area generally bounded Bryant Street and 7th Street on the north, I-280 on the east, 26th and 25th Streets on the south, and Potrero Avenue on the west.
State Water Board	California State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
TASC	Transportation Advisory Staff Committee
TDM	Transportation Demand Management
TEP	Transit Effectiveness Project (now called Muni Forward)
TIDF	Transit Impact Development Fee
TIS	Transportation Impact Study
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
TPH-mo	total petroleum hydrocarbons as motor oil
UMU	Urban Mixed-Use Zone (District)
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
UWMP	Urban Water Management Plan
v/c	volume to capacity ratio
Vara	Spanish unit of linear measurement equivalent to 2.77 feet
VCA	Voluntary Cleanup Agreement

VIMS	Vapor Intrusion Mitigation System
VOC	volatile organic compound

SUMMARY

INTRODUCTION

This document is a Draft Environmental Impact Report (EIR) for the proposed 1601 Mariposa Street Mixed Use Project (project). This chapter of the EIR provides a summary of the project, a summary of anticipated environmental impacts of the project and identified mitigation measures; areas of controversy to be resolved; a summary of alternatives; and an identification of the environmentally superior alternative. The project sponsor, Related/Mariposa Development Co., LLC, proposes to develop residential and ground-floor commercial uses on an approximately 3.36-acre project site located at 1601-1677 Mariposa Street and 485-497 Carolina Street in the Potrero Hill area of San Francisco.

PROJECT SUMMARY

The project site is located on portions of two blocks bounded by Mariposa Street to the north, Arkansas Street to the east, 18th Street to the south, and Carolina Street to the west (Assessor's Block 4005/Lots 001B and 004 and Block 4006/Lots 006, 010, 019, and 020) in the Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan. The project sponsor would demolish three existing on-site one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construct two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level, below-grade parking garage under the East Building would contain between 265 and 275 parking spaces and would be accessible from Arkansas Street (upper garage level) and 18th Street (lower garage level). The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet (excluding parapets approximately 4 feet in height, five elevator overruns approximately 6 feet in height and two stair overruns up to 10 feet in height). A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site. In addition, the project

includes excavation and remediation of hazardous materials in site soils and treatment of groundwater, pursuant to an approved Response Plan and with oversight from the Department of Toxic Substances Control (DTSC). A Vapor Intrusion Mitigation System would also be implemented and a Land Use Covenant would be established to protect future site users from residual contamination. A detailed description of the proposed project is provided in Chapter II, Project Description.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

This EIR analyzes the potential environmental effects of the proposed project, as identified in the Notice of Preparation (NOP) of an EIR, issued May 14, 2014 (Appendix A of this EIR). The Community Plan Exemption (CPE) Checklist attached to the NOP (also included in Appendix A) found that the proposed project could have potentially significant environmental effects in the areas of: Transportation and Circulation, Shadow, and Hazards and Hazardous Materials. Although the CPE Checklist determined that impacts related to Recreation would be less than significant, this topic is also further evaluated in this EIR. Impacts in the following areas would be less than significant (some with the mitigation measures identified in the CPE Checklist) and are not further evaluated in this EIR: Land Use and Land Use Planning; Aesthetics; Population and Housing; Cultural and Paleontological Resources; Noise; Air Quality; Greenhouse Gas Emissions; Wind; Utilities and Service Systems; Public Services; Biological Resources; Geology and Soils; Hydrology and Water Quality; Mineral and Energy Resources; and Agriculture and Forest Resources.

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014 and added Section 21099 to the California Public Resources Code. Among other provisions, Public Resources Code Section 21099(d)(1) changed the typical analysis of aesthetics and parking impacts for urban infill projects, meeting certain criteria pursuant to CEQA. The proposed project meets the definition of a mixed-use residential project on an infill site within a transit priority

area as specified by Section 21099(a).[1] Accordingly, this EIR does not contain a separate discussion of impacts related to the topic of aesthetics, which does not need to be considered in determining the significance of the proposed project's physical environmental effects under CEQA. The EIR nonetheless provides visual simulations for informational purposes and an overview of the change in visual conditions in and around the project site that would occur with implementation of the proposed project as part of Chapter II, Project Description. In addition, parking is discussed for informational purposes in Chapter IV.A, Transportation and Circulation. This information, however, does not relate to impact significance determinations in the EIR.

This summary provides an overview of the analysis contained in Chapter IV, Environmental Setting and Impacts. Impacts are categorized by type of impact as follows:

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

[1] San Francisco Planning Department, Transit-Oriented Infill Project Eligibility Checklist for 1601 Mariposa, February 5, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

level through compliance with existing local, State, and federal laws and regulations and for which there are no feasible mitigation measures.

As discussed in Chapter IV of this EIR, the proposed project would result in significant and unavoidable impacts related to transportation and circulation. Under Existing Plus Project conditions, one study intersection –Mariposa Street and Mississippi Street (Intersection 5) – currently operates at an unacceptable level (LOS F) during the PM peak hour. The proposed project's contribution to existing unacceptable operating conditions at this intersection would be five percent or more and would therefore be a significant impact. No feasible mitigation measures have been identified to reduce this impact to a less-than-significant level.

In addition, the proposed project, combined with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative traffic impacts at two of the study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5) – each of which would operate at LOS F under the 2025 Cumulative conditions. The proposed project's contribution to unacceptable operating conditions at these intersections would be five percent or more and would therefore be a significant impact. No feasible mitigation measures have been identified to reduce these impacts to a less-than-significant level.

Table S-1 identifies the impacts and mitigation measures for the proposed project that are identified in this EIR. **Table S-2** identifies the impacts and mitigation measures for the proposed project that are identified in the CPE Checklist included as Appendix A. The information in the tables is organized to correspond with environmental issues discussed in Chapter IV and the CPE Checklist. The table is arranged in four columns: 1) impacts; 2) level of significance prior to mitigation measures (if applicable); 3) mitigation measures (if applicable); and 4) level of significance after mitigation (if applicable). For a complete description of potential impacts and recommended mitigation measures, please refer to the topical sections in Chapter IV and in the CPE Checklist.

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Transportation and Circulation			
TR-1: The proposed project would not cause a substantial increase in traffic that would adversely affect traffic operations at 12 of the 13 study intersections or otherwise conflict with traffic circulation in the vicinity.	Less Than Significant	I-TR-1a: The project sponsor should implement Transportation Demand Management (TDM) measures to reduce vehicle traffic generated by the proposed project and to encourage the use of rideshare, transit, bicycle, and walk modes for trips to and from the proposed project. The TDM plan could include the following measures. Recommended components of the TDM program include the following: • Provide information in the move-in packets for transit service (Muni and BART lines, schedules and fares), particularly for local trips (such as to the nearest grocery store, hardware store, shopping center, restaurants, and other nearby neighborhood commercial areas), information on where transit passes could be purchased in person and on-line, and information on the Clipper Card and 511 Regional Rideshare Program; • Provide TDM training for property managers and coordinators; and have at least one contact person, preferably in the building for tenants with alternative mode travel questions; • Promote and coordinate ridesharing activities (i.e., establish a "ride board") for all building residents and employees, particularly to popular local events; • Facilitate access to car share spaces provided in the parking garage through on-site signage and information on the car share company, rates, and how to enroll in the car share program; • Ensure that the points of access to bicycle parking through elevators on the ground floor and the garage ramp include signage indicating the location of these facilities;	Less Than Significant

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
TR-1 *Continued*		• Ensure that bicycle safety strategies are developed along the sides of the property, avoiding conflicts with private cars, transit vehicles and loading vehicles, posting signs where necessary to increase awareness of the presence of bicycle traffic; • Facilitate access to the 16th Street, 17th Street and Mariposa Street bicycle routes via on-site signage; • Coordinate with SFMTA on potential on-street (sidewalk) bicycle racks. In addition, post information in the bicycle parking area to inform bikers of nearby routes and bicycle parking information would encourage bicycle use and safe routes; • Actively encourage alternative mode choice by actively monitoring above efforts effectiveness, and fostering local deliveries from nearby businesses where appropriate; and • Participate with other project sponsors in a network of transportation brokerage services.	
		I-TR-1b: As an improvement measure to minimize vehicle queues at the proposed project driveway into the public right-of-way, the proposed project would be subject to the Planning Department's vehicle queue abatement Conditions of Approval (see TIS Appendix M), which state the following: It shall be the responsibility of the owner/operator of any off-street parking facility primarily serving a non-residential use, as determined by the Planning Director, with more than 20 parking spaces (excluding loading and car-share spaces) to ensure that recurring vehicle queues do not occur on the public right-of-way.	

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
TR-1 *Continued*		A vehicle queue is defined as one or more vehicles blocking any portion of any public street, alley or sidewalk for a consecutive period of three minutes or longer on a daily or weekly basis. If a recurring queue occurs, the owner/operator of the parking facility shall employ abatement methods as needed to abate the queue. Suggested abatement methods include but are not limited to the following: redesign of facility layout to improve vehicle circulation and/or on-site queue capacity; employment of parking attendants; installation of LOT FULL signs with active management by parking attendants; use of valet parking or other space-efficient parking techniques; use of off-site parking facilities or shared parking with nearby uses; use of parking occupancy sensors and signage directing drivers to available spaces; travel demand management strategies such as additional bicycle parking, customer shuttles or delivery services; and/or parking demand management strategies such as parking time limits, paid parking or validated parking. If the Planning Director, or his or her designee, suspects that a recurring queue is present, the Department shall notify the property owner in writing. Upon request, the owner/operator shall hire a qualified transportation consultant to evaluate the conditions at the site for no less than seven days. The consultant shall prepare a monitoring report to be submitted to the Department for review. If the Department determines that a recurring queue does exist, the facility owner/operator shall have 90 days from the date of the written determination to abate the queue.	

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
TR-2: The proposed project would cause a substantial increase in traffic that would substantially affect traffic operations at one of the 13 study intersections – Mariposa Street and Mississippi Street (Intersection 5).	Significant	No feasible mitigation measures were identified.	Significant and Unavoidable
TR-3: The proposed project would not result in a substantial increase in transit demand that could not be accommodated by Muni transit capacity; nor would it affect transit operating conditions within the project vicinity such that adverse impacts to Muni transit service could occur.	Less Than Significant	None required.	Less Than Significant
TR-4: The proposed project would not result in an increase in the amount of overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, nor create potentially hazardous conditions for pedestrians.	Less Than Significant	I-TR-4: Audio and visual alerts would aid pedestrians along the north side of 18th Street and the west side of Arkansas Street to the presence of vehicles in an effort to reduce conflicts.	Less Than Significant
TR-5: The proposed project would not result in potentially hazardous conditions for bicyclists, or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.	Less Than Significant	None required.	Less Than Significant
TR-6: The loading demand of the proposed project would be accommodated within the proposed on-street loading spaces, and would not create potentially hazardous conditions or significant delays for traffic, transit, bicyclists or pedestrians.	Less Than Significant	I-TR-6: Active loading on Mariposa Street for residential uses (such as move-in/move-out) should be restricted to off-peak school hours. Peak pick-up/drop-off times at Live Oak School are generally between 8:15 a.m. and 8:35 a.m. and 2:40 p.m. and 3:35 p.m.	Less Than Significant
TR-7: The proposed project would not result in significant impacts on emergency vehicle access.	Less Than Significant	None required.	Less Than Significant

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
TR-8: The proposed project would not result in construction-related transportation impacts because of the temporary and limited duration of these activities.	Less Than Significant	I-TR-8: The project sponsor should consult with other agencies including Muni/SFMTA and property owners near the project site to assist coordination of construction traffic management strategies as they relate to transit operations and the needs of other users adjacent to the project site. The project sponsor should proactively coordinate with these groups prior to developing the construction management plan to ensure that the plan adequately meets these needs, including designating a construction management contact person, advertise-ment of construction schedule to local businesses and schools, and encouragement of construction workers to carpool or use alternative modes of travel.	Less Than Significant
C-TR-1: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to significant cumulative traffic impacts at 11 of the 13 study intersections.	Less Than Significant	None required.	Less Than Significant
C-TR-2: The proposed project, combined with past, present, and reasonably foreseeable future projects, would contribute considerably to significant cumulative traffic impacts at two of the 13 study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5).	Significant	No feasible mitigation measures were identified.	Significant and Unavoidable
C-TR-3: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative transit impacts.	Less Than Significant	None required.	Less Than Significant
C-TR-4: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative pedestrian impacts.	Less Than Significant	None required.	Less Than Significant

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
C-TR-5: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative bicycle impacts.	Less Than Significant	None required.	Less Than Significant
C-TR-6: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative construction-related transportation impacts.	Less Than Significant	None required.	Less Than Significant
Shadow			
WS-1: The proposed project would not create new shadow that would substantially and adversely affect outdoor recreation facilities or other public areas within the project site vicinity.	Less Than Significant	None required.	Less Than Significant
C-WS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not create new shadow that could adversely affect the use of outdoor recreation facilities or other public areas within the project site vicinity.	Less Than Significant	None required.	Less Than Significant
Recreation			
RE-1: The construction of the open space and recreational facilities proposed as part of the project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR and construction of the project would not otherwise result in the degradation of existing open space resources within the vicinity of the site.	Less Than Significant	None required.	Less Than Significant
RE-2: The proposed project would not increase the use of existing neighborhood parks or other recreational facilities, such that substantial physical deterioration of existing facilities would occur or be accelerated, or such that the construction of new facilities would be required.	Less Than Significant	None required.	Less Than Significant

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
C-RE-1: The proposed project, combined with past, present, and reasonable foreseeable future projects, would not contribute to cumulative effects related to recreational resources.	Less Than Significant	None required.	Less Than Significant
Hazards and Hazardous Materials			
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	None required.	Less Than Significant
HZ-2a: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during demolition of existing site buildings.	Significant	M-HZ-2a: *Eastern Neighborhoods FEIR Mitigation Measure L-1*. The City shall condition future development approvals to require that the subsequent project sponsors ensure that any equipment containing PCBs or DEPH, such as fluorescent light ballasts, are removed and properly disposed of according to applicable federal, State, and local laws prior to the start of renovation, and that any fluorescent light tubes, which could contain mercury, are similarly removed and properly disposed of. Any other hazardous materials identified, either before or during work, shall be abated according to applicable federal, State, and local laws.	Less Than Significant with Mitigation
HZ-2b: The proposed project could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during remedial excavation activities.	Significant	M-HZ-2b: Prior to issuance of grading permits for the remedial action for the project site, the project sponsor shall submit an excavation Remedial Design and Implementation Plan (RDIP) to the San Francisco Department of Building Inspection (DBI), San Francisco Department of Public Health (SFDPH), and the Department of Toxic Substances Control (DTSC), that includes a site-specific health and safety plan, emissions control plan, soil management plan, and an air monitoring plan protective of construction workers, the nearby public, and the environment. In accordance with California Health and Safety Code 25395.96(a)(4), this plan must include a description of measures that will be implemented "to control any endangerment that may occur during the response action at the site."	Less Than Significant with Mitigation

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
HZ-2c: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction.	Significant	M-HZ-2c: Prior to issuance of grading or building permits for construction of project site improvements, the project sponsor shall provide a Vapor Intrusion Mitigation System (VIMS) RDIP to the DBI and SFDPH, reviewed and approved by DTSC, that includes a site-specific health and safety plan, emissions control plan, soil management plan, and an air monitoring plan protective of construction workers, the nearby public, and the environment. In accordance with California Health and Safety Code Section 25395.96(a)(4), this plan must include a description of measures that will be implemented "to control any endangerment that may occur during the response action at the site."	Less Than Significant with Mitigation
HZ-2d: The proposed project would not create a significant hazard to the public or the environment through the release of asbestos during earthmoving activities.	Less Than Significant	None required.	Less Than Significant
HZ-2e: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation.	Significant	M-HZ-2e: Prior to issuance of a certificate of occupancy for the project site buildings, the project sponsor shall provide a Response Plan Certification for the project site, a Covenant to Restrict Use of Property prohibiting groundwater extraction and use, an Operations and Maintenance Agreement, and an Operations and Maintenance Plan. All documents require approval by DTSC prior to submittal to the DBI and SFDPH.	Less Than Significant with Mitigation
HZ-3: The project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Significant	Implement M-HZ-2a, M-HZ-2b, and M-HZ-2c.	Less Than Significant with Mitigation
HZ-4: The proposed project would not create a significant hazard to the public or the environment due to the site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.	Less Than Significant	None required.	Less Than Significant

Table S-1: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the EIR

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
HZ-5: The proposed project would not result in a safety hazard for people residing or working in the project area because it is not located within an airport land use plan or within two miles of a public airport or public use airport.	No Impact	None required.	No Impact
HZ-6: The project would not result in a safety hazard for people residing or working in the project area because it is not located within the vicinity of a private airstrip.	No Impact	None required.	No Impact
HZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant	None required.	Less Than Significant
HZ-8: The project would not expose people or structures to a significant risk of loss, injury or death involving fires.	Less Than Significant	None required.	Less Than Significant
C-HZ-1: The proposed project, in combination with other past, present, or reasonably foreseeable future projects, would not result in a considerable contribution to a significant impact on hazards and hazardous materials.	Less Than Significant	None required.	Less Than Significant

Note: Impacts annotated with a "C" are cumulative impacts; Mitigation Measures are noted with an "M;" Improvement Measures are noted with an "I."

Source: LSA Associates, Inc., 2014.

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Cultural Resources			
Impacts to archaeological resources (*Eastern Neighborhoods FEIR*)	Significant	***Project Mitigation Measure 1: Archeological Testing (Mitigation Measure J-2 from the Eastern Neighborhoods EIR)*** This measure would apply to those properties within the project area for which no archeological assessment report has been prepared or for which the archeological documentation is incomplete or inadequate to serve as an evaluation of potential effects on archeological resources under CEQA (CEQA Guidelines § 15064.5(a)(1)(3) and (c)(1)(2)),4 with the exception of those properties within Archeological Mitigation Zone B as shown in Figure 29 in Chapter IV, for which Mitigation Measure J-3, is applicable). That is, this measure would apply to the entirety of the study area outside of Archeological Mitigation Zones A and B. For projects proposed outside Archeological Mitigation Zones A and B, a Preliminary Archeological Sensitivity Study must be prepared by an archeological consultant with expertise in California prehistoric and urban historical archeology. The Sensitivity Study should contain the following: 1. Determine the historical uses of the project site based on any previous archeological documentation and Sanborn maps; 2. Determine types of archeological resources/properties that may have been located within the project site and whether the archeological resources/property types would potentially be eligible for listing in the CRHR; 3. Determine if 19th or 20th century soils-disturbing activities may adversely affected the identified potential archeological resources; 4. Assess potential project effects in relation to the depth of any identified potential archeological resource;	Less Than Significant

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		5. Conclusion: assessment of whether any CRHP-eligible archeological resources could be adversely affected by the proposed project and recommendation as to appropriate further action. Based on the Sensitivity Study, the Environmental Review Officer (ERO) shall determine if an Archeological Research Design/ Treatment Plan (ARD/TP) shall be required to more definitively identify the potential for CRHP-eligible archeological resources to be present within the project site and determine the appropriate action necessary to reduce the potential effect of the project on archeological resources to a less than significant level. The scope of the ARD/TP shall be determined in consultation with the ERO and consistent with the standards for archeological documentation established by the Office of Historic Preservation for purposes of compliance with CEQA, in Preservation Planning Bulletin No. 5). Based upon the sensitivity study conducted for the project, it was determined that archeological testing would be required for the proposed project. Based on a reasonable presumption that archeological 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. The project sponsor shall retain the services of an archaeological consultant from the rotational Department Qualified Archaeological Consultants List (QACL) maintained by the Planning Department archaeologist. The project sponsor shall contact the Department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological testing program as	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological 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 ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c). *Consultation with Descendant Communities*: On discovery of an archeological site[1] associated with descendant Native Americans or the Overseas Chinese an appropriate representative[2] of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to consult	

[1] The term "archeological site" is intended here to minimally include any archeological deposit, feature, burial, or evidence of burial.

[2] An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America.

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		with ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archaeological Resources Report shall be provided to the representative of the descendant group. *Archeological Testing Program*. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA. At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		A. The proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or B. A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible. *Archeological Monitoring Program*. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented the archeological monitoring program shall minimally include the following provisions: • The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context; • The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		• The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits; • The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis; • If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		*Archeological Data Recovery Program*. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should 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 archeological resources if nondestructive methods are practical. The scope of the ADRP shall include the following elements: • *Field Methods and Procedures*. Descriptions of proposed field strategies, procedures, and operations. • *Cataloguing and Laboratory Analysis*. Description of selected cataloguing system and artifact analysis procedures. • *Discard and Deaccession Policy*. Description of and rationale for field and post-field discard and deaccession policies. • *Interpretive Program*. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		• *Security Measures*. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities. • *Final Report*. Description of proposed report format and distribution of results. • *Curation*. Description 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 of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 1 *Continued*		*Final Archeological Resources Report*. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/ monitoring/ data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Noise			
Impacts associated with construction noise (*Eastern Neighborhoods FEIR*)	Significant	***Project Mitigation Measure 2: Construction Noise (Mitigation Measure F-2 from the Eastern Neighborhoods EIR, as modified)*** Where environmental review of a development project undertaken subsequent to the adoption of the proposed zoning controls determines that construction noise controls are necessary due to the nature of planned construction practices and the sensitivity of proximate uses, the Planning Director shall require that the sponsors of the subsequent development project develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted to the Department of Building Inspection to ensure that maximum feasible noise attenuation will be achieved. These attenuation measures shall include the following control strategies: 1. Conduct noise monitoring at the beginning of major construction phases (e.g., demolition, excavation) to determine the need and the effectiveness of noise-attenuation measures. 2. Erect temporary plywood noise barriers around the construction site where the site adjoins noise-sensitive receivers, such as the Live Oak School. 3. Utilize noise control blankets on the building structure adjacent to Live Oak School – and possibly other noise-sensitive receivers – as the building is erected to reduce noise emission from the site. 4. Post signs on-site pertaining to permitted construction days and hours, complaint procedures, and who to notify in the event of a problem, with telephone numbers listed.	Less Than Significant

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 2 *Continued*		5. Notify the Department of Building Inspection and neighbors in advance of the schedule for each major phase of construction and expected loud activities. 6. When feasible, select "quiet" construction methods and equipment (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds). 7. Require that all construction equipment be in good working order and that mufflers are inspected to be functioning properly. Avoid unnecessary idling of equipment and engines. 8. Mobile noise-generating equipment (e.g., dozers, backhoes, and excavators) shall be required to prepare the entire site. However, the developer will endeavor to avoid placing stationary noise generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas (measured at linear 20 feet) between immediately adjacent neighbors. 9. The project sponsor shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools.	

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Impacts associated with operation-period noise impacts to sensitive uses (*Eastern Neighborhoods FEIR*)	Significant	***Project Mitigation Measure 3: Siting of Noise-Sensitive Uses (Mitigation Measure F-4 from the Eastern Neighborhoods EIR)*** To reduce potential conflicts between existing noise-generating uses and new sensitive receptors, for new development including noise-sensitive uses, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within 900 feet of, and that have a direct line-of-sight to, the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes), prior to the first project approval action. The analysis shall be prepared by persons qualified in acoustical analysis and/or engineering and shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained. Pursuant to this measure, Charles M. Salter Associates conducted an Environmental Noise Assessment that included the continuous collection of noise data for 48 hours on weekdays at four locations around the project site. Noise levels from 64 to 74 dB Ldn were measured around the project site. Noise-generating uses within the vicinity of the site include Anchor Brewing Company, International Studies Academy, Jackson Playground, Live Oak	Less Than Significant

Table S-2: Summary of Impacts, Mitigation Measures and Improvement Measures Identified in the CPE Checklist

Environmental Impacts	Level of Significance Without Mitigation	Mitigation/Improvement Measures	Level of Significance With Mitigation
Project Mitigation Measure 3 *Continued*		School, and various restaurants along 18th Street. To meet the 45 dB Ldn criterion called out in the building code (Title 24), the proposed project would be required to install windows with noise reduction ratings of up to STC 38. The windows could be operable, but would need to be in the closed position to meet the indoor noise standard. Therefore, these units would require a ventilation or air-conditioning system that does not compromise the sound attenuation of the exterior façade However, units facing the interior courtyards are exposed to noise levels no greater than 60 dB Ldn and windows in these units do not need to be sound-rated and these units are not subject to the ventilation requirement.	
Impacts associated with operation-period noise impacts to open space uses (*Eastern Neighborhoods FEIR*)	Significant	***Project Mitigation Measure 4: Open Space in Noisy Environments (Mitigation Measure F-6 from the Eastern Neighborhoods EIR)*** To minimize effects on development in noisy areas, for new development including noise sensitive uses, the Planning Department shall, through its building permit review process, in conjunction with noise analysis required pursuant to Mitigation Measure F-4, require that open space required under the Planning Code for such uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.	Less Than Significant

Source: LSA Associates, Inc., 2014.

SUMMARY OF ALTERNATIVES

The following three alternatives to the projects are considered in this EIR, and are further detailed in Chapter VI, Alternatives:

- The **No Project Alternative**, under which the project site would not be redeveloped with the proposed project and the project site would remain generally in its existing condition.
- The **Reduced Density Alternative**, under which the project site would be developed with 114 residential units, 3,510 square feet of commercial space, 106 off-street parking spaces within a partially below-grade garage, and associated improvements. The total building area would be 145,070 gsf and building heights would be two to three stories and would not exceed 30 feet.
- The **Reduced Height on Mariposa Street Alternative**, under which the project site would be developed with 289 residential units, 14,000 square feet of commercial and light industrial space, 258 parking spaces within a partially below-grade garage, and associated improvements. The total building area would be 410,616 gsf. Buildings would range from two to four stories in height, would not exceed 40 feet, and would be stepped back from the Mariposa Street frontage.

A comparison of the development program identified for the proposed project and project alternatives is included in **Table S-3**. A comparison of the impacts identified for the proposed project and the project alternatives is provided in **Table S-4**.

Table S-3: Summary of Project Alternatives and Proposed Project Development

Use	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
Residential Units				
Studio	76	0	27	68
1 Bedroom	116	0	41	105
2 Bedroom	118	0	42	107
3 Bedroom	10	0	4	9
Total Units	**320**	**0**	**114**	**289**
Commercial/Industrial Use				
Retail	2,500	6,126	880	2,250
Restaurant	7,500	0	2,630	6,750
Light Industrial (PDR)	0	68,570	0	5,000
Total Commercial/Industrial Space (gsf)	**10,000**	**74,696**	**3,510**	**14,000**
Total Building Area	**427,570**	**74,696**	**145,070**	**410,616**
Building Heights (ft)	31-40	10-20	20-30	20-40
Open Space (gsf)	39,195	0	73,095	38,195
Parking				
Off-Street Vehicle Spaces	277[a]	115	106	254
On-Street Vehicle Spaces	4	–	5[b]	4
Total Vehicle Spaces	**281**	**115**	**111**	**258**
Class I Bicycle Spaces	441	0	104	149
Class II Bicycle Spaces	28	0	12	26
On-Street Loading Spaces	3	–	2	3

[a] As described in Chapter II, Project Description, the proposed project would provide between 265 and 275 parking spaces; however, to be consistent with the analysis provided in the Transportation Impact Study prepared for the project and the analysis provided in Chapter IV.A, Transportation and Circulation and for comparison purposes to project alternatives, it is assumed that the proposed project would provide 277 spaces. In addition, off-street parking garage spaces may include between two and six car share spaces.

[b] On-street parking spaces would increase compared to the proposed project due to the removal of existing on-street curb cuts.

Source: Related/Mariposa Development Co., LLC, 2014.

Table S-4: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
Ability to Meet Project Sponsor's Objectives				
	Yes	No	Some	Some
Transportation and Circulation				
TR-1: The proposed project would not cause a substantial increase in traffic that would adversely affect traffic operations at 12 of the 13 study intersections or otherwise conflict with traffic circulation in the vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-2: The proposed project would cause a substantial increase in traffic that would substantially affect traffic operations at one of the 13 study intersections – Mariposa Street and Mississippi Street (Intersection 5). (SU)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (SU)
TR-3: The proposed project would not result in a substantial increase in transit demand that could not be accommodated by Muni transit capacity; nor would it affect transit operating conditions within the project vicinity such that adverse impacts to Muni transit service could occur. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-4: The proposed project would not result in an increase in the amount of overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, nor create potentially hazardous conditions for pedestrians. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-5: The proposed project would not result in potentially hazardous conditions for bicyclists, or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-6: The loading demand of the proposed project would be accommodated within the proposed on-street loading spaces, and would not create potentially hazardous conditions or significant delays for traffic, transit, bicyclists or pedestrians. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-7: The proposed project would not result in significant impacts on emergency vehicle access. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
TR-8: The proposed project would not result in construction-related transportation impacts because of the temporary and limited duration of these activities. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-1: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to significant cumulative traffic impacts at 11 of the 13 study intersections. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)

Table S-4: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
C-TR-2: The proposed project, combined with past, present, and reasonably foreseeable future projects, would contribute considerably to significant cumulative traffic impacts at two of the 13 study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5). (SU)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (SU)
C-TR-3: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative transit impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-4: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative pedestrian impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-5: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative bicycle impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-6: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative construction-related transportation impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
Shadow				
WS-1: The proposed project would not create new shadow that would substantially and adversely affect outdoor recreation facilities or other public areas within the project site vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
C-WS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not create new shadow that could adversely affect the use of outdoor recreation facilities or other public areas within the project site vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
Recreation				
RE-1: The construction of the open space and recreational facilities proposed as part of the project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR and construction of the project would not otherwise result in the degradation of existing open space resources within the vicinity of the site. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)

Table S-4: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
RE-2: The proposed project would not increase the use of existing neighborhood parks or other recreational facilities, such that substantial physical deterioration of existing facilities would occur or be accelerated, or such that the construction of new facilities would be required. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
C-RE-1: The proposed project, combined with past, present, and reasonable foreseeable future projects, would not contribute to cumulative effects related to recreational resources. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
Hazards and Hazardous Materials				
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)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-2a: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during demolition of existing site buildings. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2b: The proposed project could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during remedial excavation activities. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2c: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2d: The proposed project would not create a significant hazard to the public or the environment through the release of asbestos during earthmoving activities. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-2e: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-3: The project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)

Table S-4: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
HZ-4: The proposed project would not create a significant hazard to the public or the environment due to the site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-5: The proposed project would not result in a safety hazard for people residing or working in the project area because it is not located within an airport land use plan or within two miles of a public airport or public use airport. (NI)		Not applicable	Same as the proposed project (NI)	Same as the proposed project (NI)
HZ-6: The project would not result in a safety hazard for people residing or working in the project area because it is not located within the vicinity of a private airstrip. (NI)		Not applicable	Same as the proposed project (NI)	Same as the proposed project (NI)
HZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-8: The project would not expose people or structures to a significant risk of loss, injury or death involving fires. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
C-HZ-1: The proposed project, in combination with other past, present, or reasonably foreseeable future projects, would not result in a considerable contribution to a significant impact on hazards and hazardous materials. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)

Note: NI = No Impact; LTS = Less Than Significant Impact; S = Significant; LTSM = Less Than Significant with Mitigation; SU = Significant and Unavoidable; SUM = Significant and Unavoidable Impact with Mitigation; NA = Not Applicable

Source: LSA Associates, Inc., 2014

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Pursuant to CEQA Guidelines Section 15126(e)(2), an EIR is required to identify the environmentally superior alternative from among the alternatives evaluated if the proposed project have significant impacts that cannot be mitigated to a less-than-significant level. The environmentally superior alternative is the alternative that best avoids or lessens any significant effects of the proposed project, even of the alternative would impede to some degree the attainment of the project objectives.

The proposed project would result in significant unavoidable effects related to the contribution to traffic at area intersections. The No Project Alternative would eliminate the significant and unavoidable traffic impacts. The No Project Alternative, which would have no development on the site, would also eliminate the less-than-significant impacts associated with the proposed project's larger and taller buildings on the site (e.g., impacts related to shadow), along with less-than-significant impacts related to additional human activity on the site and on the local transportation network (e.g., recreation and transit, pedestrian, bicycle, and loading impacts). Mitigation measures to reduce hazardous materials-related impacts would also not be required, although the site would not be remediated and toxic soils and groundwater contamination would remain.

CEQA requires selection of the "environmentally superior alternative other than the no project alternative" from among the proposed project and the other alternatives evaluated. The Reduced Density Alternative is identified as the environmentally superior alternative because it would to some extent meet the project sponsor's basic objectives, while avoiding all of the traffic-related significant unavoidable impacts of the proposed project. This impact reduction would be achieved because this alternative would have fewer residential units and commercial space at the site compared to the proposed project, and therefore have associated reductions in vehicle traffic compared to the proposed project. In addition, the Reduced Density Alternative would avoid or further reduce the less-than-significant and significant but mitigable impacts for other environmental topics, including those related to the transit/pedestrian/bicycle environment, shadow, and recreation due to the decrease in the residential and commercial uses on the site and reduced building heights.

AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

Publication of the NOP/CPE Checklist initiated a 30-day public review and comment period that began on May 14, 2014 and ended on June 13, 2014. A public scoping meeting was also held on June 4, 2014. During the review and comment period, a total of 121 comments, including letters, emails, and comment cards submitted to the Planning Department or provided orally at the public scoping session were provided by interested parties. The comment letters, emails, and comment cards received in response to the NOP/CPE Checklist and a transcript of the comments received at the June 4, 2014, public scoping meeting are available for review as part of Case File No. 2012.1398E. The Planning Department has considered the comments made by the public in preparation of the Draft EIR for the proposed project. Comments on the NOP/CPE Checklist that relate to environmental issues are summarized below and are addressed in the NOP/CPE Checklist or in this EIR, as noted.

On the basis of public comments submitted after publication of the NOP, potential areas of controversy and unresolved issues for the proposed project include:

- **Proposed Project:** Location of proposed buildings in relation to adjacent uses and lack of screening or barriers between uses; Planning Code exceptions sought by the project sponsor; building heights; need for increased setbacks; and location and use of public easements. These issues are addressed on pages 13 through 56 in Chapter II, Project Description and on pages 277 through 306 in Chapter V, Other CEQA Issues.
- **Eastern Neighborhoods EIR and Cumulative Impacts:** Use of the *Eastern Neighborhoods FEIR* for use of project-level and cumulative analyses of the proposed project; adequacy of *Eastern Neighborhoods FEIR* and if growth within the Eastern Neighborhoods area plan has exceeded what was projected in the *Eastern Neighborhoods FEIR*; compliance with environmental regulations and other laws enacted since certification of the *Eastern Neighborhoods FEIR;* the use of *Eastern Neighborhoods FEIR*, adopted in 2008, making the analysis outdated; consideration of reasonably foreseeable projects and other growth within the vicinity of the site related to cumulative assumptions; and lack of funding for needed transit and infrastructure improvements to serve cumulative development. These issues are addressed

pages 86 through 87 in Chapter IV, Environmental Setting and Impacts and pages 284 through 285 in Chapter V, Other CEQA Issues.

- **Land Use and Planning:** Compatibility of proposed project uses and density with surrounding development; existing zoning for the project site; small unit sizes that would not accommodate families; and compliance with Citywide and Showplace Square/Potrero Area Plan objectives and policies. These issues are addressed on pages 33 through 35 of the CPE Checklist, on pages 57 through 80 in Chapter III, Plans and Policies, and on pages 286 through 287 in Chapter V, Other CEQA Issues.
- **Aesthetics:** Consideration of impacts to visual resources, including loss of scenic and private views and project height, scale, and architectural compatibility with the existing visual character of the site's surroundings. These issues are addressed on pages S-2 through S-3 in Summary, pages 43 through 52 in Chapter II, Project Description, and pages 287 through 289 in Chapter V, Other CEQA Issues.
- **Population, Housing, and Employment:** Increase in population beyond anticipated growth projection in the *Eastern Neighborhoods FEIR*; loss of jobs and PDR businesses; and provision of affordable housing. This issue topic is addressed on page 37 of the CPE Checklist and is further addressed on pages 86 through 87 in Chapter IV, Environmental Setting and Impacts, and pages 289 through 290 in Chapter V, Other CEQA Issues.
- **Transportation, Circulation, Transit, and Parking:** Impacts related to increased traffic congestion, increased demand for transit services and capacity of existing services; pedestrian and bicycle safety; conflicts with and provision of loading areas; emergency vehicle access; construction-related congestion and circulation conflicts; provision of adequate parking to meet project demand; and evaluation of cumulative impacts. These issues are addressed on pages 89 through 180 in Section IV.A, Transportation and Circulation and pages 290 through 295 in Chapter V, Other CEQA Issues.
- **Noise:** Construction period impacts to sensitive receptors, timing of construction activities; operation period impacts related to proximity of residential and school uses; and increases

in street level noise. These issues are addressed on pages 42 through 46 of the CPE Checklist and on pages 295 through 297 in Chapter V, Other CEQA Issues.

- **Air Quality:** Construction and operation period impacts to air quality and associated health risks for sensitive receptors; and objectionable odors. These issues are addressed on pages 47 through 57 of the CPE Checklist and on pages 297 through 299 in Chapter V, Other CEQA Issues.
- **Shadow:** Impact of project-related shadows on nearby uses including Jackson Playground and Live Oak School classrooms and play areas. These issues are addressed on pages 181 through 216 in Section IV.B, Shadow and pages 299 through 300 in Chapter V, Other CEQA Issues.
- **Solar Access:** Reduced access to sunlight for nearby uses and existing solar panels. These issues are addressed on pages 299 through 300 in Chapter V, Other CEQA Issues.
- **Wind:** Potential for project buildings to create wind impacts. These issues are addressed on page 59 of the CPE Checklist.
- **Recreation and Open Space:** Provision of public and private open space and recreational amenities on the project site; location of mid-block pedestrian pathways; maintenance and use issues associated with Jackson Playground; physical deterioration of nearby open space areas; and lack of open space and recreational opportunities in the area. These issues are addressed on pages 60 through 61 of the CPE Checklist, pages 217 through 234 in Section IV.C, Recreation and on pages 300 through 301 in Chapter V, Other CEQA Issues.
- **Utilities and Infrastructure:** Proximity of natural gas pipelines. This issue is addressed on page 301 in Chapter V, Other CEQA Issues.
- **Biological Resources:** Removal of street trees and exposure of surrounding vegetation and animals to hazardous materials. These issues are addressed on pages 64 through 66 of the CPE Checklist pages 235 through 276 in Section IV.D, Hazards and Hazardous Materials and on page 302 in Chapter V, Other CEQA Issues.

- **Hydrology and Water Quality:** Flooding. This issue is addressed on page 72 of the CPE Checklist.
- **Hazards and Hazardous Materials:** Construction and operation period emissions of hazardous materials into the environment affecting sensitive receptors and other nearby uses; health effects of toxic materials exposure; and adequacy of existing hazardous materials regulations. These issues are addressed on pages 235 through 276 in Section IV.D, Hazards and Hazardous Materials and pages 302 through 304 in Chapter V, Other CEQA Issues.
- **Alternatives.** Increased setbacks for Live Oak school, reduced building heights, reduced building massing, lower density, larger units, and development of different uses. These issues are addressed on pages 307 through 352 in Chapter VI, Alternatives and on page 305 in Chapter V, Other CEQA Issues.

The above issues are addressed and analyzed throughout this EIR and the CPE Checklist. Chapter V, Other CEQA Issues provides a summary of the comments received during the NOP scoping period and notes where each of these issues is specifically addressed in this document, or provides a response to the comment received.

The Planning Department has considered the comments made by the public in preparation of the Draft EIR for the proposed project. This Draft EIR will be circulated for public review and comment. During this period, written comments concerning the accuracy and adequacy of the Draft EIR will be accepted and a public hearing will be held before the Planning Commission to receive oral comments. After the close of the public comment period, written responses will be prepared to address substantive comments received on the environmental analysis, and any revisions to the Draft EIR will be identified. The Comments and Responses document and the Draft EIR together will constitute the Final EIR. The Final EIR will be presented to the Planning Commission, at an advertised public hearing, for certification.

A Mitigation Monitoring and Reporting Program (MMRP) must be adopted by the Planning Commission as part of the adoption of the CEQA findings and project approvals to the extent that mitigation measures are made part of the proposed project. The MMRP identifies the measures included in the proposed project or imposed by the decision-makers as conditions of approval, the entities responsible for carrying out the measures, and the timing of implementation. If significant unavoidable impacts would remain after all feasible mitigation measures are implemented, the approving body, if it elects to approve the proposed project, must adopt a statement of overriding considerations explaining how the benefits of the proposed project would outweigh the significant impacts.

I. INTRODUCTION

PROJECT SUMMARY

The project sponsor, Related/Mariposa Development Co., LLC, proposes to develop residential and ground-floor commercial uses on an approximately 3.36-acre project site located at 1601-1677 Mariposa Street and 485-497 Carolina Street in the Potrero Hill area of San Francisco. The project site is located on portions of two blocks bounded by Mariposa Street to the north, Arkansas Street to the east, 18th Street to the south, and Carolina Street to the west (Assessor's Block 4005/Lots 001B and 004 and Block 4006/Lots 006, 010, 019, and 020) in the Showplace Square/Potrero Subarea of the *Eastern Neighborhoods Rezoning and Area Plan* (*Eastern Neighborhoods Plan*). The project would demolish three existing one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construct two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level below-grade parking garage under the East Building would contain between 265 and 275 parking spaces and would be accessible from Arkansas Street (upper garage level) and 18th Street (lower garage level). The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet. A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site. In addition, the project includes excavation and remediation of hazardous materials in site soils and treatment of groundwater, pursuant to an approved Response Plan and with oversight from the Department of Toxic Substances Control (DTSC). A Vapor Intrusion Mitigation System would also be installed and a Land Use Covenant would be established to protect future site users from residual contamination. A detailed description of the proposed project is provided in Chapter II, Project Description.

PURPOSE OF THE EIR

This Environmental Impact Report (EIR) analyzes the physical environmental effects associated with implementation of the proposed project. This EIR has been prepared by the San Francisco Planning Department (Planning Department) in the City and County of San Francisco, the Lead Agency for the proposed project, in compliance with the provisions of the California Environmental Quality Act (CEQA) and the *CEQA Guidelines* (California Public Resources Code Section 21000 et seq., and California Code of Regulations Title 14, Section 15000 et seq., "CEQA Guidelines"), and Chapter 31 of the San Francisco Administrative Code. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project.

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

This EIR is intended as an informational document to: evaluate the proposed project and the potential for significant impacts on the environment; examine methods of reducing adverse environmental impacts; identify any significant and unavoidable adverse impacts that cannot be mitigated; and identify reasonable and feasible alternatives to the proposed project that would eliminate any significant adverse environmental effects or reduce the impacts to a less-than-significant level. The Lead Agency is required to consider the information in the EIR, along with any other relevant information, in making its decisions on the proposed project. This analysis, in and of itself, does not determine whether a project will be approved, but aids the planning and decision-making process by disclosing the potential for significant and adverse impacts.

In conformance with CEQA and the *CEQA Guidelines*, this EIR provides objective information addressing the environmental consequences of the project and identifies possible means of reducing or avoiding significant impacts, either through mitigation measures or feasible project alternatives.

The City and County of San Francisco must certify the Final EIR prior to acting on the project approval application for the proposed 1601 Mariposa Street Mixed Use Project. Under *CEQA Guidelines* Section 15161, this is a project-level EIR. This most common type of EIR examines the environmental impacts of a project and focuses primarily on changes in the environment that would result from project development. This type of EIR examines all phases of a project including planning, construction, and operation.

The *CEQA Guidelines* help define the role and standards of this EIR, as follows:

- **Information Document.** An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a project, identify possible ways to minimize significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency (*CEQA Guidelines* Section 15121(a)).
- **Degree of Specificity.** The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR. An EIR on a development project will necessarily be more detailed in its discussion of specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy (*CEQA Guidelines* Section 15146(a)).
- **Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information, which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but

for adequacy, completeness, and a good faith effort at full disclosure (*CEQA Guidelines* Section 15151).

Section 15382 of the *CEQA Guidelines* defines a significant effect on the environment as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project…" Therefore, in identifying the significant impacts of the project, this EIR focuses on the substantial physical effects and mitigation measures to avoid, reduce, or otherwise alleviate those effects.

ORGANIZATION OF THE DRAFT EIR

This Draft EIR has been organized as follows:

- *Summary:* This chapter summarizes the EIR by providing a concise overview of the project; the environmental impacts that would result from the project; mitigation measures identified to reduce or eliminate these impacts; and project alternatives.
- *Chapter I – Introduction:* This chapter includes a summary of the proposed project, a discussion of the purpose of the EIR, a list of the EIR organization, and a discussion of the environmental review process, including a list of areas of controversy to be resolved.
- *Chapter II – Project Description:* This chapter discusses the background and objectives of the proposed project; provides background data on the project location; describes the operational and physical characteristics of the project; and identifies project approvals.
- *Chapter III – Plans and Policies:* This chapter provides a summary of the plans, policies, and regulations of the City and County of San Francisco that are applicable to the proposed project.
- *Chapter IV – Environmental Setting and Impacts:* This chapter describes the project's existing setting, environmental impacts, cumulative impacts, and mitigation measures. Each environmental topic is discussed in a separate section within this chapter, as follows:

A. Transportation and Circulation

B. Shadow

C. Recreation

D. Hazards and Hazardous Materials

- *Chapter V – Other CEQA Issues:* This chapter describes growth inducement that would result from the proposed project; summarizes the significant environmental effects that cannot be mitigated to a less-than-significant level; describes significant irreversible changes that would result if the project is implemented; and includes a summary of the comments received on the scope of the EIR and responses to those comments.
- *Chapter VI – Alternatives:* This chapter presents alternatives to the proposed project, including the No Project Alternative; the Reduced Density Alternative; and the Reduced Height on Mariposa Street Alternative, as well as other alternatives considered but rejected as infeasible. In addition, the environmentally superior alternative is identified.
- *Chapter VII – Report Preparers:* This chapter identifies preparers of the EIR.
- *Appendices:* Appendices include the Notice of Preparation and CPE Checklist (Appendix A).

ENVIRONMENTAL REVIEW PROCESS

The environmental review process for the proposed project is discussed below. As previously noted, the project site is located within the Showplace Square/Potrero Subarea of the *Eastern Neighborhoods Plan*. The environmental review process for a project occurring within this Plan area is described in this section, followed by the specific environmental review process for the proposed project.

Background

After several years of analysis, community outreach, and public review, the *Eastern Neighborhoods Plan* was adopted in December 2008. The *Eastern Neighborhoods Plan* was adopted in part to support housing development in some areas previously zoned to allow industrial uses, while preserving an

adequate supply of space for existing and future production, distribution, and repair (PDR) employment and businesses. The *Eastern Neighborhoods Plan* also included changes to existing height and bulk districts in some areas, although these changes did not apply to the project site.

During the *Eastern Neighborhoods Plan* adoption phase, the Planning Commission held public hearings to consider the various aspects of the proposed area plans, and Planning Code and Zoning Map amendments. On August 7, 2008, the Planning Commission certified the *Eastern Neighborhoods Rezoning and Area Plan Final EIR* (*Eastern Neighborhoods FEIR*) by Motion 17659[1] and adopted the Preferred Project for final recommendation to the Board of Supervisors.[2]

In December 2008, after further public hearings, the Board of Supervisors approved and the Mayor signed the Eastern Neighborhoods rezoning and Planning Code amendments. New zoning districts include districts that would permit PDR uses in combination with commercial uses; districts mixing residential and commercial uses and residential and PDR uses; and new residential-only districts. The districts replaced existing industrial, commercial, residential single-use, and mixed-use districts.

The *Eastern Neighborhoods FEIR* is a comprehensive programmatic document that presents an analysis of the environmental effects of implementation of the *Eastern Neighborhoods Plan*, as well as the potential impacts under several proposed alternative scenarios through the year 2025. The *Eastern Neighborhoods Draft EIR* evaluated three rezoning alternatives, two community-proposed alternatives which focused largely on the Mission District, and a "No Project" alternative. The alternative selected, or the Preferred Project, represents a combination of Options B and C. The Planning Commission

[1] San Francisco Planning Department, *Eastern Neighborhoods Rezoning and Area Plan Final Environmental Impact Report*, Planning Department Case No. 2004.0160E, certified August 7, 2008. The FEIR is on file for public review at the Planning Department, 1650 Mission Street Suite 400 as part of Case No. 2004.0160E, or at www.sfgov.org/site/planning_index.asp?id=67762.

[2] San Francisco Planning Commission Motion 17659, August 7, 2008. This document is available online at www.sfgov.org/site/uploadedfiles/planning/Citywide/Eastern_Neighborhoods/Draft_Resolution_Public%20Parcels_FINAL.pdf.

adopted the Preferred Project after fully considering the environmental effects of the Preferred Project and the various scenarios discussed in the FEIR.

A major issue in the *Eastern Neighborhoods Plan* rezoning process was the degree to which existing industrially-zoned land would be rezoned to primarily residential and mixed-use districts, thus reducing the availability of land traditionally used for PDR employment and businesses. Among other topics, the *Eastern Neighborhoods FEIR* assesses the significance of the cumulative land use effects of the rezoning by analyzing its effects on the City's ability to meet its future PDR space needs as well as its ability to meet its housing needs as expressed in the City's General Plan.

As a result of the *Eastern Neighborhoods Plan*, the project site has been rezoned to Urban Mixed Use (UMU) from Light Industrial (M-1). The UMU District is intended to promote a vibrant mix of uses while maintaining the characteristics of this formerly industrially-zoned area. It is also intended to serve as a buffer between residential districts and PDR districts in the Eastern Neighborhoods. The proposed project and its relation to PDR land supply and cumulative land use effects is discussed in Section 1, Land Use and Planning, in the attached Community Plan Exemption checklist (provided in Appendix A). The project site is located within the Showplace Square/Potrero Subarea of the Eastern Neighborhoods, the UMU zoning district, and the 40-X height and bulk district. The project site is designated and envisioned as a site with buildings up to 40 feet in height and containing a mix of uses.

The *Eastern Neighborhoods FEIR* identified the following significant unavoidable impacts associated with implementation of the *Eastern Neighborhoods Plan*:

- Cumulative land use impacts related to the loss of PDR space;
- Transit impacts to seven MUNI service lines;
- Transportation impacts to nine intersections, including the 13th/Bryant, South Van Ness/Howard/13th, Seventh/Brannan, Seventh/Townsend, Eight/Brannan, Eight/Bryant, Eight/Harrison, Third/Cesar Chavez, and Cesar Chavez/Evans intersections;

- Impacts to known or potential historical architectural resources; and
- Impacts related to shading of parks and open spaces under the jurisdiction of the San Francisco Recreation and Parks Department.

These impacts were addressed in a Statement of Overriding Considerations with CEQA Findings and adopted as part of the Eastern Neighborhoods Rezoning and Area Plans approval on January 19, 2009. All other impacts were identified as less than significant or less than significant with implementation of mitigation measures recommended in the *Eastern Neighborhoods FEIR*.

Proposed Project

The project sponsor, Related/Mariposa Development Co., LLC, filed an initial application on February 28, 2013, for the environmental evaluation of the proposed project. As previously discussed, the project site is located within the Showplace Square/Potrero Subarea of the *Eastern Neighborhoods Plan,* for which a comprehensive program-level EIR was prepared (*Eastern Neighborhoods FEIR*). Individual projects that occur under the Plan are required to undergo project-level environmental evaluation to determine if they would result in further impacts specific to the development proposal, the site and to assess whether additional environmental review is required. The San Francisco Planning Department, serving as Lead Agency responsible for administering the environmental review for the proposed project, prepared a Community Plan Exemption (CPE) Checklist and found that preparation of an EIR was required. The CPE Checklist identified the environmental issues that would be addressed in the EIR and the environmental issues that could be excluded from further detailed analysis.

CEQA requires that, before a decision can be made to approve a project that could result in adverse and unmitigable physical effects, an EIR must be prepared that fully describes the environmental effects of the project. The EIR is a public information document for use by governmental agencies and the public to identify and evaluate potential environmental impacts of a project, to recommend mitigation measures to lessen or eliminate significant adverse impacts, and to examine feasible

alternatives to the project. The information contained in the EIR must be reviewed and considered by the Planning Commission and other approving bodies prior to a decision to approve, disapprove, or modify the project.

CEQA requires that agencies shall neither approve nor implement a project unless the project's significant environmental effects have been reduced to a less-than-significant level, essentially "eliminating, avoiding, or substantially lessening" the potentially significant impacts, except when certain findings are made. If an agency approves a project that would result in the occurrence of significant adverse impacts that cannot feasibly be mitigated to less-than-significant levels, the agency must state the reasons for its action in writing, demonstrate that mitigation is infeasible based on the EIR or other information in the record, and adopt a Statement of Overriding Considerations.

The Planning Department prepared the CPE Checklist and published a Notice of Preparation (NOP) of an EIR for the 1601 Mariposa Street EIR on May 14, 2014, announcing its intent to prepare and distribute a focused EIR (the NOP and CPE Checklist is Appendix A to this EIR). The CPE Checklist found that the proposed project would be generally consistent with and was encompassed within the analysis in the *Eastern Neighborhoods FEIR*. The CPE Checklist also determined that the *Eastern Neighborhoods FEIR* adequately anticipated and described the majority of the impacts of the proposed project, and identified the mitigation measures from the *Eastern Neighborhoods FEIR* applicable to the project. The proposed project is also generally consistent with the zoning controls and the provisions of the Planning Code applicable to the project site and is in conformance with the height, use, and density for the site described in the *Eastern Neighborhoods FEIR*.

The CPE Checklist found that the following potential individual and cumulative environmental effects of the project, as fully analyzed in the CPE Checklist, were adequately covered in the *Eastern Neighborhoods FEIR*: land use and land use planning; population and housing; cultural and paleontological resources; noise; air quality; greenhouse gas emissions; wind; recreation, utilities and services systems; public services; biological resources; geology and soils; hydrology and water

quality; mineral and energy resources; and agriculture and forest resources. As such, these issue topics, other than recreation, are not further addressed in this EIR.

The CPE Checklist determined that the proposed project could result in potentially significant environmental impacts, and that an EIR is required under CEQA to analyze the following environmental topics: transportation and circulation; hazards and hazardous materials; and shadow. Although the CPE Checklist determined that impacts related to recreation would be less than significant, this topic is also further evaluated in this EIR.

As noted in Summary, the proposed project is subject to Section 21099 to the California Public Resources Code, which eliminates consideration of impacts related to the topics of aesthetics and parking in determining the significance of physical environmental effects under CEQA for projects meeting certain criteria. Accordingly, this EIR does not contain a separate discussion of impacts related to the topic of aesthetics. The EIR nonetheless provides an overview of the existing and proposed visual character of the site and surroundings for informational purposes as part of Chapter II, Project Description. Furthermore, this EIR discusses parking in Chapter IV.A, Transportation and Circulation, for informational purposes only. (See pages 119 through 120 and pages 165 through 168 for further discussion of Public Resources Code Section 21099.) Overall, the information regarding aesthetics (visual character) and parking provided here does not relate to the impact significance determinations in the EIR.

AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

Publication of the NOP and CPE Checklist initiated a 30-day public review and comment period that began on May 14, 2014 and ended on June 13, 2014. A public scoping meeting was also held on June 4, 2014. During the review and comment period, a total of 121 comments, including letters, emails, and comment cards submitted to the Planning Department or provided orally at the public scoping session were provided by interested parties. The comment letters, emails, and comment cards received in response to the NOP and CPE Checklist and a transcript of the comments received at the June 4, 2014, public scoping meeting are available for review as part of Case File No. 2012.1398E. The

Planning Department has considered the comments made by the public in preparation of the Draft EIR for the proposed project. Comments on the NOP and CPE Checklist that relate to environmental issues are addressed and analyzed throughout this EIR and the CPE Checklist. Chapter V, Other CEQA Issues, pages 280 through 305, provides a summary of the comments received during the NOP scoping period and notes where each of these issues is specifically addressed in this document, or provides a response to the comments received.

PUBLIC PARTICIPATION

The *CEQA Guidelines* and Chapter 31 of the San Francisco Municipal Code encourage public participation in the planning and environmental review processes. The City will provide opportunities for the public to present comments and concerns regarding the CEQA and planning processes. These opportunities will occur during the Draft EIR public review and comment period and public hearings before the San Francisco Planning Commission.

The Draft EIR is available for public review and comment on the Planning Department's Negative Declarations and EIRs web page (http://tinyurl.com/sfceqadocs). CDs and paper copies are also available at the Planning Information Center (PIC) counter on the first floor of 1660 Mission Street, San Francisco. Referenced materials are available for review by appointment at the Planning Department's office on the fourth floor of 1650 Mission Street (call (415) 575-9028). Documents referenced in this EIR are available for review at the Planning Department, 1650 Mission Street, Suite 400, in case File No. 2012.1398E.

There will be a public hearing before the Planning Commission during the 60-day public review and comment period for this EIR to solicit public comment on the adequacy and accuracy of information presented in this Draft EIR. The comment period for this Draft EIR will be 60 days due to proximity of the publication date to the winter holidays. The public comment period for this EIR is from December 17, 2014 to February 17, 2015. The public hearing on this Draft EIR has been scheduled before the Planning Commission for January 22, 2015 in Room 400, City Hall, 1 Dr. Carlton B. Goodlett Place, beginning at 12:00 p.m. or later. Please call (415) 558-6422 the week of the hearing for

a recorded message giving a more specific time. In addition, members of the public are invited to submit written comments on the adequacy of the document, that is, whether this Draft EIR identifies and analyzes the possible environmental impacts and identifies appropriate mitigation measures. Comments are most helpful when they suggest specific alternatives and/or additional measures that would better mitigate significant environmental effects.

Written comments should be submitted to:

Sarah B. Jones, Environmental Review Officer
Re: 1601 Mariposa Mixed Use Project Draft EIR
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Comments may also be submitted by email to sarah.b.jones@sfgov.org. Comments must be received by 5:00 p.m., February 17, 2015.

Commenters are not required to provide personal identifying information. All written and 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 Planning Department's website or in other public documents.

II. PROJECT DESCRIPTION

PROJECT OVERVIEW

The proposed 1601 Mariposa Street Mixed Use Project (project) would develop residential and ground-floor commercial uses on a 3.36-acre project site on portions of two blocks (Assessor's Block 4005 and 4006) located in the Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan. The project would demolish three existing one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construct two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level below-grade parking garage under the East Building would contain between 265 and 275 parking spaces and would be accessible from Arkansas Street (upper garage level) and 18th Street (lower garage level). The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet. A total of approximately 39,195 gross square feet (gsf) of publicly accessible and private open space would be developed throughout the project site. A complete description of the proposed project, including a list of project objectives, a detailed description of the proposed project's regional and local context, planning process and background, as well as a discussion of requested project approvals is included in this chapter.

PROJECT SPONSOR'S OBJECTIVES

According to the project sponsor, the proposed project's key objectives are to:

1. Redevelop a large underutilized site with a range of dwelling units, ground floor commercial and retail uses, and open space amenities.
2. Create a mixed-use project consistent with the Urban Mixed Use (UMU) zoning and the objectives and policies of the Showplace Square/Potrero Area Plan.

3. Build a substantial number of residential units on the site to contribute to the City's General Plan Housing Element goals, ABAG's Regional Housing Needs Allocation for the City and County of San Francisco, and to respond to the City's current shortage of housing.
4. Provide affordable dwelling units on-site, pursuant to the City's Inclusionary Affordable Housing Program.
5. Provide neighborhood services in the immediate vicinity for future residents and adjacent neighbors.
6. Create a development that is generally consistent with the height and bulk limits and other development controls recently established for the site in the Eastern Neighborhoods rezoning.
7. Incorporate private open space for the use by project residents and publically accessible open space maintained by the project sponsor in an amount equal to or greater than required by the UMU zoning.
8. Develop a feasible project capable of providing an adequate return on investment sufficient to attract both equity and debt financing.
9. Remediate existing hazardous substances on the project site to protect future site users.

EXISTING PROJECT SETTING

The following includes a description of the project site characteristics as well as surrounding land uses.

Project Site

The approximately 3.36-acre project site is located in the Potrero Hill neighborhood of San Francisco and comprises a portion of the two existing city blocks bounded by Mariposa Street to the north, Arkansas Street to the east, 18th Street to the south, and Carolina Street to the west (Assessor's Block 4005/Lots 001B and 004 and Block 4006/Lots 006, 010, 019, and 020). **Figure II-1** shows the location of the project site, **Figure II-2** shows the Blocks and Lots, and **Figure II-3** illustrates existing site conditions.

FIGURE II-1

SOURCES: GOOGLE MAPS; LSA ASSOCIATES, INC., 2013.

1601 Mariposa Street Mixed Use Project EIR
Project Site and Regional Location

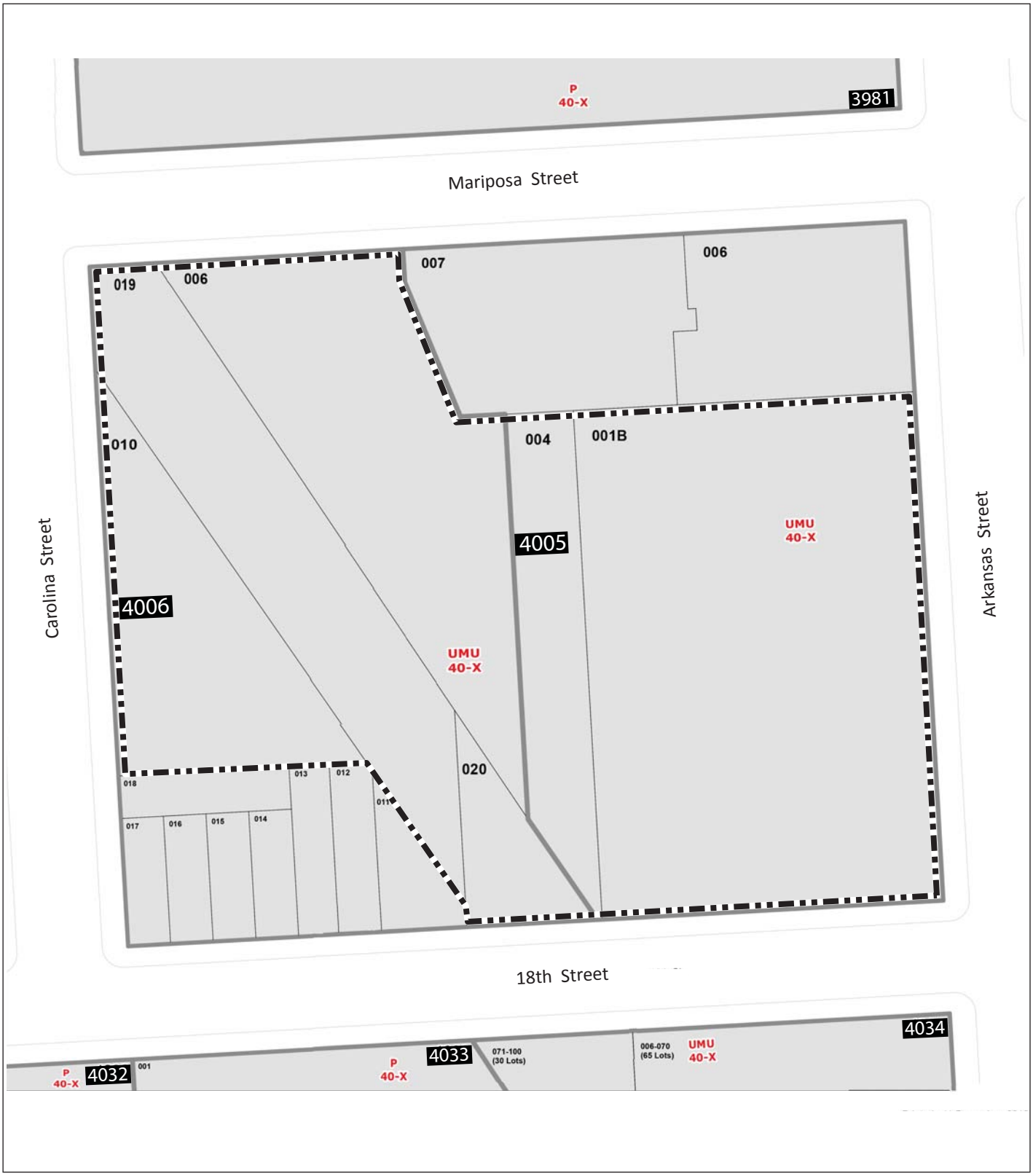

FIGURE II-2

N

0 50 100
FEET

4006 Block Number
006 Lot Number
Project Boundary

SOURCES: GOOGLE MAPS; LSA ASSOCIATES, INC., 2013.

1601 Mariposa Street Mixed Use Project EIR
Project Site Block and Lot Details

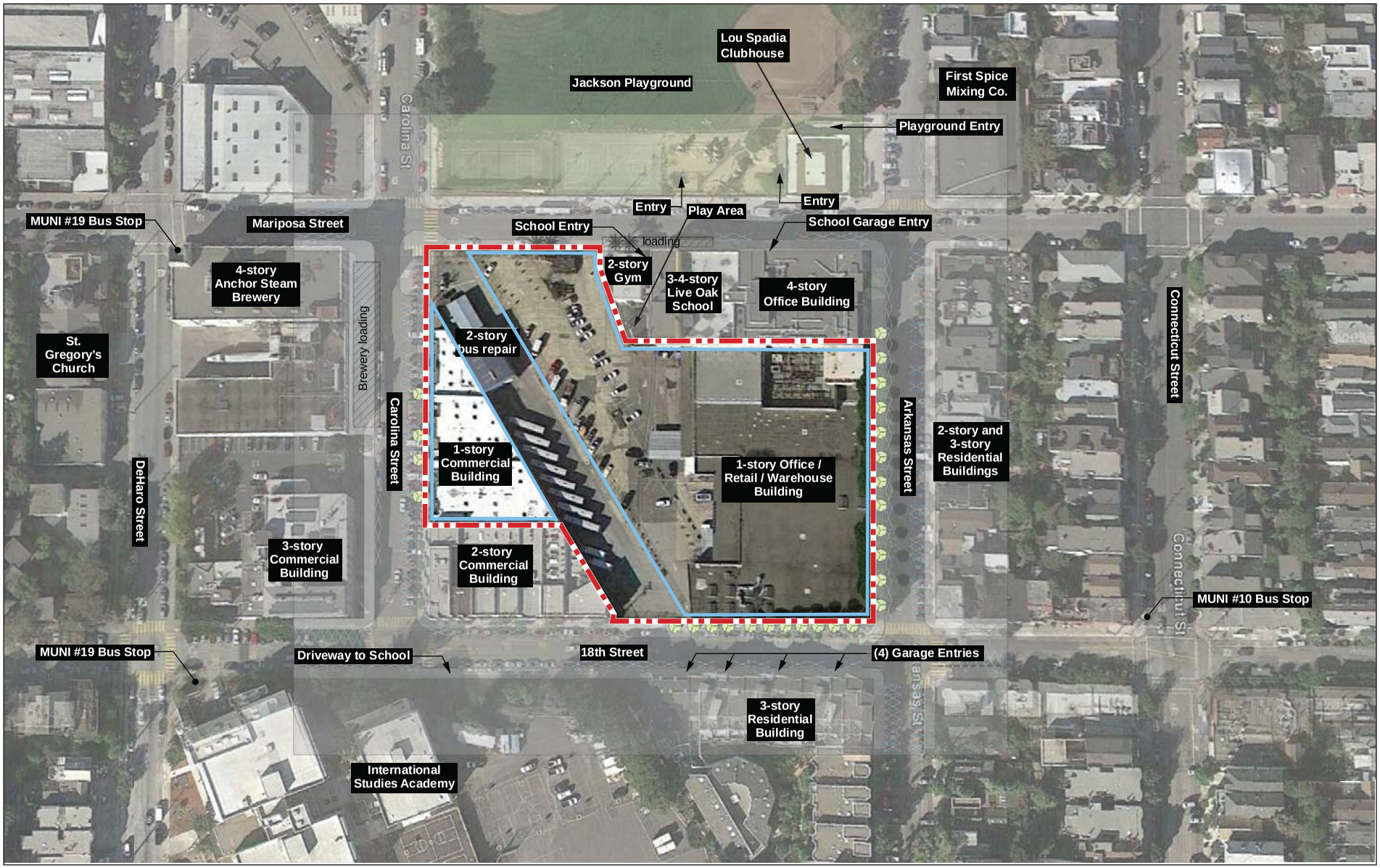

FIGURE II-3

NOT TO SCALE

Project Boundary
Parcel Boundaries
Existing Street Trees

SOURCE: DAVID BAKER + PARTNERS, DECEMBER 2013.

1601 Mariposa Street Mixed Use Project EIR
Existing Conditions

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The site is irregularly shaped and consists of three adjacent lots located at 1601 and 1677 Mariposa Street, and 485-497 Carolina Street. The topography of the site slopes upward approximately 34 feet from an elevation of about 16 feet[1] at the northwest corner, at the intersection of Mariposa and Carolina Streets, to an elevation of about 50 feet at the southeast corner, at the intersection of Arkansas and 18th Streets as part of the landform of Potrero Hill, for an overall slope of about 5 to 15 percent. The site was previously graded to below sidewalk level along Arkansas and 18th Streets, and a Southern Pacific railroad spur previously bisected the project site.[2] An existing 10-foot-wide sewer and storm drainage easement also bisects the site within the former railroad spur alignment, running north-south between Mariposa Street and 18th Street.

The project site is currently developed with three separate one- and two-story structures constructed between 1940 and 1992 (plus two sheds and a trailer), 100 surface parking spaces, 15 bus parking spaces, and 6 loading spaces. Existing buildings on the project site comprise a total of 74,696 gsf. The site is occupied by a variety of commercial, office, warehouse tenants, and automotive uses (i.e., auto parts supply and bus parking) as shown in **Table II-1**. Existing uses located on the site are further described below.

The one-story, approximately 54,360-gsf concrete building at 1601 Mariposa Street is located in the southeast portion of the project site, at the intersection of Arkansas and 18th Streets (see **Figure II-3**). This building includes office, retail, and warehouse uses occupied by MacKenzie Warehouse Auto Parts. The building sits below grade along the east and south sides of the project site, bordering the adjacent 18th and Arkansas Streets, and is at-grade along the north and west sides of the project site facing the former railroad spur, which ran within the interior of the project site. The finished floor height of this existing on-site building is approximately 21 feet. As shown in **Figure II-3**, this on-site existing building is built out to the parcel boundary with the building to the north containing Live

[1] Elevations reference San Francisco City Datum (SF Datum).

[2] There are no longer any railroad easements over the subject property associated with this past use.

Oak School and other commercial tenants. This reinforced concrete building is finished in stucco and capped by a flat roof. A surface parking lot associated with this on-site building extends diagonally through the interior of the project site, reaching from Mariposa Street to 18th Street. The current on-site parking lot owner/operator uses this area as two separately fenced parking lots, with 28 parking spaces allocated to its vehicle fleet, 14 parking spaces for retail customers, and approximately 45 parking spaces for monthly renters. Ingress to the on-site parking area is at Mariposa Street, and egress is at 18th Street.

Table II-1: Existing Uses on the Project Site

Assessor's Block-Lot	Street Address	Building	Year Built	Existing gsf	Use	Building Tenant	Employees
4005-001B 4005-004	1601 Mariposa Street	1-story warehouse and office	1940	54,360	Office/Retail/ Warehouse Parking Spaces: Vehicle Fleet: 28 Retail: 14 Monthly renters: 45	MacKenzie Warehouse Auto Parts	54
		Wood shed	Un-known	288			
4006-006 4006-019 4006-020	1677 Mariposa Street	2-story warehouse	1992	2,378	Bus depot 15 bus parking spaces 5 staff parking spaces	Coach 21	18
		1-story portable trailer	1992	960			
		Lean-to shed	Un-known	200			
4006-010	485 Carolina Street	1-story commercial	1979	16,510	Storage	Tamara Mack Design	0
	485-A Carolina Street				Studio	Yoga Fountain	2
	485-B Carolina Street				Office/Storage	Tamara Mack Design	3
	485-C Carolina Street				Storage	Daniel Stone, Contractor	1
	495 Carolina Street				Printing	Plotnet	7
	497 Carolina Street				Office	Uptown Resources, LLC	11
Total				**74,696**			**96**

gsf = gross square feet

Source: Related/Mariposa Development Company, LLC, 2013.

As shown in **Figure II-3**, the neighboring 1677 Mariposa Street property is primarily comprised of a surface parking lot and is located immediately to the west of and borders the on-site surface parking area associated with the 1601 Mariposa Street property. A chain link fence divides the two parking lots (i.e., 1677 and 1601 Mariposa Street properties and respective lots). The narrow parcel (1677

Mariposa Street) is occupied by a bus depot, operated by the company Coach 21, and includes 5 staff parking spaces and 15 bus parking spaces and areas for bus maintenance activities. A one-story, 10-foot-tall, approximately 960-gsf portable office trailer and a two-story, 21-foot-tall, approximately 2,378-gsf warehouse/maintenance building are located near the northwest corner of the 1677 Mariposa Street property, at Mariposa and Carolina Streets. The warehouse consists of corrugated metal siding and a slightly pitched metal roof. A one-story, eight-foot-tall, 200-gsf shed is located on the 1677 Mariposa Street property. Access to the 1677 Mariposa Street property is primarily via Mariposa Street; access via 18th Street is generally restricted by a chain link gate.

As also shown in **Figure II-3**, the one-story, approximately 20-foot-tall, approximately 16,510-gsf building located at 485-497 Carolina Street is located along the project site's western border and borders the property at 1677 Mariposa Street. This commercial building is divided into six separate suites, occupied by six tenants, and includes storage, office, personal service, and studio spaces. Pedestrian entrances and roll-up delivery doors to the building are located along Carolina Street. This building is clad in stucco with a flat roof.

The project site is almost entirely covered by buildings or surface pavement and there is no existing vegetation on the site. The project site is currently bordered by approximately 17 street trees along Mariposa, Arkansas, 18th, and Carolina Streets. In March 2014, nine street trees were removed from Arkansas Street pursuant to an order from the Department of Public Works due to structural defects and resulting safety concerns.[3] It is anticipated that the current property owner will replace these nine trees with new trees (minimum of 24-inch box size) in the near future.

A total of approximately 105 on-street unmetered parking spaces are located adjacent to the project site, including approximately 27 spaces along the south side of Mariposa Street between Carolina and

[3] Mohammed Nuru, San Francisco Department of Public Works. DPW Order No: 182222. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Arkansas Streets; 21 spaces along the west side of Arkansas Street between Mariposa and 18th Streets; 33 spaces along the east side of Carolina Street between Mariposa and 18th Streets; and 24 spaces along the north side of 18th Street between Carolina and Arkansas Streets. Existing on-street parking spaces are unstriped and interrupted by multiple curb cuts. Along Carolina Street, several existing curb cuts are used as parking spaces. Parking is not metered or time limited in the vicinity of the site. No existing loading spaces are present along the streets that surround the project site.

The overall visual character of the project site is influenced by the above described uses and physical conditions and is characteristic of production, distribution and repair (PDR) space found throughout this area of the City. Buildings on the site range in age from approximately 75 to 12 years old and all are of an industrial character and design. Direct views of and through the site are available from surrounding streets due to the existing relatively low building heights, open surface parking lots, and topography. Views through the site towards the downtown skyline are also partially available from surrounding sidewalks and streets, particularly along 18th Street which is uphill from Mariposa Street, and also from the hillside areas uphill from the site.

Surrounding Land Uses

As previously noted, the project site occupies a portion of two existing city blocks. Existing uses within the same two existing blocks surrounding or in proximity to the project site but not within the boundaries of the project site and surrounding land uses are generally described below.

Existing land uses within the blocks occupied by the project site (see **Table II-1**), include a three- to four-story building with a school (Live Oak School) and office uses and a two-story recreation building associated with the school on Block 4005, and eight two-story commercial buildings on Block 4006, as shown in **Figure II-3**. Live Oak School occupies approximately half of the three- to four-story building and is located immediately adjacent, along the parcel boundary, to the northeast portion of the project site, near the intersection of Mariposa and Arkansas Streets and is accessed by

Mariposa Street. The private school provides K-8 education and has an enrollment of about 290 students.[4] The other half of the building is occupied by various office tenants. A small two-story building containing recreational uses is also associated with Live Oak School and located west of the four-story building occupied by the main school. The eight two-story commercial buildings are located near the southeast corner of the site on 18th Street and Carolina Street on Block 4006. The ground floors of these commercial buildings are occupied by a variety of retail, office, and service uses; one or more accessory residential occupants are also located on the second floors of the eight commercial buildings, although the use of these buildings is primarily commercial.

The blocks that surround the 1601 Mariposa Street Mixed Use Project site include a variety of land uses, including commercial, residential, institutional, and recreational uses, as follows:

- ***North.*** Jackson Playground is an approximately 4.41-acre park located immediately north of the project site, across Mariposa Street. The park occupies two city blocks (Block 3981, Lot 001) and includes a recreation building, sand-floor playground, picnic area, tennis courts, basketball courts, and two ball fields. A community garden is also located along the southern park boundary, starting from the Mariposa and Carolina Streets intersection extending eastward to about mid-block along Mariposa Street. First Spice Mixing Company, a spice manufacturer, is located northeast of the site at the northeast corner of Mariposa and Arkansas Streets. Mixed commercial and residential uses are located farther north, followed by a variety of uses associated with PDR uses. Downtown San Francisco is located less than two miles farther to the north.
- ***East.*** Immediately across the street and east of the project site, land uses consist primarily of two- and three-story residential buildings on Arkansas Street. This land uses pattern

[4] Live Oak School intends to expand its facilities into the existing office space currently located immediately west of the existing school facilities in the same building on Mariposa Street. The expansion is anticipated to be completed by fall 2017. The expansion, when completed, is anticipated to allow for an increased enrollment of up to 410 students (Dan Lockwood, Like Oak School Board Trustee, Personal communication with Chelsea Fordham, Planning III, September 9, 2014). Plans for expansion are detailed on the school's website: www.liveoaksf.org/schoollife/expansion.html (accessed September 10, 2014).

generally continues for several blocks further east. Neighborhood-serving commercial uses are also located along the 18th Street corridor, between Connecticut and Texas Streets.

- ***South.*** The existing topography rises uphill immediately south of the site, across 18th Street. Land uses immediately across from the project site along 18th Street include a public school, described below, and a three-story mixed-use building with primarily residential uses. The International Studies Academy is a 6th through 12th grade public school with an enrollment of about 530 students which occupies approximately three-quarters of three blocks bound by 18th, Arkansas, 19th, and De Haro Streets. The three-story building on the eastern portion of the block immediately across from the project site along 18th Street includes primarily ground floor artist's lofts with residential uses on the upper floors. A performing arts/community center is also located within this building.
- ***West.*** Land uses immediately west of the project site, across Carolina Street, include the four-story Anchor Steam Brewery building and a three-story commercial building. The brewery is located on the northern portion of the block bound by Mariposa, Carolina, 18th and De Haro Streets. The building on the southern portion of this block contains a large indoor children's play space on the ground floor (Recess), as well as other service uses. Residential and commercial uses are located farther to the west. St. Gregory's church and food pantry is located further west, on De Haro Street.

The overall visual character of the area surrounding the project site is influenced by the above described uses and physical conditions. This area of Potrero Hill is characterized by a variety of building heights, which generally range from two to four stories. Buildings range in age from over 100 years old to new construction, and building architecture and design varies widely between different types of uses, from functional industrial buildings to residential buildings of Edwardian, 20th century, and modern designs. Buildings are generally built to the property line. Streets are generally lined with street trees. Jackson Playground is characterized by children's play areas, open lawn areas for active and passive uses, and a recreation building.

PROPOSED PROJECT

The project sponsor proposes to demolish all existing on-site buildings and surface pavement on the project site and construct two 31- to 40-foot-tall (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height and two stair overruns up to 10 feet in height), four-story, mixed-use buildings with associated infrastructure. As shown in the conceptual site plan depicted in **Figure II-4**, the East Building would be located on the eastern portion of the project site, south of the existing Live Oak School. The West Building would be located on the western portion of the project site, north of the existing commercial buildings located on 18th Street. The two proposed on-site buildings would be separated by a 40- to 70-foot-wide mid-block pedestrian pathway. Approximately 320 residential units and 10,000 gsf of ground floor commercial space would be distributed throughout both buildings. Approximately 265 to 275 parking spaces would be located primarily below grade in a two level garage in the East Building. Internal courtyards and pedestrian pathways would be located at the ground floor of each building. Ground level uses are depicted in **Figure II-5**.

In addition, the project includes excavation and remediation of hazardous materials in site soils and treatment of groundwater, pursuant to an approved Response Plan and with oversight from the Department of Toxic Substances Control (DTSC). A Vapor Intrusion Mitigation System would also be implemented and a Land Use Covenant would be established to protect future site users from residual contamination.

Project Building Characteristics

The East Building would consist of two levels of primarily below-grade parking and four levels of a mix of uses surrounding open space courtyards. The majority of the upper portion of the proposed East Building containing residential uses would be set back 20 feet from the south-facing property line windows of the Live Oak School building, which is located immediately to the north of the project site. A landscaped "light court" or private linear open space that would provide restricted passive recreational use only for project residents would occupy this setback area, and no dwelling units would have windows directly opposite of the south-facing property line windows of the Live

Oak School building. An internal corridor would face the courtyard; the corridor would likely have windows. The windows would be situated so as to avoid direct sight lines into Live Oak School classrooms. Two units would be set back 10 feet from the common property line and would have windows overlooking the Live Oak School playground and City views beyond.

The West Building would consist of four levels of mixed-use development surrounding an at-grade private open space courtyard. The West Building would be set back two feet from the adjacent existing commercial buildings that face 18th Street. There are no below-grade levels under the West Building. **Figures II-6** and **II-7** depict levels one and two of the West Building and the lower and upper garage levels of the East Building. **Figures II-8** and **II-9** depict the third and first levels and the fourth and second levels of the West and East Buildings, respectively. **Figures II-10** and **II-11** depict the third and fourth levels of the East Building, respectively. **Table II-2** provides a summary of the proposed project.

Table II-2: Proposed Project Details

Proposed Use	Total
Residential Use	330,630 gsf
Commercial Use	10,000 gsf
Parking Area	98,900 gsf
Total Floor Area	439,530 gsf
Open Space	39,195 gsf
Number of Dwelling Units	320 (76 studios, 116 one-bedrooms, 118 two-bedrooms, and 10 three-bedrooms)
Number of Parking Spaces	Approximately 265 to 275
Number of Loading Spaces	Three on-street yellow curb zones
Number of Buildings	2 (East Building and West Building)
Height of Buildings	31 to 40 feet
Number of Stories	East Building: 2 sub-surface, 4 above grade West Building: 4 above grade

gsf = gross square feet

Source: Related, 2013.

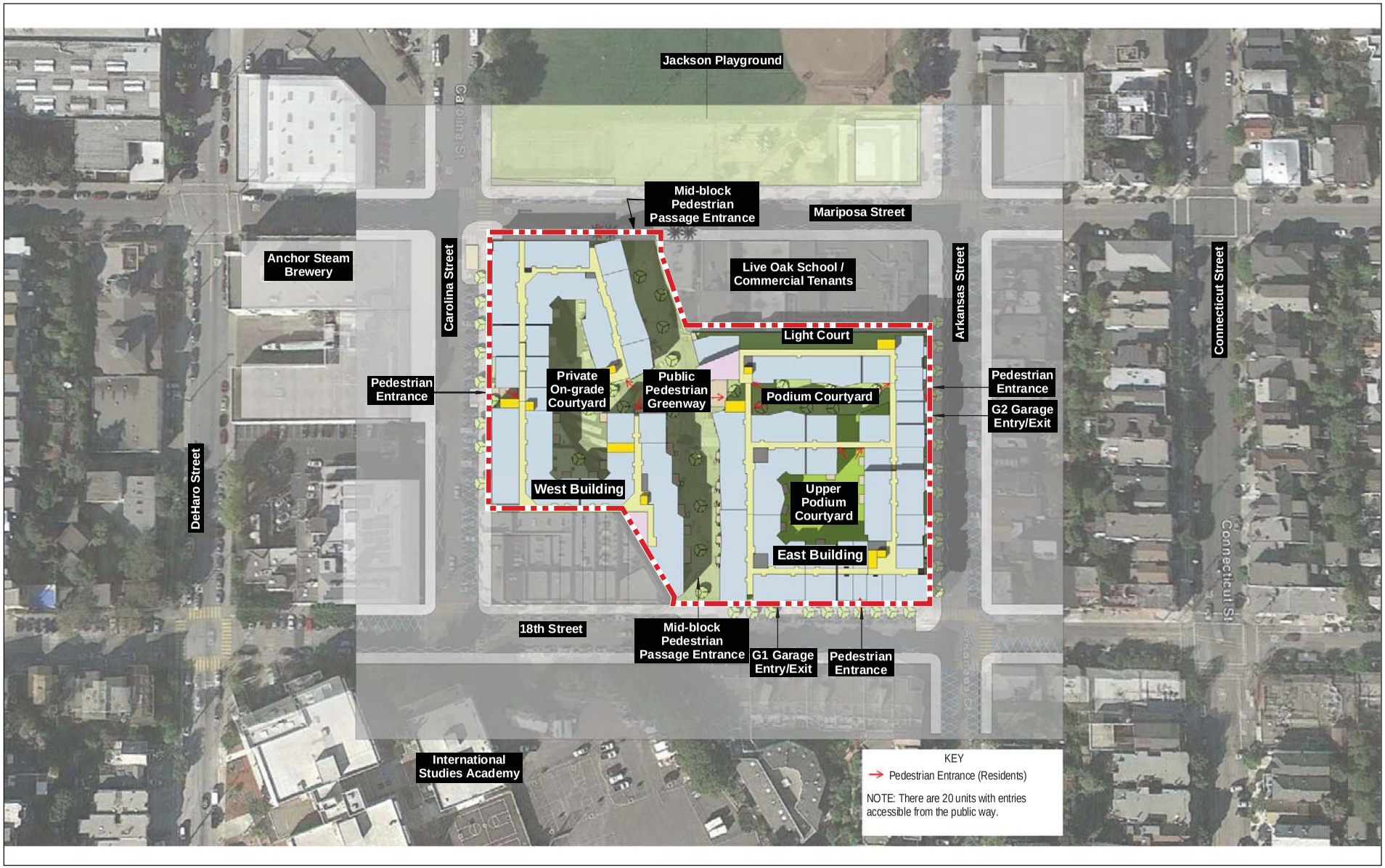


FIGURE II-4

NOT TO SCALE

Project Boundary

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR
Conceptual Site Plan

FIGURE II-5

0 30 60
FEET

N

SOURCE: DAVID BAKER ARCHITECTS; RELATED, DECEMBER 2013.

FIGURE II-6

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR

Level 1 West Building / Lower Garage East Building

FIGURE II-7

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR

Level 2 West Building / Upper Garage East Building

FIGURE II-8

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR

Level 3 West Building / Level 1 East Building

FIGURE II-9

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR
Level 4 West Building / Level 2 East Building

FIGURE II-10

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR

Roof Plan West Building / Level 3 East Building

FIGURE II-11

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR

Roof Plan West Building / Level 4 East Building

The proposed project would include construction of approximately 320 dwelling units that would be distributed between both buildings and would include about 76 studio, 116 one-bedroom, 118 two-bedroom, and 10 three-bedroom units within an approximate total of 330,630 gsf of residential space.[5] It is anticipated that the project would be operated as a rental (rather than for-sale) development and is expected to provide approximately 46 units affordable to low-income households on-site as inclusionary units to meet the City's Inclusionary Affordable Housing requirement. Residential units would either face the surrounding streets (including walk-up units at the ground-floor level), the podium level courtyards, or the mid-block public pedestrian pathway. All units would comply with the unit exposure requirements of Planning Code Section 140 that specifies that at least one window of at least one room in each dwelling unit shall face directly towards an open area, such as a street or courtyard, of at least 25 feet in width. The project would have on-site amenities serving the residential uses that may include a leasing office, building management offices, a business center, a lounge and flexible activity space, a fitness and yoga studio/gym, and a bike repair shop. The project would also include about 10,000 gsf of ground floor commercial use configured in not less than two individual commercial spaces. Commercial uses would be located near the corners of Mariposa and Carolina Streets and 18th and Arkansas Streets (see **Figure II-5**).

Building heights for both buildings would range from 31 to 40 feet, and from generally three to four stories along the project site (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height, and two stair overruns up to 10 feet in height), measured from the average adjacent curb level. A brief five-story element (of approximately four units) would be located within the interior of the site, facing the pedestrian pathway. This five-story element includes three above-garage levels and two levels of residential units fronting the East Building parking garage to mask the view of the garage from the mid-block pedestrian pathway. A two-story parking garage would also be located below grade. Along Arkansas Street, the project site slopes upward from north to south with an average slope greater than five percent, and the building height

[5] Residential gsf includes circulation and service space as well as space for amenities and common areas.

would step up in approximately 50-foot-wide increments along this street. Along 18th Street, the project site slopes upward from west to east with an average slope of about 12 percent, and the building height would step up in approximately 55-foot-wide increments along this street. Along a portion of Carolina Street, the average upward slope from north to south is between five percent and 15 percent, and the building height steps up in approximately 65-foot-wide increments. Along a portion of Carolina Street and along Mariposa Street, the average slope is less than five percent and the building height would not step. Parapets up to four feet in height and elevator and stair overruns up to 10 feet in height (provided they cover no more than 20 percent of the roof area) are exempt from the 40-foot height limit. The five elevator and two stair overruns would cover approximately one percent of the roofs of the two buildings. This method of height measurement is consistent with Planning Code Section 260. Exterior elevations of the proposed development are shown in **Figures II-12, II-13,** and **II-14**.

Open Space and Landscaping

A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site, as depicted in **Figure II-15**. An approximately 21,505 gsf, 40- to 70-foot-wide publicly accessible pedestrian pathway and open space plaza would be located mid-block between the two buildings; all other open space (approximately 17,690 gsf) on-site would be private and accessible only to residents. The pathway would provide access to pedestrians and bicyclists between Mariposa Street and 18th Streets.[6] Ground-floor units with patios would open onto the mid-block pathway. The existing fence located between the new pathway and Live Oak School may remain or, a new fence or wall would be designed in collaboration with Live Oak School and installed by the project sponsor.

[6] An east-west mid-block pedestrian pathway connecting Arkansas Street and Carolina Street is not proposed or required by Section 270.2 of the Planning Code because the north-south block frontages do not exceed 400 feet in length.

ARKANSAS STREET ELEVATION (EAST BUILDING)

18TH STREET ELEVATION (EAST BUILDING)

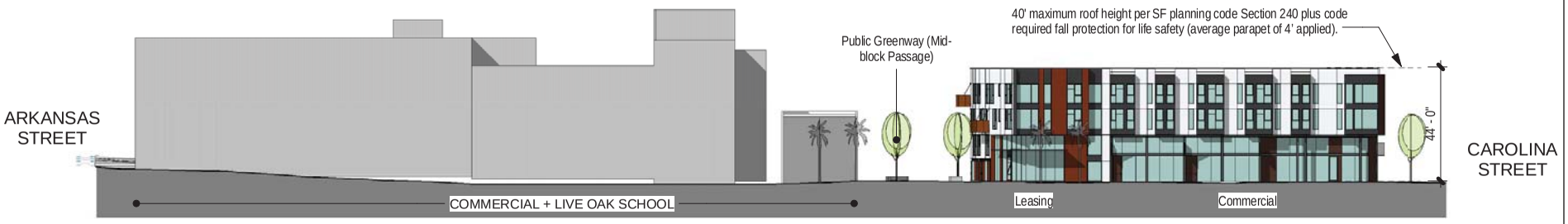
FIGURE II-12

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

1601 Mariposa Street Mixed Use Project EIR

Exterior Elevations - Arkansas Street and 18th Street



MARIPOSA STREET ELEVATION (WEST BUILDING)

CAROLINA STREET ELEVATION (WEST BUILDING)

FIGURE II-13

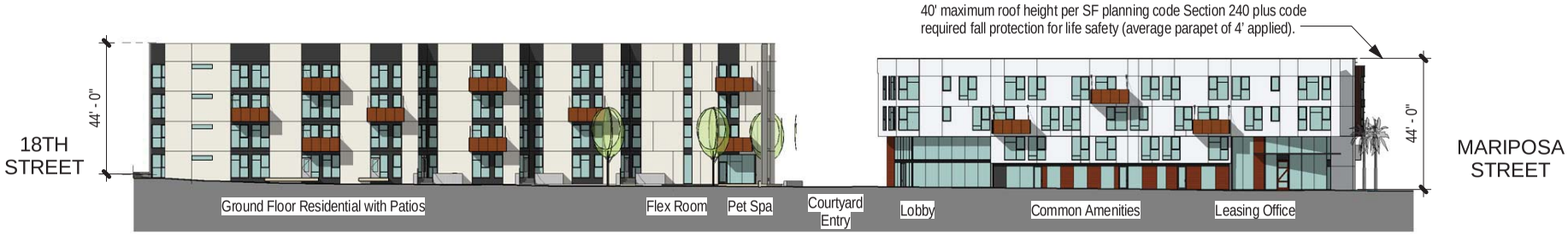
NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

1601 Mariposa Street Mixed Use Project EIR

Exterior Elevations - Carolina Street and Mariposa Street

PUBLIC PEDESTRIAN GREENWAY ELEVATION LOOKING EAST



PUBLIC PEDESTRIAN GREENWAY ELEVATION LOOKING WEST

FIGURE II-14

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

FIGURE II-15

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street Mixed Use Project EIR
Conceptual Landscape Plan

Additional open space areas accessible only to residents would include an internal podium-level courtyard and roof deck at the East Building and smaller courtyards and greenways at the northern portion of the East Building. A light court near the northern property line adjacent to Live Oak School would also be provided for restricted use by residents and would not be accessible to the public. The proposed project would be set back 20 feet from the school. An internal on-grade courtyard would be provided at the West Building. Both publicly accessible and private open space areas on the project site would be maintained by the project sponsor.

Open space areas within the project site would include trees and other plantings. As previously discussed, there are a total of 17 existing street trees that border the project site, and an additional nine trees will likely be planted to replace recently removed trees prior to project construction (for a total of 26 trees assumed to be present on the site at the time of project construction). Of the 17 existing trees, nine would be removed from the project site, as would the nine trees to be planted in the short term (for an anticipated total of 18 trees to be removed from the site). Eight existing trees would be retained and approximately 27 new street trees would be planted on the four street frontages as part of the proposed project. Additionally, a total of approximately 37 trees would be planted within the internal open space areas. With the proposed new and existing trees on and around the project site and there would be a total of approximately 72 trees around the project site.

Access and Parking

Pedestrian access to the site would be provided from Mariposa and 18th Streets via the mid-block pedestrian pathway and from Carolina and Arkansas Streets by pedestrian entrances leading to lobbies and the private on-site courtyards (see **Figure II-5**). In addition, ground floor units along Arkansas and 18th Streets would have direct access to the sidewalk from the front stoops (see **Figure II-12**).

Parking for the proposed project would be provided within a two-level sub-surface garage located within the East Building. Approximately 265 to 275 parking spaces, including 10 Americans with Disabilities Act (ADA)-accessible spaces and up to six but not less than two car share spaces,[7] would be provided as part of the proposed project, with 10 to 20 of the spaces serving the commercial uses and the remainder serving the proposed residential uses. Ingress and egress to the garage would be via two entrances/exits, one on 18th Street and one on Arkansas Street.

Additionally, the project would include approximately 469 bicycle parking spaces located within the parking garage and bike storage areas located and accessible from adjacent sidewalks on Carolina and 18th Streets and residential lobby areas.

In addition to the off-street parking provided by the proposed project, the project would modify the configuration of existing on-street parking spaces adjacent to the site including the removal of existing curb cuts to allow for new loading spaces. Three on-street yellow curb zones for loading are proposed, with one such zone to be located along Carolina Street, one along Mariposa Street and one along Arkansas Street. The yellow loading zones along Carolina and Arkansas Streets would be adjacent to the proposed residential lobby entrances along those streets. The loading zone along Mariposa Street would be adjacent to the leasing office that is proposed to be located in the West Building and, when not in use for the proposed project, would also serve as a location for parents dropping off or picking up children at the Live Oak School. Pedestrian access to and through the site would be provided along all four street frontages of the project (see **Figure II-5**). With these modifications, specifically the proposed removal of multiple existing curb cuts, approximately four net new on-street parking spaces would be created.

[7] Per Planning Code Section 166, car share spaces must be made available, at no cost, to a certified car-share organization for the purposes of providing car-share services for its subscribers. For off-street spaces, the parking area must be designed in a manner that will make the car share spaces accessible to non-resident subscribers from outside the building (i.e. members of the public with an applicable car share subscription), as well as building residents.

Visual Conditions and Views

As previously described, the project site is primarily characterized by one-story industrial buildings and surface parking lots. Views of and through the site are available from surrounding streets and nearby Jackson Playground. Implementation of the proposed project would change the visual conditions and character of the project site by constructing three- to four-story mixed-use residential and commercial buildings and new open space areas. Views from surrounding public vantage points would be altered. Visual simulations were prepared by Environmental Vision to illustrate the design and massing of the project from five viewpoints around the project site. The location of these viewpoints is depicted in **Figure II-16** and **Figures II-17 through II-21**. A brief comparison the existing and proposed visual conditions related to these vantage points is provided below.

- **Viewpoint 1 – Jackson Playground.** As shown in **Figure II-17**, existing views from Jackson Playground looking southwest towards the project site are framed by surrounding development, including the three-to four-story Live Oak School to the east and the four-story Anchor Steam building to the west. Existing structures on the site are partially visible at the center of the site, although partially obscured by existing facilities and landscaping within the park. Densely developed hillside areas are also partially visible in the distance. As shown in the visual simulation in **Figure II-17**, project buildings located at the northern edge and interior of the site would be directly visible from this vantage point as well as other vantage points throughout Jackson Playground. The four-story elements of the proposed West Building would be similar to and generally blend with adjacent three- to four-story structures. The proposed mid-block pedestrian pathway and open space area on the site provides a visual break from the continuous building façades along the Mariposa Street corridor. Views towards the hillside areas to the south would be partially obstructed, but would not be eliminated.

- **Viewpoint 2 – 18th Street near Arkansas Street.** As shown in **Figure II-18**, existing views from 18th Street near its intersection with Arkansas Street, looking west along the 18th Street corridor, are framed by existing two- and three-story buildings. Overhead utility lines are visible along the roadway as are street trees. Perpendicular and parallel parking spaces are located along either side of much of the roadway. The topography of 18th Street varies

greatly and, as seen from this vantage point, slopes downward adjacent to the project site before rising to the west. The one-story building located at the southeastern portion of the site is only partially visible due to the topography and presence of existing street trees. As shown in the visual simulation in **Figure II-18**, the four-story East Building would be visible from this vantage point. Because the topography of the site gently slopes downward to the west at this location, the buildings do not appear much taller than nearby two- and three-story buildings. The three-story residential buildings immediately across from the site at the southwest corner of the 18th Street and Arkansas Street intersection appear somewhat taller than the four-story East Building, as seen from this location. In general, the proposed buildings blend with surrounding structures and do not appear to be more massive than other buildings along 18th Street. In addition, no long-range scenic views to the west would be obstructed as none are available.

- **Viewpoint 3 – Wisconsin Street at 20th Street.** As shown in **Figure II-19**, existing views from the intersection of Wisconsin Street at its intersection with 20th Street, looking north towards the project site, are direct and open due to the elevation of this vantage point. The view is comprised of the densely urbanized areas within the Showplace Square and Potrero Hill area and the City's downtown skyline in the distance. Jackson Playground is also partially visible from this vantage point. With the exception of Jackson Playground and the immediate surroundings, vegetation is limited and the view is mostly of buildings. As shown in the visual simulation in **Figure II-19**, the East and West Buildings would be visible from this vantage point as much of the project site is visible from this distance and elevation. Existing mature trees located within the International Studies Academy property partially block the view of the project site, including the proposed pedestrian greenway. Project buildings would obstruct most of the view of Jackson Playground from this vantage point as well as Live Oak School. However, project buildings would generally blend with surrounding development and do not appear taller or more massive than other nearby buildings as seen from this vantage point. In addition, direct and open views of the City's downtown skyline would not be obstructed.

FIGURE II-16

N

0 200 400
FEET

Project Boundary

Photograph Viewpoint Location and Direction

SOURCE: ENVIRONMENTAL VISION, MARCH 2014.

1601 Mariposa Street Mixed Use Project EIR
Visual Simulation Viewpoint Location Map

Existing view from Jackson Playground looking south

Conceptual visual simulation of proposed project

FIGURE II-17

1601 Mariposa Street Mixed Use Project EIR
Viewpoint 1 -
Jackson Playground

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

Existing view from 18th Street near Arkansas Street

Conceptual visual simulation of proposed project

FIGURE II-18

1601 Mariposa Street Mixed Use Project EIR
Viewpoint 2 -
18th Street Near Arkansas Street

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

Existing view from Wisconsin Street at 20th Street

Conceptual visual simulation of proposed project

FIGURE II-19

1601 Mariposa Street Mixed Use Project EIR
Viewpoint 3 -
Wisconsin Street at 20th Street

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

Existing view from 18th Street near Carolina Street

Conceptual visual simulation of proposed project

FIGURE II-20

1601 Mariposa Street Mixed Use Project EIR
Viewpoint 4 -
18th Street Near Carolina Street

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

Existing view from Mariposa Street near Carolina Street looking east

Conceptual visual simulation of proposed project

FIGURE II-21

1601 Mariposa Street Mixed Use Project EIR
Viewpoint 5 -
Mariposa Street Near Carolina Street

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

- **Viewpoint 4 – 18th Street near Carolina Street.** As shown in **Figure II-20**, existing views from 18th Street near its intersection with Carolina Street, looking east along the 18th Street corridor, are framed by existing two- and three-story buildings. Overhead utility lines are visible along the roadway as are street trees. Perpendicular and parallel parking spaces are located along either side of much of the roadway. The topography of 18th Street varies greatly and, as seen from this vantage point, slopes upward adjacent to the project site before rising to the east. The one-story building located at the southeastern portion of the site is only partially visible due to the topography and presence of existing street trees. As shown in the visual simulation in **Figure II-20**, the four-story East Building and a partial corner of the West Building would be visible from this vantage point. Because the sloping topography, the buildings do not appear much taller than nearby two- and three-story buildings, including the two-story commercial building immediately adjacent to and west of the site. In general, the proposed buildings blend with surrounding structures and do not appear to be more massive than other buildings along 18th Street. In addition, no long-range scenic views to the east would be obstructed as none are available.
- **Viewpoint 5 – Mariposa Street near Carolina Street.** As shown in **Figure II-21**, existing views along Mariposa Street near its intersection with Carolina Street, looking east along the Mariposa Street corridor, are of existing two- and four-story buildings on the south side of the roadway (including the Live Oak School building and the Anchor Steam Brewery building) and Jackson Playground on the north side. Overhead utility lines are visible along the roadway as are street trees. Parallel parking spaces are located on either side of the roadway. The entrance to the surface parking lot used by the existing auto parts warehouse and bus depot on the project site is also visible. As shown in the visual simulation in **Figure II-21**, a three-story portion of the West Building would be visible along Mariposa Street and the view of Live Oak School would be obstructed. In general, the proposed buildings blend with surrounding structures and do not appear to be more massive than other buildings along Mariposa Street. In addition, no long-range scenic views to the east would be obstructed as none are available.

Based on the above, the proposed project would not appear to be substantially taller or more massive than surrounding development. In addition, no long-range scenic views as seen from public vantage points would be eliminated.

Demolition, Site Remediation and Construction

Construction activities at the project site would begin with demolition of all existing on-site structures, removal of all existing on-site pavement, and construction of the below-grade parking garage. The existing on-site parking lots and auto parts warehouse are graded into the hillside below sidewalk level along Arkansas and 18th Streets and are generally flat and therefore, minimal grading and excavation would be required for site preparation and foundations. If excess soil were to be excavated and require off-site disposal, it is not expected to exceed approximately 6,000 cubic yards.

Concurrent with excavation work and pavement removal, remediation of hazardous materials in site soils and treatment of encountered groundwater would occur, which would be conducted pursuant to an approved Response Plan and with oversight from DTSC. The recommended site remediation activities include removal of three underground storage tanks, excavation and off-site disposal of approximately 730 cubic yards of petroleum hydrocarbon contaminated soil, installation of a vapor intrusion mitigation system to address volatile organic compounds in soil gas, and establishment of a Land Use Covenant that would establish Institutional Controls and require soil covers and prohibit groundwater use to ensure that future inhabitants would be protected from residual soil and groundwater contamination. The proposed Response Plan, which is required for construction of the proposed project, is further described and analyzed in Section IV.D, Hazards and Hazardous Materials of this EIR.[8]

[8] Iris Environmental, Revised Draft Response Plan, 1601 and 1677 Mariposa Street and 485-497 Carolina Street, San Francisco, California. March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

Demolition and grading activities are anticipated to occur over an approximately three month period beginning in late-2015. Site remediation activities would occur for a total of five to six days during the grading activities period. After excavation, contaminated soils would be temporarily stockpiled on-site in accordance with Bay Area Air Quality Management District (BAAQMD) Rule 8-40, which requires covering the excavated soils to prevent volatile chemical emissions. There would be approximately three to four weeks in between the initial two to three days of soil excavation and the final loading/disposal of contaminated soils to allow for laboratory results and landfill acceptance. Rule 8-40 would require off-site disposal of the temporarily stockpiled contaminated soils within 45 days after excavation. After demolition and grading, construction of the buildings would occur, and the total construction period is anticipated to occur over approximately two years. The project is anticipated to use a spread-foot foundation bearing on native alluvium or bedrock for much of the East Building and a spread foot foundation bearing on ground improved with rammed aggregate piers for the West Building and western part of the East Building. Neither of these foundation types would require the use of impact driven piles.

The proposed project would connect to existing water, sewer, electrical, natural gas, and telecommunications connections available at the perimeter of the project site. The existing 10-foot-wide sewer and storm drainage easement that bisects the site would be maintained within the mid-block pedestrian pathway and would not have structures placed on it. The City would continue to have access to the sewer and storm drain for maintenance within this easement area.

PROJECT APPROVALS

The project is located in the UMU zoning district and 40-X height and bulk district, and as currently proposed, conforms to the use, density, unit mix, inclusionary affordable housing, height and other restrictions of those zoning classifications. The project sponsor is requesting four modifications, waivers, and exceptions from the Planning Commission in its Large Project Authorization application for the proposed project: 1) a modification for configuration of the project's rear yard; 2) a waiver of the horizontal mass reduction along Arkansas Street, 18th Street and Carolina Street; 3) an exception for use of three on-street loading spaces in lieu of two off-street loading spaces; and 4) an exception

for the 17-foot commercial floor-to-floor height for some areas of the proposed commercial space. These modifications, waivers and exceptions are described below.

- **Rear Yard Modification.** Per Planning Code Section 134(a)(1), the minimum rear yard depth within the UMU District is required to be equal to 25 percent of the total depth of the lot on which the building is situated, but in no case less than 15 feet. The project sponsor is requesting that the Planning Commission grant a modification to this requirement to instead allow a series of courtyards and the mid-block publicly-accessible pedestrian passage, together covering approximately 37.5 percent of the site (per Planning Code Sections 134(f) and 329(d)(7)).
- **Horizontal Mass Waiver.** Planning Code Section 270.1 requires buildings exceeding 200 feet in length in the UMU district to incorporate a mass reduction break in the building to reduce the horizontal scale of the building into discrete sections not more than 200 feet in length. The project's Arkansas Street frontage is 295 feet in length, the 18th Street frontage is 229 feet in length, and the Carolina Street frontage is 299 feet in length; therefore, these frontages are subject to Section 270.1. This section of the Planning Code requires the mass reduction breaks to be not less than 30 feet in width, 60 feet in depth, and extend up to the sky from a level not higher than 25 feet above grade or the third story, whichever is lower; and result in discrete building sections with a maximum plan length along the street frontage not greater than 200 feet. The project sponsor is requesting that the Planning Commission grant a waiver for the horizontal mass reduction requirement (per Planning Code Section 270.1(b) and 327(d)(3)).
- **Exception for On-Street Loading Spaces.** Planning Code Section 152.1 requires two off-street loading spaces for residential projects of between 200,000 and 500,000 gsf. The project sponsor is requesting that the Planning Commission grant an exception to the off-street loading requirement to have three on-street loading spaces (per Planning Code Sections 152.1 and 329(d)(4)).
- **Exception for Interior Commercial Floor-to-Floor Heights.** Planning Code Section 145.1(c)(4)(A) requires that ground floor non-residential uses in UMU Districts have a

minimum floor-to-floor height of 17 feet, as measured from street grade. The project sponsor is requesting that the Planning Commission grant an exception for the floor to floor height of two commercial spaces along Carolina Street and 18th Street (which would be 10 to 12 feet) where the elevation of the sidewalk slopes upward, and the non-residential space floor remains level to meet ADA accessibility requirements (per Planning Code Section 329(d)(11).

The Planning Commission will consider the above requested modifications, waivers, and exceptions when it considers approval of the project. These requested approvals and consistency with the Planning Code are discussed further in Chapter III, Plans and Policies.

The proposed project would require the following City, State, and regional approvals:

- Planning Commission certification of the EIR;
- Large Project Authorization approval by the Planning Commission pursuant to Planning Code Section 329, because the project contains greater than 25,000 gsf of new construction with a modification for the rear yard configuration, a waiver of the horizontal mass reduction, an exception for off-street loading, and an exception for the 17-foot commercial floor-to-floor height for some areas of the proposed commercial space. This is considered the Approval Action for this CEQA determination pursuant to Section 31.04(h) of the San Francisco Administrative Code;
- San Francisco Municipal Transportation Agency's approval of Color Curb Program for all proposed changes in loading zones and the reconfiguration/removal/addition of on-street parking spaces;
- Lot Merger and Subdivision Map approval by the Department of Public Works to merge and re-subdivide the separate lots that comprise the project site;
- Demolition and building permits by the Department of Building Inspection;
- San Francisco Department of Public Health approval of Dust Control Plan;

- DTSC approval of a California Land Use and Revitalization Act (CLRRA) Final Response Plan; and
- Bay Area Air Quality Management District (BAAQMD) approval of an Asbestos Dust Mitigation Plan.

III. PLANS AND POLICIES

This chapter provides a summary of the relevant plans and policies of the City and County of San Francisco (City) that are applicable to the proposed project and focuses in particular on the project's potential inconsistencies with applicable plans and policies that could result in environmental impacts. The determination of whether a project is consistent with a specific plan or policy can be subjective, and is best made with a broad understanding of the often-competing policy objectives in a planning document. As a result, policy consistency determinations are ultimately made by the City's local decision-making body (i.e., Planning Commission and/or Board of Supervisors). This consideration of policies would occur independently of the environmental review process, as part of the decision to approve or reject the project. The analysis in this chapter is intended to provide decision-makers with a discussion of planning considerations that are pertinent to the proposed project and associated development site, and a preliminary conclusion regarding whether the project may be inconsistent with identified plans and policies. These preliminary conclusions are intended to supplement decision-makers' own understanding of the various and often-competing policy considerations.

Furthermore, a policy inconsistency is considered significant pursuant to CEQA only when it would result in a significant, adverse physical environmental impact. The potential instances of such conflicts are discussed in the topical sections of this EIR.

The main documents that guide planning and land use within and around the project site that are discussed in this chapter are:

- San Francisco General Plan
- Eastern Neighborhoods Rezoning and Area Plan (Eastern Neighborhoods Plan)
    - Showplace Square/Potrero Area Plan

- San Francisco Planning Code
- Proposition M, The Accountable Planning Initiative
- Sustainability Plan
- Climate Action Plan
- Better Streets Plan
- Transit First Policy
- Bicycle Plan

Environmental plans and policies are those, like the *Bay Area* 2010 *Clean Air Plan*, which directly address environmental issues and/or contain targets or standards that must be met in order to preserve or improve the characteristics of the City's physical environment. The proposed project would not obviously or substantially conflict with any such adopted environmental plan or policy. Resource-specific and regional plans and policies are discussed in specific topical sections of this EIR or in the CPE Checklist contained in Appendix A (e.g., Air Quality), as appropriate.

SAN FRANCISCO GENERAL PLAN

The San Francisco General Plan provides general policies and objectives to guide land use decisions in the City, and embodies the City's vision for the future physical development of San Francisco. The General Plan comprises ten elements (each of which pertains to a particular topic or resource area that is important throughout the City). The elements include: Air Quality; Arts; Commerce and Industry; Community Facilities; Community Safety; Environmental Protection; Housing; Recreation and Open Space; Transportation; and Urban Design. These elements provide a policy context for future development in the City. In addition, the General Plan includes area plans that outline goals and objectives for specific geographic and community planning areas (such as the Showplace Square/Potrero Area Plan, discussed in the following subsection).

The Planning Department, Zoning Administrator, Planning Commission, and other City decision-makers will evaluate the proposed project in the context of the General Plan, and as part of this

review process will consider potential conflicts. This consideration of General Plan objectives and policies will occur independent of the environmental review process, as part of the decision to approve or reject the proposed project. Any potential conflict not identified in this EIR would be considered in that context and would not alter the analysis of physical environmental impacts found in this EIR.

Two General Plan elements that are particularly applicable to planning considerations associated with the proposed project are the Urban Design and Housing elements. The Urban Design Element of the General Plan focuses on the physical character and order of the City, and is concerned both with development and preservation. The Urban Design Element also seeks to protect public views of open space and water bodies, and protect and enhance the aesthetic character of San Francisco. Objective 3 of the Urban Design Element seeks to ensure that major new development complements existing land use patterns, protects important natural resources, and preserves neighborhood character. The proposed project is consistent with the type and intensity of development envisioned for the project site (refer to *Eastern Neighborhoods Plan* and Planning Code discussions below) and would not obviously conflict with any goals, objectives, or policies in the Urban Design Element.

The key objective of the Housing Element is to promote the development of new housing in San Francisco and the retention of existing housing in a way that is protective of neighborhood identity, is sustainable, and is served by adequate community infrastructure. A particular focus of the Housing Element is on the creation and retention of affordable housing, which reflects intense demand for such housing, a growing economy (which itself puts increasing pressure on the existing housing stock), and a constrained supply of land (necessitating infill development and increased density). In general, the Housing Element supports projects that increase the City's housing supply (both market-rate and affordable housing), especially in areas that are close to the City's job centers and are well-served by transit. The proposed project, which is a mixed-use project containing housing, would not obviously conflict with any objectives or policies in the Housing Element.

EASTERN NEIGHBORHOODS PLAN

After several years of analysis, community outreach, and public review, the *Eastern Neighborhoods Plan* was adopted in December 2008. The goals of the Area Plan were to reflect local values, increase housing, maintain some industrial land supply, and improve the quality of all existing areas with future development. The *Eastern Neighborhoods Plan* was adopted in part to support housing development in some areas previously zoned to allow industrial uses, while preserving an adequate supply of space for existing and future production, distribution, and repair (PDR) employment and businesses.

The Eastern Neighborhoods rezoning and Planning Code amendments included new zoning districts that would permit PDR uses in combination with commercial uses; districts mixing residential and commercial uses and residential and PDR uses; and new residential-only districts. The districts replaced existing industrial, commercial, residential single-use, and mixed-use districts. As a result of the *Eastern Neighborhoods Plan*, the project site was rezoned to Urban Mixed Use (UMU). The *Eastern Neighborhoods Plan* also included changes to existing height and bulk districts in some areas, although these changes did not apply to the project site.

In addition to the rezoning and Planning Code text amendments, the *Eastern Neighborhoods Plan* added four new area plans to the General Plan, including the Mission Area Plan, the East South of Market Area Plan, the Showplace Square/Potrero Area Plan, and the Central Waterfront Area Plan. Each of these Area Plans articulate a holistic vision for a neighborhood, by promoting areas that are transit, bicycle and pedestrian friendly; strengthening and encouraging vibrant neighborhood-serving commercial areas; providing and maintaining community facilities and open space to ensure neighborhood livability; and increasing both the supply and variety of housing for residents, with emphasis on affordable housing. As previously discussed, the project site is located within the Showplace Square/Potrero Area Plan (**Figure III-1**) and would not obviously conflict with any objectives or policies within this subarea of the *Eastern Neighborhoods Plan*.

During the *Eastern Neighborhoods Plan* adoption phase, the Planning Commission held public hearings to consider the various aspects of the proposed area plans, and Planning Code and Zoning Map amendments. On August 7, 2008, the Planning Commission certified the *Eastern Neighborhoods Rezoning and Area Plan Final EIR* (*Eastern Neighborhoods FEIR*) by Motion 17659[1] and adopted the Preferred Project for final recommendation to the Board of Supervisors.[2] The *Eastern Neighborhoods FEIR* is a comprehensive programmatic document that presents an analysis of the environmental effects of implementation of the *Eastern Neighborhoods Plan*, as well as the potential impacts under several proposed alternative scenarios. The *Eastern Neighborhoods Draft EIR* evaluated three rezoning alternatives, two community-proposed alternatives which focused largely on the Mission District, and a "No Project" alternative. The alternative selected, or the Preferred Project, represents a combination of Options B and C. The Planning Commission adopted the Preferred Project after fully considering the environmental effects of the Preferred Project and the various scenarios discussed in the FEIR.

Individual projects that could occur in the future within the Eastern Neighborhoods area are required to undergo project-level environmental evaluation to determine if they would result in further impacts specific to the development proposal, the site, and the time of development and to assess whether additional environmental review is required. Project-level review of the 1601 Mariposa Street Mixed-Use Project is the subject of this EIR (also refer to the analysis provided in the CPE Checklist included in Appendix A). The assumptions that formed the basis for evaluation of the *Eastern Neighborhoods Plan*, the determinations provided in the *Eastern Neighborhoods FEIR*, and the project's consistency with this programmatic document are more fully explained in Chapter I,

[1] *Eastern Neighborhoods Rezoning and Area Plans Final Environmental Impact Report*, Planning Department Case No. 2004.0160E, certified August 7, 2008. The FEIR is on file for public review at the Planning Department, 1650 Mission Street Suite 400 as part of Case No. 2004.0160E, or at www.sfgov.org/site/planning_index.asp?id=67762.

[2] San Francisco Planning Commission Motion 17659, August 7, 2008. This document is available online at www.sfgov.org/site/uploadedfiles/planning/Citywide/Eastern_Neighborhoods/Draft_Resolution_Public%20Parcels_FINAL.pdf.

Introduction (pages 5 through 8) and Chapter IV, Setting and Impacts and Mitigation Measures (pages 86 through 87, including the Approach to Analysis discussion within each subsection).

Showplace Square/Potrero Area Plan

The project site is in the area covered by the Showplace Square/Potrero Area Plan, which is also a subarea of the Eastern Neighborhoods Plan (see discussion below). The Showplace Square/Potrero Area Plan covers an area that is roughly bound by Bryant and 7th Streets to the north, 7th Street and the I-280 corridor to the east, portions of Cesar Chavez, 26th and 25th Streets to the south; and Potrero Avenue to the west (see **Figure III-1**). The vision outlined in the Showplace Square/Potrero Area Plan for the pattern of development in this area is based on the need to increase opportunities for new housing development, particularly affordable housing; retain space for production, distribution and repair (PDR) activities; protect established affordable residential areas; maintain vibrant neighborhood commercial areas on Potrero Hill; maintain existing residential areas; and allow for new neighborhood-serving retail and businesses at the base of Potrero Hill near Jackson Playground.

Objectives of the Showplace Square/Potrero Area Plan that relate to the proposed project include: encourage transition of portions of Showplace/Potrero to a more mixed use and neighborhood-serving character, while protecting the core of design-related PDR uses (Objective 1.1); maximize development potential in keeping with neighborhood character (Objective 1.2); retain the role of Showplace Square as an important location for Production, Distribution, and Repair (PDR) activities, focusing in particular on design related activities (Objective 1.7); ensure that a significant percentage of new housing created in the area is affordable to people with a wide range of incomes (Objective 2.1); require a significant number of units in new developments to have two or more bedrooms (Objective 2.3); promote an urban form and architectural character that supports walking and sustains a diverse, active and safe public realm (Objective 3.2); facilitate movement of automobiles by managing congestion and other negative impacts of vehicle traffic (Objective 4.9);

Note: Together the Mission, Potrero Hill, Showplace Square, Central Waterfront and East SOMA make up the Eastern Neighborhoods Plan Areas.

FIGURE III-1

N

Project Site

NOT TO SCALE

SOURCE: SAN FRANCISCO PLANNING DEPARTMENT, 2014.

1601 Mariposa Street Mixed Use Project EIR
Existing Planning Context Map

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and ensure that new development includes high quality private open space (Objective 5.2). The proposed project would develop a mixed-use residential development on a site that contains existing commercial, office, warehouse and associated surface parking uses. The project would provide affordable housing, include a mix of residential units (approximately 40 percent of which would be two-bedroom units or more); increased access for pedestrian circulation; and on-site open space.

Although the proposed project would contribute to the loss of PDR space in the area, this impact was identified as significant and unavoidable in the *Eastern Neighborhoods FEIR* and no new impacts related to PDR loss would result from the proposed project (see discussion in the CPE Checklist, Appendix A, pages 33 through 35). In addition, the project would increase traffic congestion in the area, and this issue is addressed in Section IV.A, Transportation and Circulation. These impacts are mitigated to the extent feasible, but were found to be significant and unavoidable. However, the proposed project would not obviously conflict with any objectives or policies in the Showplace Square/Potrero Area Plan.

SAN FRANCISCO PLANNING CODE

The San Francisco Planning Code (Planning Code), which incorporates the City's Zoning Maps, implements the General Plan and governs permitted uses, densities, and configurations of buildings within the City. Permits to construct new buildings (or to alter and demolish existing buildings) may not be issued unless: 1) the proposed project conforms to the Planning Code; or 2) allowable exceptions are granted pursuant to provisions of the Planning Code.

The proposed project is generally consistent with the uses, density, unit mix, open space, and parking requirements of the Planning Code. The project sponsor is requesting four modifications, waivers, and exceptions from the Planning Commission in its Large Project Authorization application for the proposed project: 1) a modification for configuration of the project's rear yard; 2) a waiver of the horizontal mass reduction along Arkansas Street, 18th Street and Carolina Street; 3) an exception for use of three on-street loading spaces in lieu of two off-street loading spaces; and 4) an exception for

the 17-foot commercial floor-to-floor height for some areas of the proposed commercial space, as described in Chapter II, Project Description, pages 54 through 55.

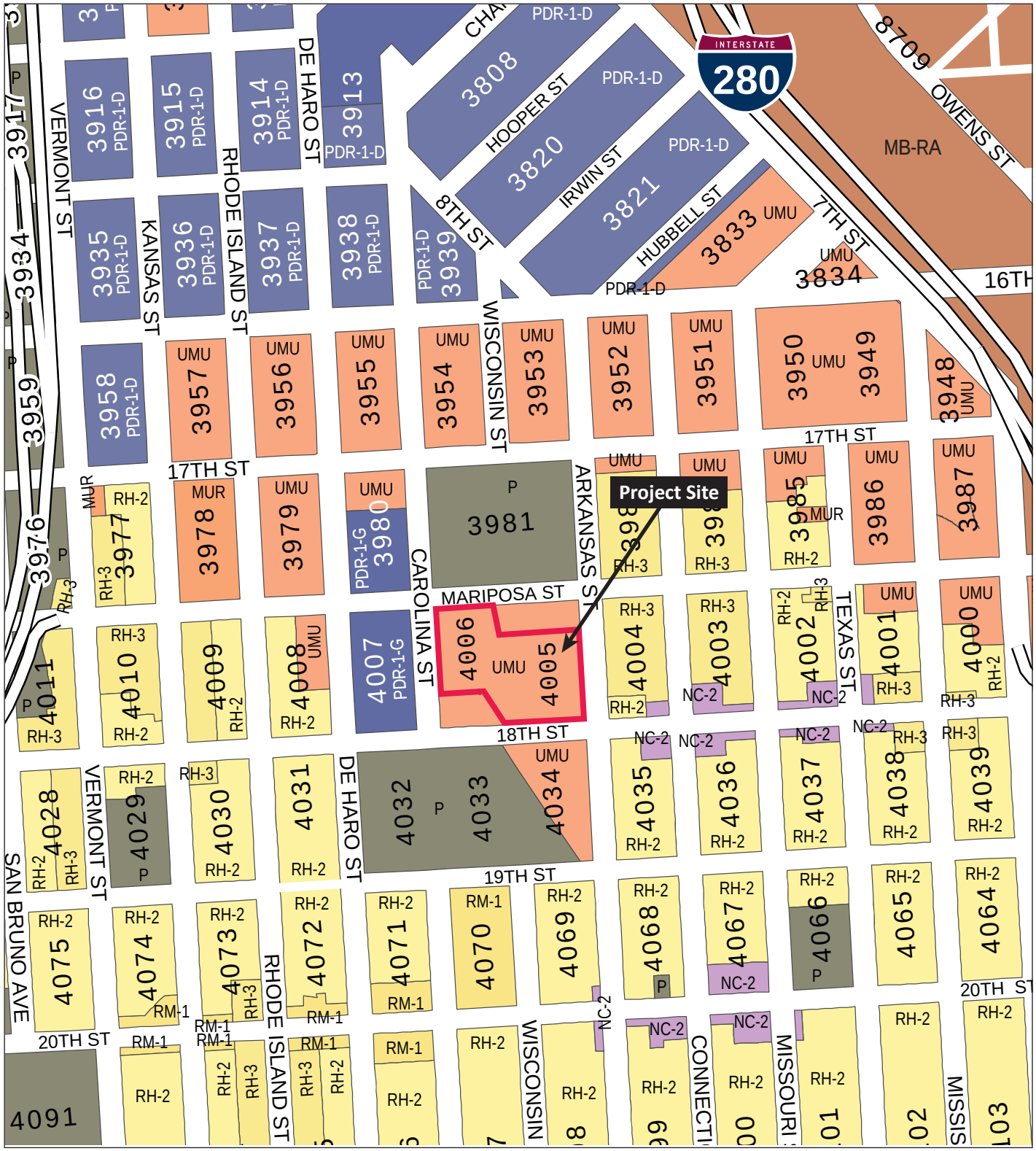
The following section describes the proposed project's consistency with the land use districts and use, bulk, height, and other regulations associated with the project site. **Figure III-2** and **Figure II-3** show the land use and bulk/height districts applicable to the project site and vicinity.

Use District

As previously discussed, the project site is located within the UMU District. The UMU District is intended to promote a vibrant mix of uses while maintaining the characteristics of this formerly industrially-zoned area. It is also intended to serve as a buffer between residential districts and PDR districts in the Eastern Neighborhoods. Within the UMU District, allowed uses include production, distribution, and repair uses such as light manufacturing, home and business services; arts activities; warehouse; and wholesaling. Additional permitted uses include retail, educational facilities, and nighttime entertainment. Housing is also permitted, but is subject to higher affordability requirements. Family-sized dwelling units are encouraged.

Within the UMU District, there is no minimum or maximum density requirement for residential use (subject to height and bulk controls; Section 843.24) and at least 40 percent of all dwelling units must contain two or more bedrooms (Section 843.25). The proposed project includes 320 units (76 studios, 116 of one-bedrooms, 118 two-bedrooms, and 10 three-bedrooms) and would comply with this requirement. Retail sales and services are permitted for up to 25,000 square feet per lot; the proposed project would provide up to 10,000 square feet of ground floor commercial uses on the site.

Projects proposing ten or more dwelling units are subject to Inclusionary Affordable Housing Program outlined in Section 415 of the Code. The project sponsor would fulfill this requirement by providing up to 46 units on-site to comply with the Inclusionary Affordable Housing Program.



USE DISTRICTS

- P — Public

Residential, House Character

- RH-2 — Two Units Per Lot
- RH-3 — Three Units Per Lot

Residential, Mixed (Houses/Apartments)

- RM-1 — Low Density (1 Unit per 800 sf)

Neighborhood Commercial

- NC-2 — Small Scale (2 Commercial Stories)

Eastern Neighborhoods Mixed Use

- MUR — Mixed Use, Residential
- UMU — Urban Mixed Use

Redevelopment Agency

- MB-RA — See Mission Bay Redevelopment Plans

Production, Distribution & Repair

- PDR-1-D — Design
- PDR-1-G — General

4005 — Block Number

Project Site

0 250 500 FEET

FIGURE III-2

1601 Mariposa Street Mixed Use Project EIR

Zoning Map

SOURCE: CITY & COUNTY OF SAN FRANCISCO, 2014.

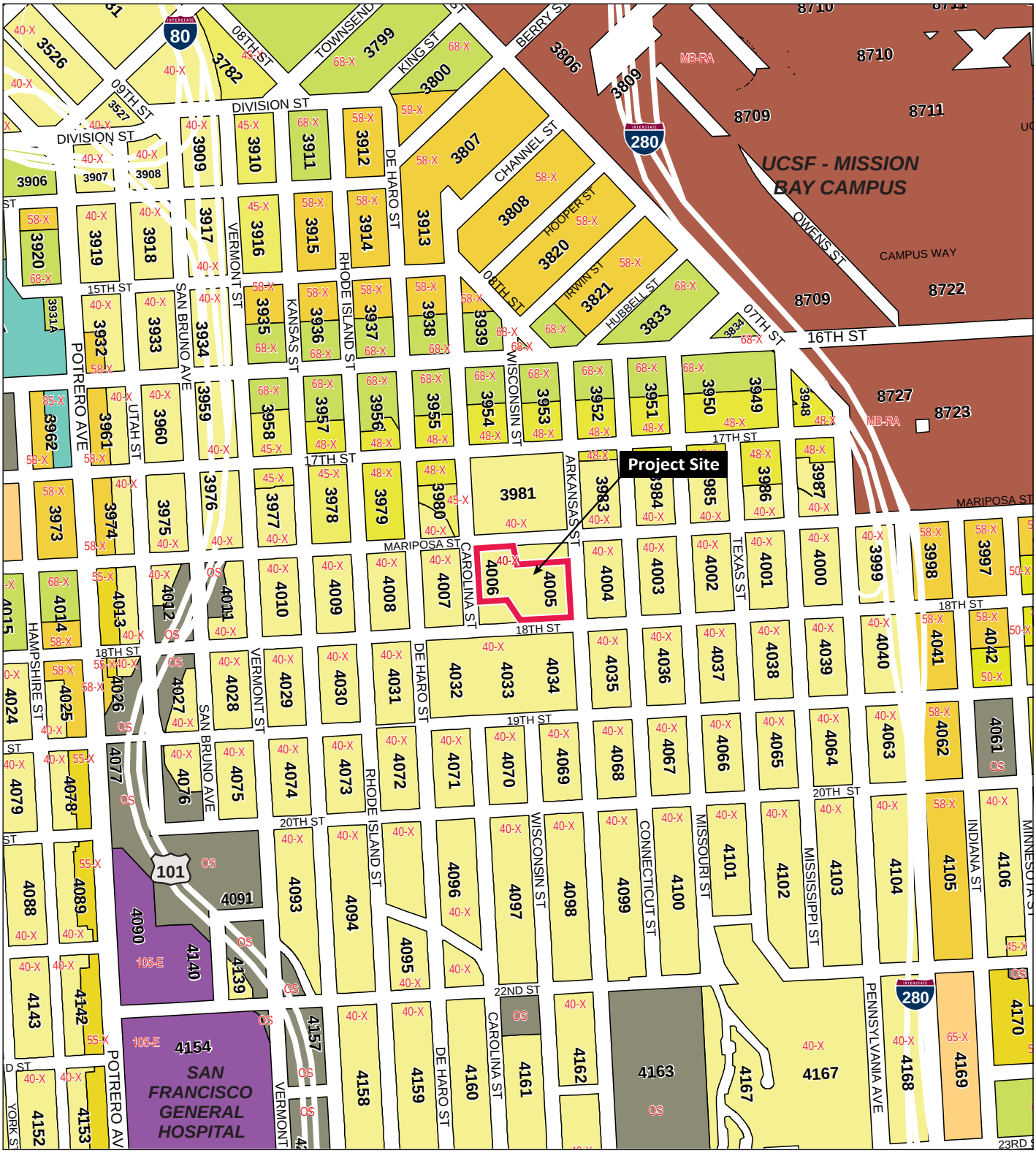


FIGURE III-3

Project Site

OS — *"Open Space"* District

"Numbers" are Height Limits in feet. See Planning Code Section 250 and following.

"Letters" refer to Bulk Limits. See Planning Code Section 270.

00-Z-1 — *"Suffix Numbers"* identify districts in which special regulations apply. See Planning Code Sections 263 and following.

3725 Block Number

0 1000 2000 FEET

SOURCE: CITY & COUNTY OF SAN FRANCISCO, 2014.

1601 Mariposa Street Mixed Use Project EIR

Height and Bulk Districts

The proposed project would redevelop the site with a mix of residential and ground floor commercial uses. With approval of the requested modification, waiver and exceptions noted below, the proposed project would be consistent with the type and intensity of development envisioned for the site and would not obviously conflict with the zoning controls applicable to the project site.[3, 4]

Setbacks

The minimum rear yard depth within the UMU District is required to be equal to 25 percent of the total depth of the lot on which the building is situated, but in no case less than 15 feet. As discussed in Chapter II, Project Description, rather than a single rear yard covering 25 percent of the site, the project proposes instead a series of private courtyards and the publicly-accessible mid-block pedestrian passage, together covering approximately 37.5 percent of the site. Sections 134(f) and 329(d)(7) of the Planning Code authorize the Planning Commission to modify the rear yard configuration of large projects in the UMU zoning district, "provided it meets certain conditions that: 1) a comparable, but not necessarily equal amount of square footage as would be created in a code conforming rear yard is provided elsewhere within the development; 2) the proposed new or expanding structure will not significantly impede the access to light and air from adjacent properties or adversely affect the interior block open space formed by the rear yards of adjacent properties; and 3) the modification request is not combined with any other residential open space modification or exposure variance for the project, except exposure modifications in designated landmark buildings." The project sponsor is seeking a modification to this requirement because the project site is irregularly shaped on a block with frontages on all streets; therefore, it would be difficult to provide a

[3] Adam Varat, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Citywide Planning and Policy Analysis, 1601 Mariposa Street, December 3, 2013. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[4] Jeff Joslin, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Current Planning Analysis, 1601 Mariposa Street, January 2, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

single rear yard covering 25 percent of the site. The project sponsor is requesting the rear yard modification in order to provide usable open space for residents and the public.

Interior Floor-to Floor Heights

Planning Code Section 145.1(c)(4)(A) requires that ground floor non-residential uses in UMU Districts have a minimum floor-to-floor height of 17 feet, as measured from grade. Section 329(d)(11) authorizes the Planning Commission to grant exceptions to this requirement. The project sponsor is requesting that the Planning Commission grant an exception for the floor to floor height of of two commercial spaces along Carolina Street and 18th Street (which would be 10 to 12 feet) where the elevation of the sidewalk slopes uphill, and the non-residential space floor remains level to meet ADA accessibility requirements.

Loading

The project sponsor is requesting that the Planning Commission grant an exception to the off-street loading requirement. This issue is further addressed in the Vehicle and Bicycle Parking and Loading subsection, below.

Horizontal Building Mass

Planning Code Section 270.1 requires buildings exceeding 200 feet in length in the UMU district to incorporate a mass reduction break in the building to reduce the horizontal scale of the building into discrete sections not more than 200 feet in length. The project's Arkansas Street frontage is 295 feet in length, the 18th Street frontage is 229 feet in length, and the Carolina Street frontage is 299 feet in length; therefore, these frontages are subject to Section 270.1. This section of the Planning Code requires the mass reduction breaks to be not less than 30 feet in width, 60 feet in depth, and extend up to the sky from a level not higher than 25 feet above grade or the third story, whichever is lower; and result in discrete building sections with a maximum plan length along the street frontage not greater than 200 feet. Pursuant to Section 270.1(b) and 327(d)(3), the Planning Commission may modify or waive this requirement for large projects in the UMU district, providing they meet certain criteria that: 1) no more than 50 percent of the required mass is reduced unless special circumstances

are evident; 2) the depth of any mass reduction breaks provided is not less than 15 feet from the front facade, unless special circumstances are evident; 3) the proposed building envelope can be demonstrated to achieve a distinctly superior effect of reducing the apparent horizontal dimension of the building; and 4) the proposed building achieves unique and superior architectural design. The project sponsor is requesting that the Planning Commission waive the horizontal mass reduction requirement because of the proposed low height of the building (up to 40 feet), because of the proposed residentially-scaled articulation of the facades, and because the lateral variation in building heights along Arkansas, 18th and Carolina Streets (as shown in **Figures II-12 and II-13**) are proposed to reduce the horizontal scale of those building frontages more than a single horizontal mass reduction would.

Height and Bulk District

The City's height and bulk districts are intended to serve a variety of urban design purposes. Generally, these height and bulk districts seek to relate the scale of new development to existing development, in order to prevent the new development from overwhelming or dominating the City's skyline. The regulation of height and bulk is also intended to promote harmony in the visual relationships and transitions between new and existing development. The site is located in the 40-X Height and Bulk District. Per Article 2.5 of the Planning Code, the 40-X Height and Bulk District allows a maximum building height of 40 feet across the project site, as measures from the curb level adjacent to a building (pursuant to Planning Code Section 102.12), with no bulk restrictions.

Building heights for both buildings would range from 31 to 40 feet, and from generally three to four stories along the project site (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height, and two stair overruns up to 10 feet in height), measured from the average adjacent curb level. A brief five-story element (of approximately four units) would be located within the interior of the site, facing the pedestrian pathway. Parapets up to four feet in height, elevator overruns up to 16 feet in height, and stair overruns up to 10 feet in height (provided they cover no more than 20 percent of the roof area) are exempt from the 40-foot height limit. The five elevator and two stair overruns would cover approximately one percent of the roofs of the two

buildings. Exterior elevations of the proposed development are shown in Figures II-12, II-13, and II-14 in Chapter II, Project Description.

Street Trees

The purpose of Planning Code Section 138.1 is to "establish requirements for the improvement of the public right-of-way associated with development projects, such that the public right-of-way may be safe, accessible, convenient and attractive to pedestrian use and travel by all modes of transportation consistent with the San Francisco General Plan, achieve best practices in ecological stormwater management, and provide space for public life and social interaction, in accordance with the City's 'Better Streets Plan.'" The Better Streets Plan governs the design, location, and dimensions of all pedestrian and streetscape items in the public right-of-way, including crosswalks, bulbouts, street furniture, planters, and trees. One 24-inch box size street tree must be installed for each 20 feet of frontage along each street or alley, with any remaining fraction of 10 feet or more of frontage requiring an additional tree, unless a waiver is granted because inadequate sidewalk width, utilities, or driveways make installation impractical.

It is anticipated that 18 of the 26 protected street trees on the site (17 existing and nine anticipated to be planted prior to project construction) would be removed with development of the proposed project and the remaining eight trees would be retained. Therefore, approximately 27 new street trees would be planted on all four street frontages as part of the proposed project, for a total of approximately 35 street trees.

Open Space

Section 135 of the Planning Code specifies the amount of usable open space required to be supplied by new residential development in the Eastern Neighborhoods Mixed Use Zoning Districts. "Private usable open space" is defined as areas private to and designed for use by only one dwelling unit; "common usable open space" is defined as an area or areas designed for joint use by two or more dwelling units.

In Eastern Neighborhoods Mixed Use Zoning Districts, 80 square feet of usable open space per dwelling unit is required if all open space is to be private or common. If publicly accessible open space is provided, 54 square feet per dwelling unit is required (Table 135B). Open space requirements for non-residential uses within the Eastern Neighborhoods are governed by Planning Code Section 135.3 (Table 135.3). For retail space, one square foot of usable open space per 250 feet of occupied floor area associated with new square footage is required.

Per Section 135.3, in the Eastern Neighborhoods Mixed Use Districts, the open space requirements may be fulfilled by providing privately-owned public open space, subject to the following: 1) the amount of open space required could be reduced by 33 percent if it is publicly accessible usable open space; 2) it meets the requirements specified in Section 135(h), Publicly-Accessible Open Space Standards; and 3) up to 50 percent of the publicly accessible open space may be provided off-site if it is within 800 feet of the project site.

The required open space for the 320 units on the site would vary depending on the combination of private and publicly accessible open space provided. If all residential open space were to be private, about 25,600 gsf would be required for the residential component of the project, based on the requirement for 80 gsf of usable open space per residential unit. If all residential space were to be publicly accessible, about 17,280 gsf would be required for the residential component of the project, based on the requirement for 54 gsf per publicly accessible private open space per residential unit. In addition, the proposed project would be required to provide 40 gsf of usable open space for the 10,000 gsf of commercial space, based on the requirement for 250 gsf of open space required for non-residential retail use.

The proposed project would include 39,195 gsf of open space on the project site, 21,505 gsf of which would consist of publicly accessible open space for use by project residents, employees, and the public. This amount would exceed the open space requirements of the Planning Code. The remaining 17,690 gsf would be for use by residents only. The proposed project would also provide indoor recreational space, including a fitness gym, yoga studio, and a flexible activity space.

Vehicle and Bicycle Parking and Loading

Planning Code Section 151.1 permits up to one space per 2-bedroom unit and 0.75 space per remaining dwelling unit. Within the UMU zone, there is no minimum requirement to provide off-street parking for commercial uses, although a maximum of one space for every 200 square feet of restaurant use and one space for every 500 square feet of retail use is allowed. Planning Code Section 155(i) requires that one handicap-accessible parking space be provided for every 25 off-street parking spaces provided. Planning Code Section 166 requires two car share spaces for every 200 residential dwelling units, plus one additional space for each additional 200 units. Additionally, parking spaces are not "bundled" with the residential units. In other words, residents would have the option to rent or purchase a parking space, but one would not be automatically provided with the residential unit. Therefore, the proposed project would be permitted to have up to 272 residential off-street parking spaces and up to 42 commercial off-street parking spaces.The proposed project would comply with Section 151.1 and provide between 265 and 275 off-street parking spaces (including 10 ADA-compliant spaces, 10 to 20 spaces for the commercial uses, and between two and six car share spaces) and result in an increase of four on-street parking spaces.

Under Planning Code Section 155.2, the residential portion of the proposed project (320 units) would be required to provide 155 Class 1 and 16 Class 2[5] bicycle parking spaces. Under Planning Code Section 155.4 the residential portion of the proposed project would be exempt from providing showers and clothes lockers,[6] as would the retail portion because it contains less than 25,000 gross square feet. As proposed, the proposed project would provide more than the required amount, approximately 441 Class 1 bicycle parking spaces and up to 28 Class 2 bicycle parking spaces in

[5] Class 1 bicycle parking spaces are defined as facilities which protect the entire bicycle, its components and accessories, against theft and against inclement weather, including wind-driven rain. Class 2 bicycle parking spaces are defined as standard racks to which you can lock a bicycle.

[6] San Francisco Planning Code; Section 155.2, Table 155.2 states for residential developments: "For projects over 100 dwelling units, 100 Class 1 spaces plus 1 Class 1 space for every 4 dwelling units over 100." 320 dwelling units equals 155 required bicycle parking spaces.

sidewalk racks.[7,8] The Class 1 bicycle parking areas would be accessed from pedestrian access points on all four facing streets and from the parking facility access points along the western side of Arkansas Street and the north side of 18th Street.

Planning Code Section 152.1 requires two off-street loading spaces for residential projects of between 200,000 and 500,000 gsf. The Planning Commission is authorized by Sections 152.1 and 329(d)(4) to grant an exception to the off-street loading requirement "if it finds that the design of the project, particularly ground floor frontages, would be improved and that such loading could be sufficiently accommodated on adjacent streets and alleys." The project sponsor is requesting that the Planning Commission grant an exception to the off-street loading requirement because the design of ground floor frontages would be improved without off-street loading docks and loading can be sufficiently accommodated with three on-street spaces on Mariposa, Arkansas and Carolina Streets.

Given the above, the proposed project would not substantially conflict with the parking, bicycle parking and loading requirements outlined in the Planning Code.

ACCOUNTABLE PLANNING INITIATIVE

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, and was also included in the General Plan. The Priority Policies, which provide general policies and objectives to guide certain land use decisions, generally relate to physical environmental issues, and each of these issues are addressed in this EIR or in the CPE Checklist included in Appendix A. These policies, and the sections of this EIR or the CPE Checklist that address the environmental issues associated with the policies are:

[7] Subject to San Francisco Municipal Transit Agency (SFMTA) approval.

[8] Calculation based on gross square footage, whereas requirement is based on occupied square footage, so the requirement may be less.

- That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses enhanced (see Section 1, Land Use and Land Use Planning in the CPE Checklist);
- That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods (see Section 1, Land Use and Land Use Planning in the CPE Checklist);
- That the City's supply of affordable housing be preserved and enhanced (see Chapter II, Project Description of the EIR and Section 3, Population and Housing of the CPE Checklist);
- That commuter traffic not impede Muni transit services or overburden our streets or neighborhood parking (see Section IV.A, Transportation and Circulation of the EIR);
- That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced (see Section 1, Land Use and Land Use Planning in the CPE Checklist);
- That the City achieve the greatest possible preparedness to protect against injury and the loss of life in an earthquake (see Section 14, Geology and Soils in the CPE Checklist);
- That landmarks and historic buildings be preserved (see Section 4, Cultural and Paleontological Resources in the CPE Checklist); and
- That our parks and open space and their access to sunlight and vistas be protected from development (see Section IV.B, Shadow of the EIR).

Prior to issuing a permit for any project which requires an EIR under CEQA, and prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action which 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. As with policies in the General Plan, Priority Policies may conflict with one another, depending on the project; decision-makers, in

considering whether to approve the proposed project, would need to assess whether the project, on balance, is consistent with the applicable Priority Policies when adopting the necessary findings.

Potential conflicts of the proposed project in regard to transportation and circulation, shadow, recreation, and hazards associated with the Priority Policies are discussed in the relevant topical sections of this EIR. The project case reports and approval motions will contain the Planning Department's comprehensive project analysis and findings regarding consistency of the proposed projects with the Priority Policies.

CLIMATE ACTION PLAN

In February 2002, the San Francisco Board of Supervisors passed the Greenhouse Gas Emissions Reduction Resolution (Number 158-02), committing the City and County of San Francisco to a greenhouse gas (GHG) emissions reductions goal of 20 percent below 1990 levels by the year 2012. The resolution also directs the San Francisco Department of the Environment, the San Francisco Public Utilities Commission (SFPUC), and other appropriate City agencies to complete a local action plan targeting GHG emission reduction activities. In September 2004, the San Francisco Department of the Environment and the SFPUC published the Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Emissions (Climate Action Plan).

The Climate Action Plan examines the causes of global climate change and human activities that contribute to global warming and provides projections of climate change impacts on California and San Francisco based on recent scientific reports; presents estimates of San Francisco's baseline GHG emissions inventory and reduction targets; describes recommended emissions reduction actions in the key target sectors – transportation, energy efficiency, renewable energy, and solid waste management – to meet stated goals by 2012; and presents next steps required over the near term to implement the Climate Action Plan. Although the Board of Supervisors has not formally committed the City to perform the actions addressed in the Climate Action Plan, and many of the actions require further development and commitment of resources, the Climate Action Plan serves as a blueprint for GHG emission reductions, and several actions are now in progress. The proposed project, by

intensifying land uses in a neighborhood that is well-served by transit and by incorporating energy efficiency measures, would not obviously conflict with the Climate Action Plan.

BETTER STREETS PLAN

The Better Streets Plan, adopted in 2010, describes a vision for the future of San Francisco's pedestrian environment and included of a set of City-wide streetscape and pedestrian policies and guidelines to help accomplish this vision. The Planning Department, Department of Public Works, San Francisco Municipal Transportation Agency, and SFPUC were joint project sponsors of the Plan on behalf of the City and County of San Francisco. The Better Streets Plan seeks to balance the needs of all City street users. The Plan identifies goals, objectives, policies, and design guidelines, as well as future strategies to improve the pedestrian realm in San Francisco. Pedestrian areas mainly include sidewalks and crosswalks and, in some instances, portions of roadways. Major concepts covered in the Better Streets Plan range from increased pedestrian safety and accessibility features to improved ecological performance of streets and streetscape greening.

The proposed project would not physically alter the existing vehicular circulation pattern or remove travel-ways on any major pedestrian or vehicle thoroughfares adjacent to the project site. The proposed project would provide a publicly-accessible mid-block pedestrian pathway to provide access between Mariposa and 18th Streets. In addition, corner bulbouts and widened sidewalks would be included in the project to enhance pedestrian mobility and comfort. Therefore, the proposed project would not obviously conflict with the Better Streets Plan.

TRANSIT FIRST POLICY

The City of San Francisco's Transit First policy, adopted by the Board of Supervisors in 1973 and contained within Section 8A.115 of the City Charter, was developed in response to the damaging impacts over previous decades of freeways on the City's urban character. The policy is aimed at restoring balance to a transportation system long dominated by the automobile, and improving overall mobility for residents and visitors whose reliance chiefly on the automobile would result in severe transportation deficiencies. It encourages multi-modalism, the use of transit, and other

alternatives to the single-occupant vehicle as modes of transportation, and gives priority to the maintenance and expansion of the local transit system and the improvement of regional transit coordination. The project site is located in close proximity to numerous transit routes and is easily accessible by bicycle and sidewalks. Additionally, bike storage and parking would be provided on the project site. Therefore, the project would not obviously conflict with the Transit First Policy.

SUMMARY

In general, the proposed project is consistent with policies in the relevant planning documents described in this chapter related to the development of new housing, provision of active, pedestrian-oriented neighborhoods, and the development of a mixture of compatible land uses. The project would not obviously conflict with General Plan policies relating to urban design or housing. With approval of the requested waivers, modifications, and exceptions, the project would not obviously conflict with the Planning Code or other applicable planning documents.

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IV. ENVIRONMENTAL SETTING AND IMPACTS

This chapter contains an analysis of each issue that was identified in the Community Plan Exemption (CPE) Checklist (included in Appendix A) as a topic for analysis in the 1601 Mariposa Street Mixed Use Project EIR. Although not identified in the CPE Checklist for further analysis, the additional topic of recreation is also considered in this chapter. Sections A through D of this chapter describe the environmental setting of the project site related to each specific environmental issue evaluated in the EIR and the impacts which may result or which project implementation may potentially affect. Mitigation measures to reduce potential impacts are identified, where appropriate.

The project sponsor, Related/Mariposa Development Co. LLC, filed an application February 28, 2013, for the environmental evaluation of the proposed project. Based on the CPE Checklist published on May 14, 2014, the San Francisco Planning Department determined that an EIR is required. The CPE Checklist concluded that many of the physical environmental effects of the proposed project would be less than significant, or that mitigation measures identified in the *Eastern Neighborhoods FEIR*, agreed to by the project sponsor and required as a condition of project approval, would reduce significant impacts to a less-than-significant level. CEQA does not require further assessment of the project's less-than-significant impacts, which fall into the following topical areas: Land Use and Land Use Planning; Aesthetics; Population and Housing; Cultural and Paleontological Resources; Noise; Air Quality; Greenhouse Gas Emissions; Wind; Utilities and Service Systems; Public Services; Biological Resources; Geology and Soils; Hydrology and Water Quality; Mineral and Energy Resources; and Agriculture and Forest Resources. However, the CPE Checklist found potentially significant project-specific effects and/or cumulative impacts related to: Transportation and Circulation; Shadow; and Hazards and Hazardous Materials. Accordingly, these topics are evaluated in this EIR in separate topical sections. Although the CPE Checklist determined that impacts related to recreation would be less than significant, this topic is also further evaluated in this EIR.

PUBLIC RESOURCES CODE SECTION 21099

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. Among other provisions, SB 743 amended CEQA by adding Public Resources Code Section 21099 regarding the analysis of aesthetics and parking impacts for certain urban infill projects in transit priority areas,[1] as discussed below.

Aesthetics and Parking Analysis

Public Resources Code Section 21099(d), effective January 1, 2014, provides that, "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment." Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

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

The proposed project meets each of the above three criteria and thus, this EIR does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA.[2]

[1] A "transit priority area" is defined in Section 21099 of the California Public Resources Code as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code 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. A map of San Francisco Transit Priority Areas can be found on-line at: http://sfmea.sfplanning.org/Map%20of%20San%20Francisco%20Transit%20Priority%20Areas.pdf.

[2] San Francisco Planning Department, Transit-Oriented Infill Project Eligibility Checklist for 1601 Mariposa, February 5, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

Public Resources Code Section 21099(e) states that a Lead Agency maintains the authority to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers and that aesthetic impacts do not include impacts on historical or cultural resources. As such, there will be no change in the Planning Department's methodology related to design and historic review.

The Planning Department recognizes that the public and decision-makers nonetheless 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 information that would have otherwise been provided in an aesthetics section of the EIR (i.e., "before" and "after" visual simulations) has been included in Chapter II, Project Description, of this EIR. However, this information is provided solely for informational purposes and will not be used to determine the significance of the environmental impacts of the project, pursuant to CEQA.

Similarly, the Planning Department acknowledges that parking conditions may be of interest to the public and the decision-makers. Therefore, this EIR presents parking demand analysis for informational purposes and considers any secondary physical impacts associated with constrained supply (e.g., queuing by drivers waiting for scarce onsite parking spaces that affects the public right-of-way) as applicable in the transportation analysis in Chapter IV.A, Transportation and Circulation.

Level of Service Analysis

Public Resources Code Section 21099 requires that the State Office of Planning and Research (OPR) develop revisions to the *CEQA Guidelines* establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the "reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also allows OPR to develop alternative metrics outside of transit priority areas. The statute provides that, upon certification and adoption of the revised *CEQA Guidelines* by the Secretary of the Natural Resources Agency, "automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment". In other words, LOS generally shall not be used as a significance threshold under CEQA. These changes would need to be adopted by the Secretary of the Natural

Resources Agency and are anticipated to be effective sometime in 2015. Therefore, the LOS-related provisions of Public Resources Code Section 21099 are not yet applicable to the proposed project, and this EIR analyzes the traffic-related impacts of the project as they pertain to LOS.

DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The guidelines 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. Each impact and mitigation measure section of this chapter is prefaced by certain criteria, which have been developed by the San Francisco Planning Department for use in determining whether an impact is significant.

Impacts are categorized by type of impact as follows:

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

FORMAT OF ENVIRONMENTAL ANALYSIS

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

- **Setting.** The setting section for each environmental topic provides a description of the baseline physical setting for the project site and its surroundings at the beginning of the environmental review process (e.g., existing land uses, noise environment, traffic conditions).
- **Regulatory Framework.** The regulatory framework provides an overview of the federal, State, and local regulations (as applicable) that relate to each specific environmental topic.
- **Impacts and Mitigation Measures.** The impacts and mitigation measures section for each environmental topic presents a discussion of the impacts (i.e., the changes to baseline physical environmental conditions) that could result from implementation of the proposed 1601 Mariposa Street Mixed Use Project. The section begins with the criteria of significance, which establish a way of determining whether an impact is significant. The latter part of this section presents the impacts from the proposed project and mitigation measures, if required. The impacts of the proposed project are organized into separate categories based on the criteria listed in each topical section. Project-specific impacts are discussed first, followed by cumulative impacts.

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

TR: Transportation and Circulation

WS: Shadow

RE: Recreation

HZ: Hazards and Hazardous Materials

APPROACH TO ANALYSIS

The analysis of each issue topic includes an evaluation of the potential environmental impacts associated with implementation of the proposed project. As described in Chapter II, Project Description, the proposed project would result in the construction of new residential, commercial, open space, and associated infrastructure and parking. Project related construction and operation impacts are identified, where applicable in each subsection. In addition, remediation activities that would occur at the project site prior to building demolition and building construction are also evaluated for associated environmental impacts.

In addition, at a programmatic level, the *Eastern Neighborhoods FEIR* identified potential environmental impacts associated with implementation of the *Eastern Neighborhoods Plan*, which encompasses the project site. Therefore, impacts and mitigation measures identified in the *Eastern Neighborhoods FEIR* are applicable to future development projects within the *Eastern Neighborhoods Plan* area boundaries, pending site-specific, project-level review of individual development proposals. The "Approach to Analysis" subsection for each topical section of the EIR identifies potential impacts and mitigation measures identified in the *Eastern Neighborhoods FEIR* and indicates whether or not those mitigation measures would apply to the proposed project, or if the project would contribute to the *Eastern Neighborhoods FEIR* identified impacts.

APPROACH TO CUMULATIVE ANALYSIS

CEQA defines cumulative impacts as "two or more individual effects, which, when considered together, are considerable, or which can compound or increase other environmental impacts." Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate potential environmental impacts that may be individually limited but cumulatively significant. These impacts could result from the proposed project alone, or together with other projects. The *CEQA Guidelines* state: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects." Cumulative impacts could result from individually minor but collectively significant projects taking place over time.

For the evaluation of cumulative impacts, CEQA allows the use of either a list of past, present, or reasonably anticipated relevant projects, including projects outside the control of the lead agency, a summary of the projections in an adopted planning document, or a combined list-based and growth projections approach. For the 1601 Mariposa Street Mixed Use Project, the cumulative analysis primarily relies on the cumulative growth projections assumptions found in the *Eastern Neighborhoods FEIR*, as described below.

The *Eastern Neighborhoods FEIR* found that implementation of the *Eastern Neighborhoods Plan* could result in a substantial amount of growth within the *Eastern Neighborhoods Plan* area, resulting in an increase of approximately 7,400 to 10,000 households by the year 2025. To date, approximately 2,600 new residential units have been developed within the Plan area, and 4,100 additional residential units are currently being planned for within the Plan area.[3] Growth that has occurred within the Plan area since adoption of the *Eastern Neighborhoods FEIR* has been planned for and anticipated and the effects of that growth were considered in the *Eastern Neighborhoods FEIR*. The proposed project is consistent with and within the growth projections anticipated in the Eastern Neighborhoods Plan and FEIR. Therefore, the cumulative assumptions provided within the *Eastern Neighborhoods FEIR* are applicable to development of the project site.

The specific approach to the cumulative analysis is discussed in each topical subsection of this chapter. Cumulative projects known to the Planning Department that are within the immediate vicinity of the 1601 Mariposa Street project site that were not anticipated in the *Eastern Neighborhoods FEIR*, but which could combine with the proposed project to create a cumulatively considerable impact are specifically noted. Cumulative projects consist of those projects that are reasonably foreseeable and that either have an application on file with the Planning Department (private projects) or have an identified funding source (for public projects).

[3] "Currently being planned for projects" include projects that have submitted applications with the Planning Department.

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A. TRANSPORTATION AND CIRCULATION

This section discusses the anticipated effects of the proposed 1601 Mariposa Street Mixed Use Project on the transportation and circulation system within the vicinity of the project site and is based on the Transportation Impact Study[1] (TIS) prepared for the project. The transportation analysis summarized here and presented in the TIS is consistent with the analysis contained *Eastern Neighborhoods FEIR* and with the City's *Transportation Impact Analysis Guidelines for Environmental Review* (SF Guidelines).[2] As discussed in the Transportation and Circulation section of the CPE Checklist (see page 41, Appendix A) the proposed project could result in significant impacts related to transportation and circulation.

Environmental Setting

The irregularly-shaped project site comprises a portion of the two existing city blocks bounded by Mariposa Street to the north, Arkansas Street to the east, 18th Street to the south, and Carolina Street to the west in the San Francisco's Potrero Hill neighborhood. The project site fronts on all four City streets and is also bordered by the existing Live Oak School and office building to the northeast and commercial buildings to the southwest.

The site is completely developed with three separate one- and two-story structures (plus two sheds and a trailer), 100 surface parking spaces, 15 bus parking spaces, and six loading spaces. The site is occupied by a variety of commercial, office, warehouse tenants, and automotive uses (i.e., auto parts supply and bus parking). Pedestrian access to the site is currently provided by various building entrances on Mariposa, Carolina, and 18th Streets, as well as two vehicle driveways which provide access to interior building entrances. Vehicular access to off-street parking spaces within the interior of the site is provided by two access points located on Mariposa and 18th Streets.

[1] DKS Associates, *1601 and 1677 Mariposa Street/485 Carolina Street, Related California Residential Project, Revised Final Transportation Impact Study*, November 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

[2] City and County of San Francisco, Transportation Impact Analysis Guidelines for Environmental Review, October 2002.

From the project site, the transportation study area extends approximately two blocks north to 16th Street, six blocks east to Interstate 280 (I-280), two blocks south to 20th Street, and four blocks west to Vermont Street (see **Figure IV.A-1**).

This section provides a description of the existing transportation conditions in the vicinity of the project site. Included in this section are descriptions of existing roadway, circulation, transit, pedestrian, bicycle, loading, and parking conditions.

Roadway Network

The City and County of San Francisco identifies several types of roadway networks within its boundaries, including the Congestion Management Program (CMP) network, the Metropolitan Transportation System (MTS) network, Transit Preferential Streets, and Citywide Pedestrian Network. A detailed description of these regional and local access roadway networks is included below. **Figure IV.A-1** presents the roadway network in the vicinity of the project site and also identifies the study intersections discussed later in this section.

Regional Access. Regional vehicular access to the project site is provided by I-280 to the east, Interstate 80 (I-80) to the north and U.S. Highway 101 (U.S. 101) to the west. Local streets in the vicinity of the site connect to I-280 and U.S. 101.

- **U.S. 101** is an eight-lane freeway that runs north-south approximately 0.25 miles west of the project site and provides access to and from the North Bay and South Bay. U.S. 101 is an elevated freeway until the junction with I-80 and the elevated Central Freeway structure where it continues via surface streets running north along Van Ness Avenue. Access to the project site from northbound U.S. 101 is via the Mariposa Street/Vermont Street off-ramp.

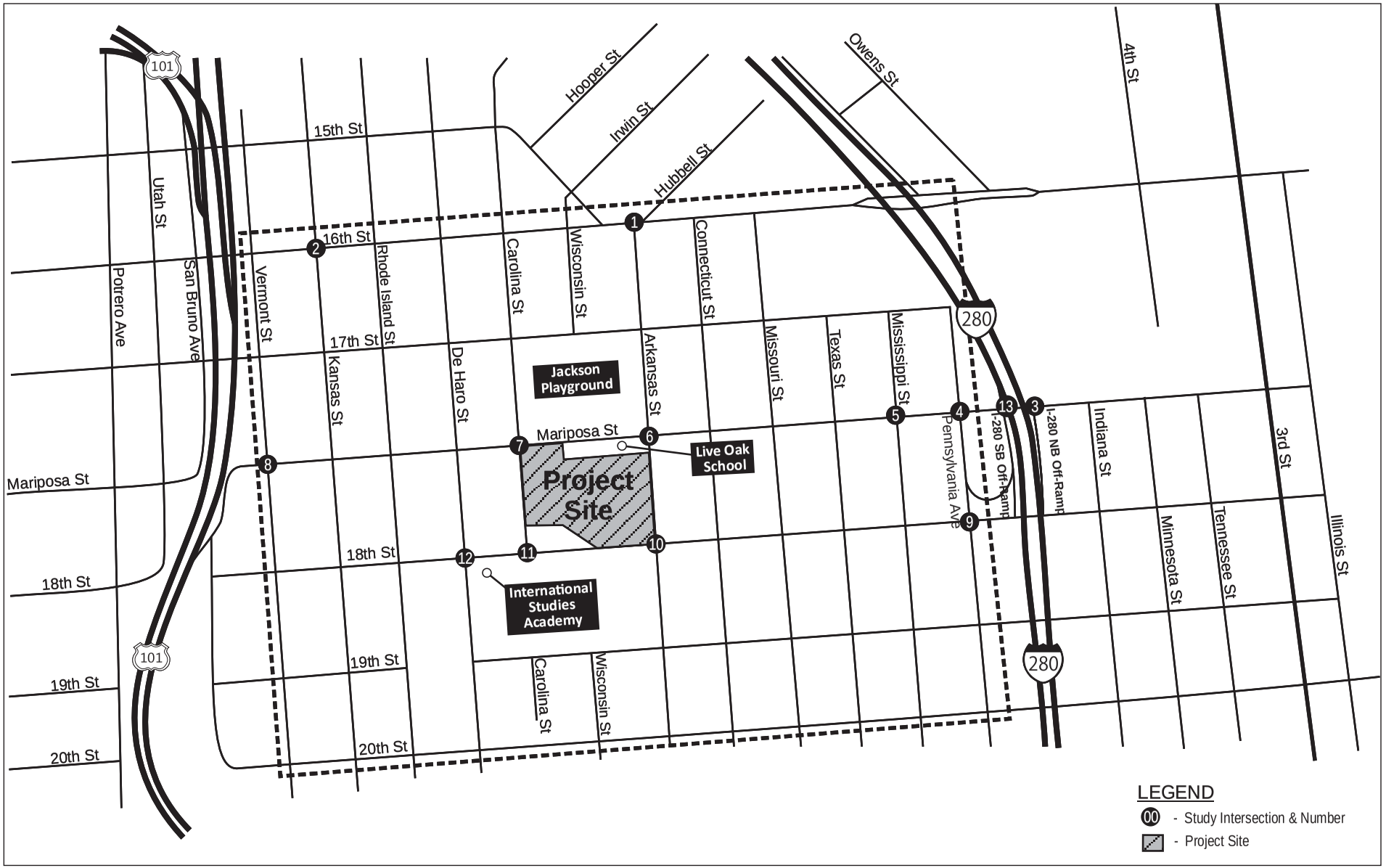

FIGURE IV.A-1

NOT TO SCALE

SOURCE: DKS, APRIL 2014.

1601 Mariposa Street Mixed Use Project EIR

Study Intersections

- **I-280** is a six-lane freeway that runs north-south approximately 0.3 miles east of the project site. In the vicinity of the project site, I-280 is the major roadway connector between downtown San Francisco and State Route 1 (SR 1) and San Jose. Access to the project site from northbound and southbound I-280 is via the 18th Street/Mariposa Street ramps.
- **I-80** is an eight-lane freeway that generally runs east-west with the exception of a north-south segment located approximately 0.5 miles northwest of the project site. In the vicinity of the project site, I-80 is the major roadway connector between San Francisco and the East Bay via the Bay Bridge. Access to the project site from westbound I-80 is via the Ninth Street/Civic Center off-ramp and from eastbound I-80 is via the Seventh Street off-ramp. Access from the project site to eastbound I-80 is via the Bryant Street on-ramp slightly west of Eighth Street while access to westbound I-80 is via the Seventh Street on-ramp south of Harrison Street.

Local Access. The following section describes the local roadway system in the vicinity of the project site.

- **16th Street** is a two-way, two-lane east-west roadway that runs between Flint Street and Terry A. Francois Boulevard two blocks north of the project site. Non-metered on-street parking is generally permitted on either side of 16th Street. In the San Francisco Better Streets Plan, 16th Street is designated as a Mixed-Use Street. The roadway is designated as a Secondary Arterial, a Transit Preferential Street (transit oriented), and a Neighborhood Commercial Street in the San Francisco General Plan. Within the study area there is a bicycle lane in both directions on 16th Street.
- **17th Street** runs between Stanyan Street and Pennsylvania Avenue, one block north of the project site. 17th Street is a two-way, two-lane east-west roadway. A two-hour non-permit parking limit is enforced on some segments of 17th street near the project site, while other segments provide unregulated parking. Sidewalks are not present on either side of the street in the vicinity of the project site. Bicycle Route 40 is located on 17th Street between Douglas Street and Kansas Street, and includes 5-foot-wide Class II bicycle facilities in both

directions. 17th Street is designated as a Mixed-Use Street in the San Francisco Better Streets Plan.

- **Mariposa Street** runs between Harrison Street and Illinois Street within the vicinity of the project site, with an interruption for the U.S. 101 freeway. Mariposa Street is the northern boundary of the project site and is a two-way, two-lane east-west roadway. A two-hour non-permit parking limit is enforced on some segments of Mariposa Street near the project site, while other segments provide unregulated parking. Bicycle Routes 7 and 23 run along Mariposa Street between Mississippi Street and Illinois Street, and are designated as Class III bicycle facilities. Near the project site, Mariposa Street is designated as a neighborhood residential street in the San Francisco Better Streets Plan between Carolina Street and Texas Street, and between Pennsylvania Avenue and the I-280 northbound off-ramps. Mariposa Street is designated as a mixed-use street between Texas Street and Pennsylvania Avenue, and between the I-280 northbound off-ramps and Illinois Street in the San Francisco Better Streets Plan.
- **18th Street** runs between Market Street and Illinois Street with interruptions at Harrison Street and for the U.S. 101 freeway. 18th Street runs adjacent to the southern border of the project site and is a two-way, two-lane east-west roadway. A two-hour non-permit parking limit is enforced on some segments of 18th Street near the project site, while other segments provide unregulated parking. No bike routes are located on 18th Street near the project site. 18th Street is generally designated as a Neighborhood Residential Street in the San Francisco Better Streets Plan with exceptions between Arkansas Street and Texas Street, and the I-280 northbound off-ramp and Illinois Street, where it is designated as a Neighborhood Commercial and Mixed-Use Street, respectively. 18th Street is designated as a Neighborhood Pedestrian Street (Neighborhood Commercial Street), between Texas Street and Arkansas Street, near the project site.
- **19th Street** runs between Market Street and Illinois Street with interruptions at Harrison Street and for the U.S. 101 freeway. 19th Street is located one block south of the project site and is a two-way, two-lane east-west roadway. A two-hour non-permit parking limit is

enforced on some segments of 19th street near the project site, while other segments provide unregulated parking. No bike routes are located on 19th Street near the project site. 19th Street is generally designated as a Neighborhood Residential Street in the San Francisco Better Streets Plan with exceptions between Arkansas Street and Texas Street, and the I-280 northbound off-ramp and Illinois Street, where it is designated a Neighborhood Commercial and Mixed-Use Street, respectively. 19th Street is designated as a Neighborhood Pedestrian Street (Neighborhood Commercial Street), between Texas Street and Arkansas Street, near the project site.

- **20th Street** runs from Douglass Street to Michigan Street with interruptions at Noe Street and the U.S. 101 freeway. Near the project site, 20th Street is a two-way, two-lane east-west roadway located two blocks south of the project site. A one-hour non-permit parking limit is enforced on some segments of 20th Street near the project site, while other segments provide unregulated parking. No bike routes are located on 20th Street near the project site. 20th Street is generally designated as a Neighborhood Residential Street in the San Francisco Better Streets Plan with exceptions between Arkansas Street and Texas Street, and the I-280 northbound off-ramp and Illinois Street, where it is designated a Neighborhood Commercial and Mixed-Use Street, respectively. 20th Street is designated as a Neighborhood Pedestrian Street (Neighborhood Commercial Street), between Texas Street and Arkansas Street near the project site.
- **Arkansas Street** runs between 16th Street and 23rd Street and is the eastern boundary of the project site. Arkansas Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of Arkansas Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Arkansas Street near the project site. It is designated as a mixed-use street between 16th Street and 17th Street, and a neighborhood residential street between 17th Street and 23rd Street in the San Francisco Better Streets Plan.

- **Carolina Street** runs between Channel Street and 18th Street and is the western boundary of the project site. Carolina Street is a two-way, two-lane north-south roadway. Non-metered on-street parking is generally permitted on either side of Carolina Street near the project site. No designated bikeways are located on Carolina Street near the project site. It is designated as a mixed-use street between Channel Street and 17th Street, and a neighborhood residential street between 17th Street and 23rd Street in the San Francisco Better Streets Plan. Carolina Street is a Neighborhood Pedestrian Street (Neighborhood Network Connection Street), between 17th Street and 20th Street, near the project site.
- **Connecticut Street** runs between 16th Street and 22nd Street and is located one block east of the project site. Connecticut Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of Connecticut Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Connecticut Street near the project site. It is designated as a mixed-use street between 16th Street and 17th Street, and a neighborhood residential street between 17th Street and Cesar Chavez Street in the San Francisco Better Streets Plan.
- **De Haro Street** runs between Division Street and 26th Street and is located one block west of the project site. De Haro Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of De Haro Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on De Haro Street near the project site. It is designated as a mixed-use street between Division Street and Mariposa Street, and a neighborhood residential street between Mariposa Street and 26th Street in the San Francisco Better Streets Plan.
- **Kansas Street** generally runs between 15th Street and 26th Street (with an interruption at 22nd Street) and is located three blocks west of the project site. Kansas Street is a two-way, two-lane north-south roadway. A three-hour non-permit parking limit is enforced on some segments of Kansas Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Kansas Street near the project site. It is designated as a mixed-use street between Division Street and Mariposa Street, and a

neighborhood residential street between Mariposa Street and 26th Street in the San Francisco Better Streets Plan.

- **Missouri Street** runs between 16th Street and 23rd Street and is located two blocks east of the project site. Missouri Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of Missouri Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Missouri Street near the project site. It is designated as a Mixed-Use Street between 16th Street and 17th Street, and a Neighborhood Residential Street between 17th Street and 23rd Street in the San Francisco Better Streets Plan.
- **Mississippi Street** runs between 16th Street and 22nd Street and is located four blocks east of the project site. Mississippi Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of Mississippi Street near the project site, while other segments provide unregulated parking. Bike Route 23 is located on Mississippi Street between 16th Street and Mariposa Street, and is designated as a Class II bicycle facility. Mississippi Street is designated as a Mixed-Use Street between 16th Street and Mariposa Street, and a Neighborhood Residential Street between Mariposa Street and 22nd Street in the San Francisco Better Streets Plan.
- **Pennsylvania Avenue** runs between 17th Street and Cesar Chavez Street and is located five blocks east of the project site. Pennsylvania Avenue is a two-way, two-lane north-south roadway. Non-metered on-street parking is generally permitted on both sides of Pennsylvania Avenue near the project site. Sidewalks are generally present on both sides of Pennsylvania Avenue south of 18th Street; however, between 18th Street and Mariposa Street and a short segment north of 18th Street, sidewalks are only located on the west side. Additionally, there are no sidewalks present on the east side of Pennsylvania Avenue from north of 18th Street to 17th Street. Notably, there are no curbs along Pennsylvania Avenue between Mariposa Street and 17th Street. No designated bikeways are located on Pennsylvania Avenue near the project site. It is designated as a Neighborhood Residential Street in the San Francisco Better Streets Plan.

- **Potrero Avenue** runs between Brannan Street and Cesar Chavez Street approximately 0.7 miles west of the project site. Potrero Avenue is a two-way, four-lane north-south roadway. Two-hour non-permit parking limit is enforced on both sides of the street. Bike Route 25 is located on Potrero Avenue between 17th Street and Cesar Chavez Street, and is designated as a Class II bicycle facility between 17th Street and 25th Street. It is also designated a Class III facility between 25th Street and Cesar Chavez Street. It is designated as a Mixed-Use Street between Brannan Street and 19th Street, and a Residential Throughway between 19th Street and Cesar Chavez Street. Potrero Avenue is designated as a Neighborhood Commercial Street between 24th Street and 25th Street, and a Major Arterial for its entire length in the San Francisco Better Streets Plan.
- **Rhode Island Street** runs between Division Street and 26th Street and is located two blocks west of the project site. Rhode Island Street is a two-way, two-lane north-south roadway. A three-hour non-permit parking limit is enforced on some segments of Rhode Island Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Rhode Island Street near the project site. It is designated as a mixed-use street between Division Street and Mariposa Street, and a neighborhood residential street between Mariposa Street and 26th Street in the San Francisco Better Streets Plan.
- **Texas Street** runs between 17th Street and 25th Street and is located three blocks east of the project site. Texas Street is a two-way, two-lane north-south roadway. A two-hour non-permit parking limit is enforced on some segments of Texas Street near the project site, while other segments provide unregulated parking. No designated bikeways are located on Texas Street near the project site. It is designated as a Mixed-Use Street between 17th Street and Mariposa Street, and a Neighborhood Residential Street between Mariposa Street and 22nd Street in the San Francisco Better Streets Plan.
- **Vermont Street** runs between Division Street and 22nd Street and is located four blocks west of the project site. Vermont Street is a one-way, three-lane northbound roadway between 16th Street and Mariposa Street, and a two-way, two-lane roadway between

Mariposa Street and south of 20th Street near the project site. No designated bikeways are located on Vermont Street near the project site. It is designated as a Mixed-Use Street between Division Street and 17th Street, and a Neighborhood Residential Street between 17th Street and 22nd Street in the San Francisco Better Streets Plan.

- **Wisconsin Street** generally runs between 17th Street and 26th Street located approximately 0.3 miles south and north of the project site. Wisconsin Street is a two-way, two-lane north-south roadway. Non-metered on-street parking is generally permitted on either side of Wisconsin Street. No designated bikeways are located on Wisconsin Street near the project site. The street is designated as a Mixed-Use Street between Eighth Street and 26th Street in the San Francisco Better Streets Plan.

Intersection Operating Conditions

The following 13 intersections near the project site were evaluated for Level-of-Service (LOS). Figure IV.A-1 illustrates the location of the analyzed intersections listed below:

1. 16th Street and Arkansas Street
2. 16th Street and Kansas Street
3. Mariposa Street and I-280 north bound (NB) off-ramp
4. Mariposa Street and Pennsylvania Avenue
5. Mariposa Street and Mississippi Street
6. Mariposa Street and Arkansas Street
7. Mariposa Street and Carolina Street
8. Mariposa Street/US-101 north bound (NB) off-ramp and Vermont Street
9. 18th Street and Pennsylvania Avenue
10. 18th Street and Arkansas Street
11. 18th Street and Carolina Street

12. 18th Street and De Haro Street

13. Mariposa Street and I-280 south bound (SB) on-ramp

Weekday PM peak hour intersection turning movement volumes for 9 of the 13 study intersections were collected on June 4, 2013, and June 25, 2013. Intersection turning movement counts for the other 4 study intersections –Mariposa Street and I-280 NB off-ramp, Mariposa Street and Pennsylvania Avenue, Mariposa Street and I-280 SB on-ramp, and Mariposa Street and Mississippi Street – were collected on July 18, 2012. Site visits were conducted during the week of July 22, 2013, to confirm lane geometries and observe traffic operations at study intersections. Existing bicycle and pedestrian movements and intersection turning movements were also collected, and facilities were observed during the site visits. Intersections were observed during the weekday PM peak hour (generally between 5:00 p.m. and 6:00 p.m.) for the PM peak period (4:00 p.m. to 6:00 p.m.).[3] Lane geometries for each intersection are presented in **Figure IV.A-2** and the Existing Conditions traffic volumes are presented in **Figure IV.A-3**.

A LOS evaluation is a qualitative description of intersection performance based on the average delay-per-vehicle experienced during peak travel periods. LOS can range from "A" representing free-flow conditions to "F" representing congested conditions with long delays. In San Francisco, LOS A is considered excellent, while LOS D is considered satisfactory operating conditions; LOS E is undesirable, and LOS F represents unacceptable conditions, at or above capacity. LOS definitions, considering vehicle delay for signalized and unsignalized intersections, are shown in **Table IV.A-1**.

[3] AM peak period intersection counts were not collected or evaluated as the San Francisco Traffic Impact Study Guidelines only require a PM peak analysis.

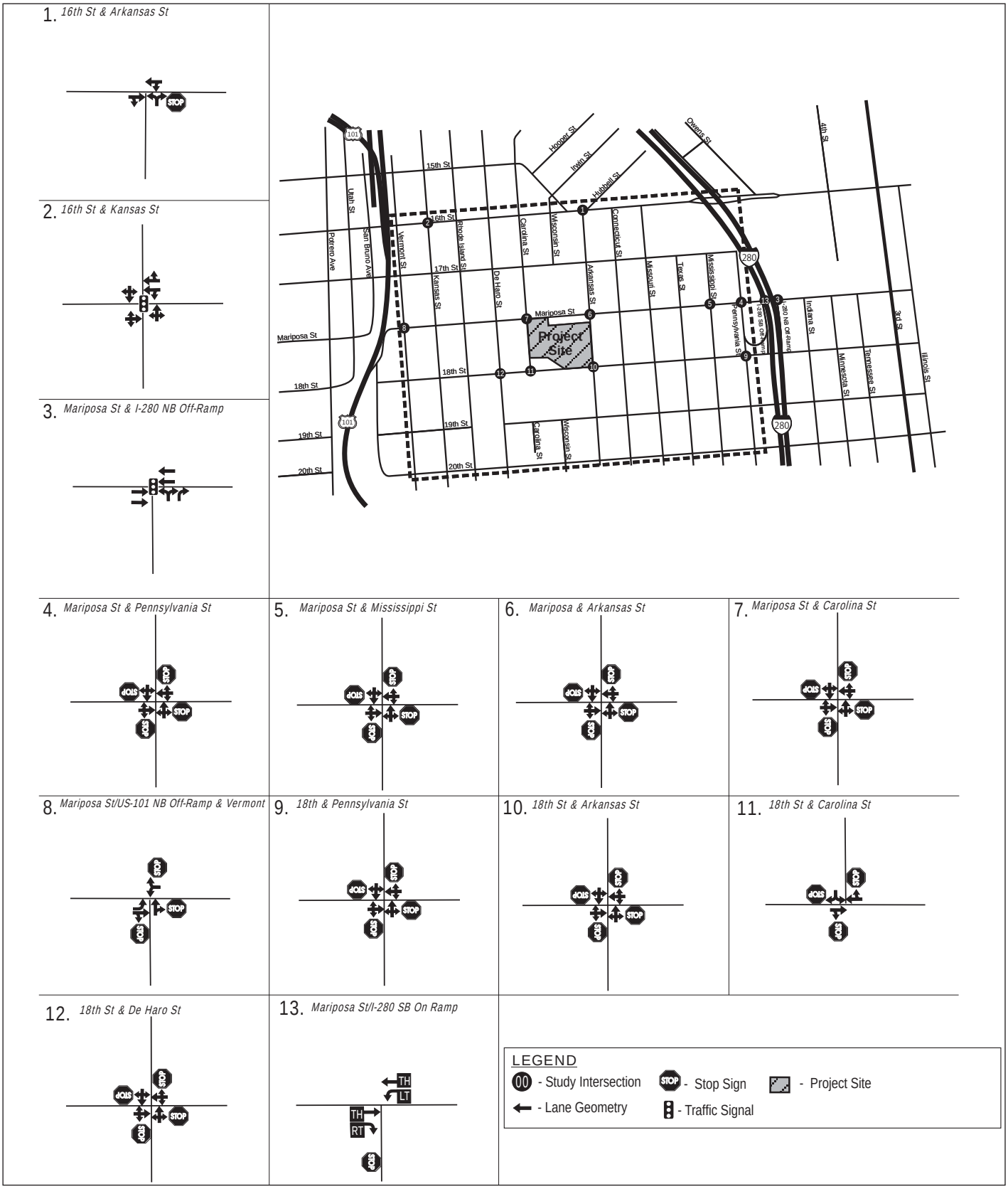

FIGURE IV.A-2

NOT TO SCALE

SOURCE: DKS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Existing Intersection Lane Geometries

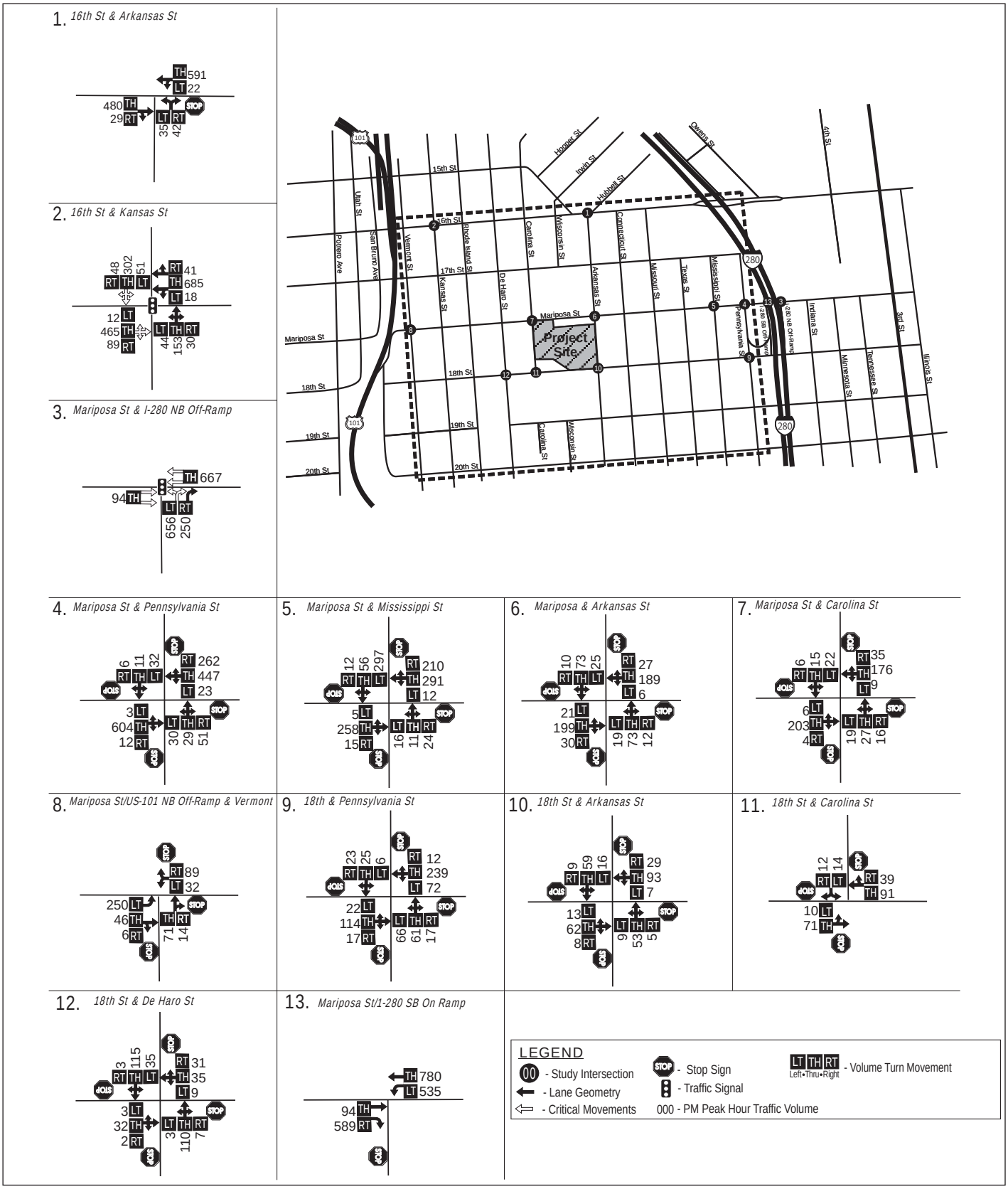

FIGURE IV.A-3

NOT TO SCALE

SOURCE: DKS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Existing Traffic Volumes

Table IV.A-1: LOS Thresholds and Definitions

Level of Service	Average Control Delay (seconds/vehicle)		Description
	Signalized Intersections	Unsignalized Intersections	
A	≤ 10	≤ 10	Free Flow/Insignificant Delay
B	> 10 and ≤ 20	> 10 and ≤ 15	Stable Operation/Minimal Delay
C	> 20 and ≤ 35	> 15 and ≤ 25	Stable Operation/Acceptable Delay
D	> 35 and ≤ 55	> 25 and ≤ 35	Approaching Unstable/Tolerable Delay
E	> 55 and ≤ 80	> 35 and ≤ 50	Unstable Operation/Significant Delay
F	> 80	> 50	Forced Flow/Excessive Delay

Notes: Worst Approach Delay (in seconds per vehicle) is used to determine LOS for Unsignalized Intersections.

Source: Transportation Research Board, 2000. *2000 Highway Capacity Manual*; SF Guidelines, October 2002.

Based on the LOS analysis for Existing Conditions (see **Table IV.A-2**; calculation sheets are included in the TIS), 10 of the 13 study intersections currently operate at LOS D or better during the PM peak hour. The following three intersections operate at LOS F during the PM peak hour:

- Mariposa Street and Pennsylvania Avenue (unsignalized)
- Mariposa Street and Mississippi Street (unsignalized)
- Mariposa Street and the I-280 southbound on-ramp (unsignalized)

The operational impact on signalized intersections is considered significant when project-related traffic causes the intersection level of service to deteriorate from LOS D or better to LOS E or F, or from LOS E to LOS F. The operational impacts on unsignalized intersections are considered significant if project-related traffic causes the level of service at the worst approach to deteriorate from LOS D or better to LOS E or F and Caltrans signal warrants would be met, or would cause Caltrans signal warrants to be met when the worst approach is already operating at LOS E or F.[4]

[4] The peak hour signal warrant determines if signalization is warranted based on number of approach lanes and if approach volumes during the peak hour pass a defined threshold.

Table IV.A-2: Existing Conditions Intersection Level of Service (PM Peak Hour)

No.	Intersection Name	Control	PM Peak Hour	
			Delay[a]	LOS[b,c]
1	16th Street and Arkansas Street (NB)	Unsignalized	25.7	D
2	16th Street and Kansas Street	Signalized	16.9	B
3	Mariposa Street and I-280 NB off-ramp	Signalized	28.6	C
4	Mariposa Street and Pennsylvania Avenue	Unsignalized	**>50 (SB)**	**F**
5	Mariposa Street and Mississippi Street	Unsignalized	**>50 (WB)**	**F**
6	Mariposa Street and Arkansas Street (EB)	Unsignalized	9.8	A
7	Mariposa Street and Carolina Street (EB)	Unsignalized	9.2	A
8	Mariposa Street and US-101 NB off-ramp/Vermont Street (EB)	Unsignalized	9.8	A
9	18th Street and Pennsylvania Avenue (WB)	Unsignalized	11.8	B
10	18th Street and Arkansas Street (EB)	Unsignalized	8.2	A
11	18th Street and Carolina Street (EB)	Unsignalized	7.7	A
12	18th Street and De Haro Street (SB)	Unsignalized	8.6	A
13	Mariposa Street and I-280 SB on-ramp	Unsignalized	**>50 (WB)**	**F**

[a] Delay is in seconds per vehicle and is based on average stopped delay. Where signalized intersection is LOS F, volume to capacity (v/c) ratio is also reported.

[b] LOS = Level of Service

[c] For unsignalized intersections, LOS is reported based on worst approach, which is indicated in parenthesis.

BOLD indicates unacceptable LOS of E or F.

Source: DKS Associates, 2014.

Peak hour signal warrants are met for the unsignalized intersection of Mariposa Street and Mississippi Street under Existing Conditions. The peak hour signal warrant is not met for the unsignalized intersection of Mariposa Street and Pennsylvania Avenue. As the unsignalized intersection of Mariposa Street and the I-280 SB on-ramp does not have a minor approach, there is no signal warrant analysis.[5] Also, since the intersection of Mariposa Street and the I-280 northbound off-ramp is already signalized, no signal warrant analysis was conducted.

[5] Volumes at this intersection are likely to meet Caltrans signal warrants and signalization of the intersection of Mariposa Street and I-280 southbound on-ramp is planned as part of the Mission Bay South Infrastructure Plan, discussed later in this section under the Cumulative Impacts discussion.

Pedestrian and Vehicle Circulation in the Vicinity of the Project Site

There are two schools within the immediate vicinity of the project site as well as an existing park, Jackson Playground. School drop-off and pick-up volume counts were conducted from May 28, 2013 through May 30, 2013 for International Studies Academy, located at 655 De Haro Street and on June 4, 2013, June 5, 2013, June 10, 2013, and June 11, 2013 for Live Oak School, located immediately adjacent to the site at 1555 Mariposa Street. Both schools were in session when counts were taken. Detailed school drop-off and pick-up counts are included in Appendix E of the TIS.

The drop-off/pick-up zone for the Live Oak School is located along the south side of Mariposa Street, between Carolina Street and Arkansas Street, facilitated through an existing 160-foot long white colored curb (passenger loading zone). Drop-off mainly occurs between 8:15 a.m. and 8:35 a.m. and no spillover was observed outside of the existing loading zone (i.e. double parking) during the two weeks of observation. During pick-up times, the majority of vehicles arrive between 2:40 p.m. and 3:35 p.m. and school dismissal occurs at 3:00 p.m. During the pick-up time for the school (between 3:00 p.m. and 3:30 p.m.), there are a considerable number of vehicles, resulting in double parked vehicles outside passenger loading zone with queuing of vehicles past the intersection of Mariposa Street and Carolina Street blocking eastbound traffic along Mariposa Street, including access to the project site along Mariposa Street. The larger queue in the afternoon is likely due to parents arriving early, waiting for dismissal and therefore spending more time in the loading zone.

Pedestrian traffic is heaviest during drop-off/pick-up times and observations of the project vicinity showed that there is not much pedestrian traffic during the PM peak hour (5:00 p.m. to 6:00 p.m.). Currently, there are signs in place warning drivers to drive cautiously near the adjacent Live Oak School and the International Studies Academy on De Haro Street. Pedestrian volumes are discussed in greater detail below, under Pedestrian Network.

The drop-off/pick-up zone for International Studies Academy is located along the east side of De Haro Street, between 18th Street and 19th Street, facilitated through an existing white colored curb (passenger loading zone). The majority of pedestrian activity near this school is concentrated along

DeHaro Street in front of the school's main entrance. Students that are not picked up generally walk to nearby bus stops along DeHaro Street (the closest of which is at the intersection with 18th Street).

Jackson Playground is a public park located across Mariposa Street from the project site. There are two entrances/exits to the park located along Mariposa Street and neither entrances/exits are located directly across the street from the project site. Pedestrians were not observed crossing the street from the Live Oak School to the park.

Transit Network

The existing transit network in the vicinity of the site is discussed below.

Local and Regional Transit Providers. The project vicinity is served by public transit, with local transit service within walking distance and regional transit available 0.6 to 1.0 mile from the site. Local service is provided by San Francisco Municipal Railway (Muni) bus and light rail under the direction of the San Francisco Municipal Transit Agency (SFMTA). Regional service to the East Bay and south of San Francisco is provided by Bay Area Rapid Transit (BART). The project site is located approximately 1 mile to the east of the 16th Street Mission BART station with local Muni bus service connecting to this station. Service to and from the South Bay/Peninsula is provided by the Peninsula Corridor Joint Powers Board via Caltrain with the nearest station, the 22nd Street Station, located approximately 0.6 miles southeast of the project site. In addition, the Alameda-Contra Costa County Transit District (AC Transit) and the golden Gate Bridge Highway and Transportation District (Golden Gate Transit) provide bus service to the East Bay and North Bay, respectively. These services are generally routed through the Transbay Terminal, located approximately 3 miles north of the site, and the nearest stops are located about 1.8 miles north of the site. The area bounded by Vermont Street, 16th Street, Pennsylvania Avenue and 20th Street has been considered for the transit analysis. **Figure IV.A-4** shows the area transit network. Transit services within the vicinity of the project site are further discussed below.

Muni. Muni provides transit service within the City and County of San Francisco. Service options include bus (both diesel motor coach and electric trolley), light rail (Muni Metro), cable car, and electric streetcar lines. Within the vicinity of the proposed project, Muni service includes the following: 10 Townsend, 19 Polk, and 22 Fillmore bus lines and the T Third Street light rail line, which are further described below. Ridership and capacity utilization for the PM peak hour is provided in **Table IV.A-3**.

Table IV.A-3: Muni Service Summary

	Outbound			Inbound			
Route	PM Ridership	PM Capacity	% Capacity Utilization	PM Ridership	PM Capacity	% Capacity Utilization	Peak Hour Headway
10 Townsend	171	**189**	90%	186	189	**98%**	20 min
19 Polk	124	252	49%	172	252	68%	15 min
22 Fillmore	308	473	65%	323	473	68%	8 min
T Third Street	550	714	77%	365	830	44%	9 min

BOLD indicates operations at capacity, or over 85 percent.

Source: SF Planning Department, 2012. *SF Transit Data for Transportation Impact Studies Memo*.

- *10 Townsend* – The 10 Townsend bus route operates from 5:00 a.m. to 8:45 p.m. between San Francisco General Hospital and Pacific Heights via Potrero Hill, Downtown, and Chinatown and runs along 17th Street and Connecticut Street in the vicinity of the project site. The nearest inbound and outbound bus stops are located on Connecticut Street at 17th Street approximately 0.1 miles from the project site. At these stops, there is pavement striping locating the bus stop and the stop is shared with the 22 Fillmore bus route.
- *19 Polk* – The 19 Polk bus route operates from 5:21 a.m. and 1:34 a.m. between Fisherman's Warf and Hunters Point and runs along De Haro Street, 16th Street, and Rhode Island Street in the vicinity of the project site. The nearest inbound bus stop is located at 16th Street and De Haro Street approximately 0.35 miles from the project site and the nearest outbound bus stop is located at 16th Street and Rhode Island Street approximately 0.4 miles from the project site. At these stops, there are pavement markings locating the bus stop and the stop is shared with the 10 Townsend bus route.

FIGURE IV.A-4

NOT TO SCALE

SOURCE: DKS, APRIL 2014.

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- *22 Fillmore* – The 22 Fillmore bus route operates continuously between Potrero Hill and the Marina via the Mission and runs along 17th Street and Connecticut Street in the vicinity of the project site. The nearest inbound and outbound bus stops are located on Connecticut Street at 17th Street approximately 0.1 miles from the project site. At these stops, there is pavement striping locating the bus stop and the stop is shared with the 10 Townsend bus route.
- *T Third Street* – This muni line operates from 4:45 a.m. to 12:15 a.m. between the Castro and Sunnydale districts. The nearest T Third Street station is located at Third Street and South Street approximately 0.5 miles east of the project site.

BART. BART operates a regional rail transit system between the East Bay (from Pittsburg/Bay Point, Richmond, Dublin/Pleasanton and Fremont) and San Francisco and between San Mateo County and San Francisco with 5 lines and 43 stations through San Francisco, Alameda, Contra Costa, and San Mateo Counties. The five lines provide regular service between 4:00 a.m. and midnight with trains for each line arriving every 15 to 20 minutes. During the weekday AM and PM peak period, headways are generally 5 to 15 minutes for each line. The nearest station for BART services is the 16th Street Mission (SF) station approximately 1.3 miles west of the project site, accessible by Muni bus route 22 Fillmore. The Civic Center station is located along Market Street near Seventh Street approximately 1.35 miles northwest of the project site and is accessible by Muni bus route 19 Polk. Four lines run through 16th Street-Mission (SF) station.

Caltrain. Caltrain provides passenger rail service on the Peninsula between Downtown San Francisco and Downtown San Jose with stops at several communities in San Mateo County and Santa Clara County. Limited service is available to communities south of San Jose. The Caltrain tracks operate east of the project site and include an at-grade crossing of 16th Street slightly east of the intersection of Seventh/16th/Mississippi Streets. The at-grade Caltrain crossing of 16th Street includes crossing gates, audio and visual alerts, and is coordinated with the signalized intersection of Seventh/16th/ Mississippi streets.

Within San Francisco, the nearest Caltrain station to the project site is at the 22nd Street station in the Potrero Hill neighborhood, approximately 0.6 miles southeast of the project site. Caltrain terminates at the Fourth/King Station in the South of Market neighborhood, approximately 0.9 miles north of the project site. Caltrain service headways during the AM and PM peak periods are between 6 and 23 minutes, depending on the type of train (e.g., local, limited, or express "baby bullet"). From the project site, Caltrain riders could access the Fourth/King Street Station via the 10 Townsend bus route or the 22nd Street Station via the 10 Townsend and transferring to the 48 Quintara bus routes.

AC Transit. AC Transit operates bus service in western Alameda and Contra Costa counties, as well as routes to San Francisco and San Mateo County. AC Transit operates 27 "Transbay" bus routes between the East Bay and the temporary Transbay Terminal, at Howard Street and Main Street. The temporary Transbay Terminal accommodates all Transbay AC Transit buses that stop in San Francisco during the AM and PM commute periods and is 1.8 miles northeast of the project site.

Golden Gate Transit. Golden Gate Transit provides bus service between the North Bay (Marin and Sonoma counties) and San Francisco. Golden Gate Transit operates six bus routes serving the temporary Transbay Terminal, one limited-stop service route, 17 routes serving the Financial District, and three routes serving the Civic Center. Access between the project site and Golden Gate Transit at the temporary Transbay Terminal is via the T Third Street Muni metro, or 10 Townsend Muni bus, approximately 1.8 miles northeast of the project site. Access between the project site and Golden Gate Transit and the Civic Center area stops is via the 19 Polk Muni bus.

SamTrans. SamTrans provides bus service between San Mateo County and San Francisco, including 14 bus lines that serve San Francisco (12 routes serve the downtown area). SamTrans does not operate within the immediate vicinity of the site; however, in general, SamTrans service to downtown San Francisco operates along South Van Ness Avenue, Potrero Avenue, and Mission Street in the Transbay Terminal. SamTrans cannot pick up northbound passengers at San Francisco stops. Similarly, passengers boarding in San Francisco (and destined to San Mateo) may not disembark in San Francisco.

Ferry. Golden Gate Transit provides ferry services between San Francisco and the North Bay. During the morning and evening peak periods, ferries run between Larkspur and San Francisco and between Sausalito and San Francisco. The San Francisco terminal is located at the Ferry Building, at The Embarcadero and Market Street, approximately 3.2 miles north of the site. Access to the ferry from the project site is via various bus routes and transfers.

Transit Capacity Utilization. Consistent with the *SF Guidelines*, Muni's available service capacity is analyzed by a series of four screenlines which divide the City of San Francisco (northeast, northwest, southeast, and southwest). The screenlines are useful in determining the magnitude of transit-related capacity and demand in the peak direction to or from downtown to other areas of the city. The San Francisco screenlines are schematically illustrated in Appendix I of the TIS. Muni screenline groupings are also listed in Appendix J of the TIS. **Table IV.A-4** details the ridership, capacity, and utilization for the screenlines. The SFMTA Board has adopted an "85 percent" standard for transit vehicle load – that is, all transit vehicles should operate at or below 85 percent capacity utilization. As shown in **Table IV.A-4**, all corridors and screenlines operate below the SFMTA 85 percent standard for transit vehicle loads.

Table IV.A-4: Existing Conditions Muni Screenline Analysis, PM Peak Hour (Outbound)[a]

Screenline	Transit Corridor	Capacity	Ridership	Utilization
Northeast	Kearny/Stockton	3,291	2,158	66%
	All Other Lines	1,078	570	53%
	Subtotal	**4,369**	**2,728**	**62%**
Northwest	Geary Corridor	2,528	1,814	72%
	California	1,686	1,366	81%
	Sutter/Clement	630	470	75%
	Fulton/Hayes	1,176	965	82%
	Balboa	929	637	69%
	Subtotal	**6,949**	**5,252**	**76%**
Southeast	Third Street	714	508	71%
	Mission	2,789	1,529	55%
	San Bruno/Bayshore	2,134	1,320	62%
	Other Lines	1,712	1,034	60%
	Subtotal	**7,349**	**4,391**	**60%**
Southwest	Subway Lines	6,294	4,598	73%
	Haight/Noriega	1,651	1,105	67%
	All Other Lines	700	276	39%
	Subtotal	**8,645**	**5,979**	**69%**
Total		**27,312**	**18,350**	**67%**

[a] Muni bus data collected between August 2011 and October 2011 (except 1AX and 1BX which is January to March 2012). Muni rail data collected between September 2007 and February 2010.

Source: SF Planning Department and SFMTA, 2013.

Regional Screenline Analysis. AC Transit, SamTrans, Caltrain, Golden Gate Transit, and BART as regional agencies provide transit service to the East Bay, North Bay, and South Bay. As shown in **Table IV.A-5**, BART, AC Transit, ferry, Golden Gate Transit Bus, Caltrain, and SamTrans service all currently operate under 100 percent capacity utilization. The highest utilization rate for these transit providers occurs for BART for the East Bay screenline which operates at 89 percent for the weekday PM peak hour.

Overall, the regional screenline analysis shows that utilization is approximately 76 percent for the PM peak hour in the outbound direction.

Table IV.A-5: Existing Conditions Regional Screenline Analysis – Weekday PM Peak Hour (Outbound)

Screenline	Transit Corridor	Capacity	Ridership	Utilization
East Bay	BART	22,050	19,716	89%
	AC Transit	3,926	2,256	57%
	Ferries	1,615	805	50%
	Subtotal	**27,591**	**22,777**	**83%**
North Bay	Golden Gate Transit Bus	2,817	1,384	49%
	Ferries	1,959	968	49%
	Subtotal	**4,776**	**2,352**	**49%**
South Bay	BART	14,910	10,682	72%
	Caltrain	3,100	2,377	77%
	SamTrans	320	141	44%
	Ferries	–	–	–
	Subtotal	**18,330**	**13,200**	**72%**
Total		**50,697**	**38,329**	**76%**

[a] Muni bus data collected between August 2011 and October 2011 (except 1AX and 1BX which is January to March 2012). Muni rail data collected between September 2007 and February 2010.

Source: SF Planning Department and SFMTA, 2013.

Pedestrian Network

Sidewalk and crosswalk conditions adjacent to the project site are described below. In addition, a qualitative evaluation of pedestrian conditions in the vicinity of the project site was conducted during the weekday midday (1:30 p.m. to 3:00 p.m.) and PM peak period (4:00 p.m. to 6:00 p.m.) and is summarized below.

Sidewalk and Crosswalk Conditions. To the north of the project site across Mariposa Street, sidewalks are generally 10 feet wide and are in good condition. There are no parking meters present along Mariposa Street between Carolina Street and Arkansas Street. The Mariposa Street and Arkansas Street intersection is four-way stop controlled and has striped crosswalks across all approaches of the intersection.

East of the project site on Arkansas Street, sidewalks are generally 16 feet wide and are in good condition. There are no parking meters present along Arkansas Street between 18th Street and Mariposa Street. The 18th Street and Arkansas Street intersection is four-way stop controlled and has striped crosswalks across all approaches of the intersection.

On 18th Street, south of the project site, sidewalks are generally 12 feet wide and are in good condition. There are no parking meters present along 18th Street between Carolina Street and Arkansas Street. The 18th Street and Carolina Street intersection is stop-controlled on the Carolina approach and has striped crosswalks across all three approaches of the intersection.

West of the project site on Carolina Street, sidewalks are generally 8 to 10 feet wide and are in good condition. There are no parking meters present along Carolina Street between 18th Street and Mariposa Street. The Mariposa Street and Carolina Street intersection is four-way stop controlled and has striped crosswalks across all approaches of the intersection.

Due to the presence of schools in the area, Live Oak School on Mariposa Street and the International Studies Academy on De Haro Street, the majority of study intersections have striped pedestrian crossings. The northbound and westbound approaches at Mariposa Street and Vermont Street have striped crosswalks. All of the approaches at 16th Street and Kansas Street, Mariposa Street and Carolina Street, Mariposa Street and Arkansas, Mariposa Street and Mississippi Street, Mariposa Street and Pennsylvania Avenue, 18th Street and De Haro Street, 18th Street and Carolina Street, 18th Street and Arkansas Street, and 18th Street and Pennsylvania Avenue have striped crosswalks. None of the approaches at 16th Street and Arkansas Street and Mariposa Street and the I-280 northbound

off-ramp have striped crosswalks. None of the intersections within the vicinity of the schools have pedestrian countdown signals.

Pedestrian Volumes. The period of highest pedestrian activity in the project vicinity is during drop-off/pick-up for the Live Oak School; however, the majority of students are picked up and do not walk past the loading zone. The International Studies Academy is located nearby the project site on De Haro Street; however the majority of the students that are not picked up walk to nearby bus stops located along De Haro Street and do not travel adjacent to the project site.

Pedestrian crossing volumes for the PM peak hour for intersections adjacent to the project site were collected on June 25, 2013, and are shown in **Table IV.A-6**. The highest volume of pedestrian traffic during the PM peak hour is located at the intersection of Mariposa Street and Arkansas Street. Pedestrians were observed travelling to and from the park, and were not observed to travel on sidewalks adjacent to the project site.

Table IV.A-6: Existing Conditions Pedestrian PM Peak Hour Crossing Volumes

	Pedestrian Volume (ped/hour)				
Intersection	**Northbound Crosswalk**	**Southbound Crosswalk**	**Eastbound Crosswalk**	**Westbound Crosswalk**	**Total**
Mariposa Street & Arkansas Street	25	22	55	8	110
18th Street & Arkansas Street	24	14	17	13	68
18th Street & Carolina Street	–	12	1	6	19
Mariposa Street & Carolina Street	13	21	17	19	70

Source: DKS Associates, 2014.

Pedestrian Access to Transit. To reach the nearest 10 Townsend and 22 Fillmore bus stops at 17th Street and Connecticut Street and 18th Street and Connecticut Street, pedestrians walk down Mariposa Street east to Connecticut Street or walk down 18th Street east to Connecticut Street. The nearest T Third Street Muni metro stop is located at Third Street and Mariposa Street to the southeast which is approximately 0.5 miles from the project site. Pedestrians access the stop by walking down Mariposa Street.

Bicycle Conditions

Bikeways are classified as Class I, Class II, or Class III facilities.[6] Class I bicycle facilities provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized. Class II bicycle facilities provide a striped lane on a street or highway. Class III bicycle facilities are signed bike routes that provide for shared use with motor vehicle traffic.[7] Class III bicycle facilities are signed routes with no bike lane striping but may include other striping such as "sharrows" that allow bicyclists to share the roadway with vehicles. **Figure IV.A-5** presents the bicycle route network in the vicinity of the project site. There are no designated bicycle facilities adjacent to the project site; however, there are three existing designated bicycle routes within the bicycle study area, which is bounded by Vermont Street to the west, 20th Street to the south, Pennsylvania Avenue to the east, and 16th Street to the north. Segments of these three bicycle routes are designated as Class II or Class III bicycle facilities. In general, these bikeways are a combination striped bike lanes and sharrows with directional signage and (as part of the Bike Route system). The three routes are described below:

- **Bicycle Route 7** runs from the intersection of Keith Street and Carroll Avenue to the intersection of Mariposa Street and Illinois Street. It is a Class III bicycle facility for its entire length except for a short segment on Cesar Chavez Street, between Third Street and Indiana Street, where it is a Class II bicycle facility. Within the study area, Bicycle Route 7 is a Class III bicycle facility and travels east to west on Mariposa Street, west of Indiana Street, and north to south on Indiana Street, south of Mariposa Street.
- **Bicycle Route 23** runs from the intersections of Seventh and Eighth Street at Market Street to the intersection of Mariposa Street and Illinois Street. Bicycle Route 23 is a Class II bicycle facility for its entire length except for a short segment on Mariposa Street, between Mississippi Street and Illinois Street, where is it a Class III bicycle facility. Within the study

[6] Bicycle facilities are defined by the State of California in the California Streets and Highway Code, Section 890.4.

[7] Caltrans Highway Design Manual – Chapter 1000 Bikeway Planning and Design, June 26, 2006.

area, Bicycle Route 23 travels north of 16th Street on Seventh Street and on Mississippi Street between 16th Street and Mariposa Street as a Class II bicycle facility. On Mariposa Street, between Mississippi Street and Illinois Street, Bicycle Route 23 is a Class III bicycle facility.

- **Bicycle Route 40** generally runs in the east-west direction between the Cole Valley neighborhood and Mission Bay. Bicycle route 40 is a Class III bicycle facility for the entire route with exceptions on 16th Street between Kansas Street and Third Street and on 17th Street between Kansas Street and Treat Street where it is a Class II bicycle facility. Within the study area, Bicycle Route 40 runs along 16th Street as a Class II bicycle facility with 5-foot-wide bicycle lanes in both directions. Bicycle Route 40 connects to Bicycle Route 25, which runs in the north-south direction between the Bayshore Caltrain station and Market Street in the Civic Center neighborhood.

The San Francisco Bicycle Plan, approved in June 2009, proposed minor changes to the existing bicycle facilities on Mariposa Street and Indiana Street near the project site. These improvements include minor changes to pavement markings and signage and other improvement such as the installation of colored pavements materials, the installation of shared roadway bicycle markings, minor changes to parking configurations and minor changes to intersection traffic signal timing. These elements are considered treatments necessary to improve conditions for bicycle use, and are not specified in more detail by route in the Plan.

Loading Conditions

Anchor Steam Brewery (1705 Mariposa Street) has an unmarked loading zone on Carolina Street across the street to the west of the project site. During site observations on July 22, 2013, large trucks were observed parking on Carolina Street during the midday and afternoon, unloading/loading and blocking the southbound traffic lane for periods lasting up to several hours. Loading at the Anchor Steam Brewery generally occurs during the hours of 5:30 a.m. and 3:00 p.m.

FIGURE IV.A-5

NOT TO SCALE

SOURCE: DKS, APRIL 2014.

1601 Mariposa Street Mixed Use Project EIR

Area Bicycle Routes

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As described above as part of Circulation in the Vicinity of the Project Site, east of the project site, there is a white drop-off/pick-up zone located along the south side of Mariposa Street, between Carolina Street and Arkansas Street, for the Live Oak School.

Parking Conditions

Existing on-street parking conditions were examined for the weekday midday period (1:00 p.m. to 3:30 p.m.) and evening period (6:30 p.m. to 8:00 p.m.) during the week of June 24, 2013, and July 22, 2013, and the resulting counts are provided in Appendix C of the TIS. On-street parking facility capacity, occupancy data, and door counts were collected on June 26, 2013. There are no off-street parking facilities located near the project site.

On-street midday and evening period parking supply and occupancy were surveyed in a study area bounded by Vermont Street to the west, 20th Street to the south, Pennsylvania Avenue to the east, and 16th Street to the north. On-street parking within the study area primarily consists of time restricted and non-metered spaces. For a more conservative analysis, spaces were not considered if they were in a tow-away zone, had no-stopping restrictions, or did not allow parking during the midday or evening periods. The parking study area surveyed a combined on-street parking supply of approximately 3,832 vehicles. Adjacent to the project site, there are approximately 27 on-street parking spaces along the south side of Mariposa Street between Carolina and Arkansas Streets, 21 on-street parking spaces along the west side of Arkansas Street between Mariposa Street and 18th Street, 33 on-street parking spaces along the east side of Carolina Street between Mariposa Street and 18th Street, and 24 on-street parking spaces along the north side of 18th Street between Carolina and Arkansas Streets.

As shown in **Table IV.A-7**, for the midday period from 1:00 p.m. to 3:30 p.m., approximately 3,241 on-street spaces are occupied in the project area resulting in an 85 percent utilization rate. For the evening period from 6:30 p.m. to 8:00 p.m., 2,470 on-street parking spaces are occupied for a 64 percent utilization rate. Within two blocks of the project site (bounded by 16th Street to the north, Missouri Street to the east, 20th Street to the south, and Rhode Island Street to the west), approxi-

mately 1,638 on-street spaces are occupied during the midday period resulting in an 87 percent utilization rate, and approximately 1,282 on-street spaces are occupied during the evening period resulting in a 68 percent utilization rate. On the streets adjacent to the project site, approximately 170 on-street spaces are occupied during the midday period resulting in a greater than 100 percent utilization rate (utilization rate greater than 100 percent is possible for parking in areas with unstriped curbs), and approximately 108 on-street parking spaces are occupied during the evening period resulting in a 65 percent utilization rate.

Table IV.A-7: Existing Conditions On-Street Parking Analysis

On-Street Parking Facility	Metered Supply	Non-Metered Supply	Total Supply	Occupied Spaces	Utilization
Study Area					
Midday (1:00-3:30 p.m.)	0	3,832	3,832	3,241	85%
Evening (6:30-8:00 p.m.)	0	3,832	3,832	2,470	64%
Within Two Blocks of Project Site					
Midday (1:00-3:30 p.m.)	0	1,892	1,892	1,638	87%
Evening (6:30-8:00 p.m.)	0	1,892	1,892	1,282	68%
On Streets Adjacent to Project Site					
Midday (1:00-3:30 p.m.)	0	167	167	170	**102%**
Evening (6:30-8:00 p.m.)	0	167	167	108	65%

[a] Streets bordering the project site include Mariposa Street, Arkansas Street, 18th Street, and Carolina Street.

BOLD indicates that parking is at capacity.

Note: A utilization rate greater than 100 percent is possible for parking in areas with unstriped curbs.

Source: DKS Associates, 2013. *On-Street Parking Survey*.

Regulatory Framework

Local regulations that apply to transportation and circulation at the project site are included in the San Francisco General Plan, San Francisco Bicycle Plan, San Francisco Better Streets Plan, and the City's Transit First Policy. These are described below. There are no federal, State, or other regional regulations that apply to the project site or vicinity.

San Francisco General Plan

The Transportation Element of the San Francisco General Plan is composed of objectives and policies that relate to the eight aspects of the citywide transportation system: General Regional Transportation, Congestion Management, Vehicle Circulation, Transit, Pedestrian, Bicycles, Citywide Parking, and Goods Management. The Transportation Element references San Francisco's "Transit First" Policy in its introduction, and contains objectives and policies that are directly pertinent to consideration of the proposed project, including objectives related to locating development near transit investments, encouraging transit use, and traffic signal timing to emphasize transit, pedestrian, and bicycle traffic as part of a balanced multimodal transportation system. The San Francisco General Plan also emphasizes alternative transportation through the positioning of building entrances, making improvements to the pedestrian environment, and providing safe bicycle parking facilities.

San Francisco Bicycle Plan

The Bicycle Plan describes the City's program to provide the safe and attractive environment needed to promote bicycling as a transportation mode. The Bicycle Plan identifies the citywide bicycle route network, and establishes the level of treatment (i.e., Class I, Class II or Class III facility) on each route. The Bicycle Plan also identifies near-term improvements as well as policy goals, objectives and actions to support these improvements. It also includes long-term improvements, and minor improvements that would be implemented to facilitate bicycling in San Francisco.

San Francisco Better Streets Plan

The Better Streets Plan focuses on creating a positive pedestrian environment through measures such as careful streetscape design and traffic calming measures to increase pedestrian safety. The Better Streets Plan includes guidelines for the pedestrian environment, which it defines as the areas of the street where people walk, sit, shop, play, or interact. Generally speaking, the guidelines are for design of sidewalks and crosswalks; however, in some cases, the Better Streets Plan includes guidelines for certain areas of the roadway, particularly at intersections.

Transit First Policy

In 1998, the San Francisco voters amended the City Charter (Charter Article 8A, Section 8A.115) to include a Transit-First Policy, which was first articulated as a City priority policy by the Board of Supervisors in 1973. The Transit-First Policy is a set of principles which underscore the City's commitment that travel by transit, bicycle, and foot be given priority over the private automobile. These principles are embodied in the policies and objectives of the Transportation Element of the San Francisco General Plan. All City boards, commissions, and departments are required, by law, to implement transit-first principles in conducting City affairs.

Impacts and Mitigation Measures

This section analyzes the impacts to the transportation system that could result from the proposed project. The section begins with the significance criteria, which establishes the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project.

Significance Criteria

The following are the significance criteria used by the Planning Department for the determination of impacts associated with a proposed project:

- The operational impact on signalized intersections is considered significant when project-related traffic causes the intersection level of service to deteriorate from LOS D or better to LOS E or F, or from LOS E to LOS F. The operational impacts on unsignalized intersections are considered significant if project-related traffic causes the level of service at the worst approach to deteriorate from LOS D or better to LOS E or F and Caltrans signal warrants would be met, or would cause Caltrans signal warrants to be met when the worst approach is already operating at LOS E or F. The project may result in significant adverse impacts at intersections that operate at LOS E or F under existing conditions depending upon the magnitude of the project's contribution to the worsening of the average delay per vehicle. In addition, the project would have a significant adverse impact if it would cause major

traffic hazards or contribute considerably to cumulative traffic increases that would cause deterioration in levels of service to unacceptable levels.

- The project would have a significant effect on the environment if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; or cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels could result. With the Muni and regional transit screenlines analyses, the project would have a significant effect on the transit provider if project-related transit trips would cause the capacity utilization standard to be exceeded during the peak hour.
- The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas.
- The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas.
- A project would have a significant effect on the environment if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed on-site loading facilities or within convenient on-street loading zones, and created potentially hazardous conditions or significant delays affecting traffic, transit, bicycle or pedestrians.
- The project would have a significant effect on the environment if it would result in inadequate emergency vehicle access.
- Construction-related impacts generally would not be considered significant due to their temporary and limited duration.

Approach to Analysis

The following includes a description of the transportation and circulation-related impacts identified in the *Eastern Neighborhoods FEIR*, in addition to the approach to the project-specific analysis of these impacts evaluated in this section. The *Eastern Neighborhoods FEIR* anticipated that growth resulting from the zoning changes would not result in significant impacts related to pedestrians, bicyclists, loading, emergency access, or construction. However, the *Eastern Neighborhoods FEIR* anticipated that growth resulting from the zoning changes could result in significant impacts on traffic and transit ridership, and identified 11 transportation mitigation measures. Even with mitigation, however, it was anticipated that the significant adverse cumulative traffic impacts and the cumulative impacts on transit lines could not be fully mitigated. Thus, these impacts were found to be significant and unavoidable. The findings of the *Eastern Neighborhoods FEIR* are further detailed below.

Eastern Neighborhoods FEIR. The *Eastern Neighborhoods FEIR* included an evaluation of potential traffic, transit, pedestrian, bicycle, loading, and construction impacts that could occur with implementation of the *Eastern Neighborhoods Plan*. Parking demand and supply was also considered. The San Francisco County Transportation Authority (SFCTA) countywide travel demand forecasting model was used to develop the travel forecasts for development and growth through the year 2025 in the Eastern Neighborhoods study area. This approach resulted in an impacts assessment for year 2025 conditions that took into account both the future development expected in the Eastern Neighborhoods and the expected growth in housing and employment for the remainder of San Francisco and the nine-county Bay Area. Traffic, transit, pedestrian, and bicycle impacts and parking conditions identified in the *Eastern Neighborhoods FEIR* are summarized below. Mitigations identified in the *Eastern Neighborhoods FEIR* are generally applicable on a program-level basis and would not be specifically applicable to the proposed project.

Traffic Impacts. The *Eastern Neighborhoods FEIR* evaluated potential impacts to 40 intersections within or in the vicinity of the Eastern Neighborhoods. The *Eastern Neighborhoods FEIR* determined that the rezoning that would occur within the Eastern Neighborhoods as a result of implementation of the proposed rezoning and area plans project would increase daily traffic and would result in significant

unavoidable impacts to 10 of the 15 study intersections within or near the Showplace Square/Potrero Hill area. These include the intersections of 13th and Bryant Streets; South Van Ness, Howard, and 13th Streets; Seventh and Brannan Streets; Seventh and Townsend Streets; Eighth and Brannan Streets; Eighth and Bryant Streets; Eighth and Harrison Streets; Third and Cesar Chavez Streets; and Cesar Chavez and Evans Streets.

No feasible mitigation measures were identified to mitigate impacts at the above intersections to less-than-significant levels. Other mitigation measures for the above impacts would include implementation of Intelligent Traffic Management Systems ("ITMS") strategies (*Mitigation Measure E-2 Intelligent Traffic Management*), improvement and enhancement of streets (*Mitigation Measure E-6: Transit Corridor Improvements*), promotion of alternative means of travel (*Mitigation Measure E-7: Transit Accessibility*), and parking management to discourage driving (*Mitigation Measure E-4: Intelligent Traffic Management*). However, it was not anticipated that the significant adverse effects at local intersections could be fully mitigated, and thus these remaining impacts to study intersections were identified in the *Eastern Neighborhoods FEIR* as significant and unavoidable. However, none of these intersections are near enough to the project site such that the project would substantially contribute to unacceptable intersection operations and these impacts and mitigation measures are not applicable to the proposed project.

Transit Impacts. The *Eastern Neighborhoods FEIR* determined that each of the proposed rezoning options would contribute, along with background (No-Project) growth, to significant cumulative impacts on Muni lines, with the preferred project affecting the following seven lines: 9-San Bruno, 22-Fillmore, 26-Valencis, 27-Bryant, 33-Stanyan, 48-Quintara, and 49-Van Ness/Mission. Mitigation included the identification of new funding source(s) to supplement the City's Transit Impact Development Fee program for non-residential uses to enable Muni to accommodate projected transit demand within the Eastern Neighborhoods and the remainder of the City (*Mitigation Measures E-5: Enhanced Transit Funding*). Additionally, further mitigation identified in the *Eastern Neighborhoods FEIR* would include additional and enhanced Muni service (*Mitigation Measure E-10: Transit Enhancement*), transit priority on certain streets (*Mitigation Measure E-6: Transit Corridor Improvements*),

improvement of transportation demand management (*Mitigation Measure E-11: Transportation Demand Management*), establishment of a coordinated planning process to link land use planning and development in the Eastern Neighborhoods to transit (*Mitigation Measure E-7: Transit Accessibility*) and other alternative transportation mode planning in the eastern portion of the City (*Mitigation Measure E-9: Rider Improvements*). Mitigation for capital needs such as bus storage was also included (*Mitigation Measures E-8: Muni Storage and Maintenance*). However, it is not anticipated that the significant adverse effects on Muni service could be fully mitigated, and therefore the project's effect on Muni service was identified in the *Eastern Neighborhoods FEIR* as significant and unavoidable.

Pedestrian Impacts. The *Eastern Neighborhoods FEIR* determined that because baseline pedestrian volumes within the Showplace Square/Potrero Hill neighborhood are relatively low, the addition of pedestrian trips associated with the rezoning options would not substantially affect baseline pedestrian operating conditions. However, the addition of vehicle trips and pedestrian trips associated with the rezoning options would increase the potential for pedestrian-vehicle conflicts and collisions, particularly because several streets in this subarea are major arterials with higher vehicular travel speeds. The *Eastern Neighborhoods FEIR* determined that pedestrian impact analyses would be conducted for future development, and individual development projects would make localized sidewalk improvements and improvements to reduce pedestrian-vehicle and bicycle conflicts. However, such development projects would not typically be required to improve system-wide or area-wide deficiencies and this impact was identified as less than significant.

Bicycle Impacts. The *Eastern Neighborhoods FEIR* determined that new bicycle trips resulting from development subsequent to implementation of the proposed rezoning and area plans would use the existing and planned system of bicycle routes. Individual development projects would be required to comply with provisions of the Planning Code pertaining to bicycle parking spaces in off-street parking facilities, and other support facilities, such as showers and lockers. Bicycle impacts were determined to be less than significant.

Parking. The *Eastern Neighborhoods FEIR* determined that there could be parking shortfalls associated with implementation of the proposed rezoning and area plans; however, because parking deficits are considered to be social effects, rather than impacts on the physical environment as defined by CEQA, the anticipated parking shortfalls would be a less than significant. Furthermore, individual development projects in the Eastern Neighborhoods would be required to comply with the Planning Code requirements for parking, including the number of parking spaces, provision of car-sharing spaces, and the separation of parking costs from housing costs in new residential buildings.

Project-Specific Approach to Analysis. This section presents the methodology for analyzing the transportation impacts and information considered in developing travel demand for the proposed project. The impacts of the proposed project on surrounding roadways were analyzed using the guidelines set forth in the SF Guidelines. The SF Guidelines provide direction for analyzing transportation conditions and identifying the transportation impacts of a proposed project in San Francisco.

The analysis of the proposed project was conducted for existing and 2025 cumulative conditions. "Existing Plus Project" conditions assess the near-term impacts of the proposed project, while "2025 Cumulative" conditions assess the long-term impacts of the proposed project in combination with other reasonably foreseeable future development and transportation network changes.

The impact analysis methodology for traffic, transit, bicycle, pedestrian, loading, emergency access, and construction impacts is described below.

Traffic Analysis. The traffic analysis provided herein focuses on project-specific impacts that could result with development of the proposed project. As previously noted, none of the study intersections, which were selected based on their proximity to the site and potential to experience substantial increases in traffic due to new project trips, were identified in the *Eastern Neighborhoods FEIR* as significantly impacted by implementation of the *Eastern Neighborhoods Plan*.

As with existing conditions, the analysis of the effect of the proposed project on the study intersections was based on the LOS methodology described in the Highway Capacity Manual (HCM) 2000. LOS is a qualitative description of an intersection's performance based on the average delay per vehicle. Intersection levels of service range from LOS A, which indicates free flow or excellent vehicle flow conditions with short delays, to LOS F, which indicates congested or overloaded vehicle flow conditions with extremely long delays. In San Francisco, LOS A through D are considered acceptable, and LOS E and LOS F are considered unsatisfactory service levels.

Transit Analysis. The impact of additional transit ridership generated by the proposed project was assessed for the local and regional transit screenlines, and the impact of the additional project-generated vehicle trips on transit routes in the vicinity of the project site was also assessed.

Local and Regional Screenline Analysis. The availability of Muni service capacity was analyzed in terms of a series of screenlines. The concept of screenlines is used to describe the magnitude of travel to or from the greater downtown area, and to compare estimated transit volumes to available capacities. Screenlines are hypothetical lines that would be crossed by persons traveling between downtown and its vicinity and other parts of San Francisco and the region. Four screenlines have been established in San Francisco to analyze potential impacts of projects on Muni service: northeast, northwest, southwest, and southeast, with sub-corridors within each screenline. The bus and light rail lines used in this screenline analysis are considered the major commute routes from the downtown area. Other bus lines, such as lines with greater than 10-minute headways, are not included due to their generally lower ridership.

The screenline for each route reflects the maximum load point (MLP) for each Muni line that crosses one of the screenlines. The MLP for each individual line may occur at some point of either side of the schematic lines drawn for graphical representation. For the purpose of this analysis, Muni ridership measured at the four San Francisco screenlines and sub-corridors represents the peak direction of travel and patronage loads for the Muni system, which corresponds with the evening commute in the outbound direction from the downtown area to other parts of San Francisco. As a means to determine

the amount of available space within each screenline, capacity utilization is used, which relates the number of passengers per transit vehicle to the design capacity of the vehicle. The capacity per vehicle includes both seated and standing capacity, where standing capacity is somewhere between 30 to 80 percent of seated capacity (depending upon the specific transit vehicle configuration). For example the capacity of a light rail vehicle is 119 passengers, the capacity of a historic streetcar is 70 passengers, and the capacity of a standard bus is 63 passengers.

Muni's established capacity utilization performance standard for peak period operations is 85 percent. It should be noted that the 85 percent utilization is of seated and standing loads, so at 85 percent all seats are taken and there are many standees. Muni screenlines and subcorridors at or near 85 percent capacity operate under noticeably crowded conditions with many standees. Because each screenline and most sub-corridors include multiple lines, each with several vehicles during the peak hour, some individual vehicles may operate at or above 85 percent of capacity and are extremely crowded, while others operate under less crowded conditions. Moreover, the extent of crowding is exacerbated whenever target headways are not met through either missed runs and/or bunching in service. Thus, in common with other types of transportation operations such as roadways and parking facilities, transit operators may experience substantial problems in service delivery even when operating at less than 85 percent of capacity.

A screenline analysis was also performed on the regional transit carriers (AC Transit, BART, Caltrain, Golden Gate Transit and SamTrans), in order to determine the current service volumes and capacity. Three regional screenlines have been established around San Francisco to analyze potential impacts of projects on the regional transit carriers. For the purpose of this analysis, the ridership and capacity at the three screenlines represents the peak direction of travel and patronage loads, which corresponds with the evening commute in the outbound direction from downtown San Francisco to the region. As a means to determine the amount of available space for each regional transit provider, capacity utilization is also used. For all regional transit operators, the capacity is based on the number of seated passengers per vehicle. All of the regional transit operators have a 1-hour load factor standard of 100 percent, which would indicate that all seats are full.

Pedestrian Analysis. Pedestrian conditions were assessed qualitatively as they relate to the project site, including safety and right-of-way issues, and conflicts with traffic.

Bicycle Analysis. Bicycle conditions were assessed qualitatively as they relate to the project site, including bicycle routes, safety and right-of-way issues, and conflicts with traffic.

Loading Analysis. Loading was analyzed by comparing the on-site and on-street loading spaces proposed as part of the project to the projected loading demand.

Emergency Vehicle Access. Potential project-related changes affecting emergency vehicle access were assessed qualitatively. Specifically, the analysis assessed whether any of the proposed project elements would preclude adequate emergency vehicle access.

Construction Analysis. Potential short-term and temporary construction impacts related to transportation were assessed qualitatively. The potential for overlapping construction of the project in combination with other cumulative projects was also assessed qualitatively.

2025 Cumulative Analysis. The 2025 Cumulative conditions traffic volumes have been developed from the existing and cumulative intersection turning movement volumes for the *Eastern Neighborhoods FEIR*. For intersections not included in the *Eastern Neighborhoods FEIR*, the annual percent growth rate for intersection turning movement volumes between the existing and cumulative conditions analysis years have been determined. This annual percent growth rate has been applied to the observed 2013 turning movement volumes to determine the 2025 Cumulative conditions turning movement volumes. Pedestrian, bicycle, and construction impacts are also discussed. Due to cumulative growth in the area, and as a whole, on-street parking and loading conditions would likely change demand for parking and loading conditions, but parking and loading demand for the project site is site specific. Specifically, off-street parking or loading space provision related to the project would remain similar to Existing Plus Project conditions, and any changes to on-street conditions

would not be directly related to the proposed project under Cumulative conditions, therefore these topics are not discussed in the cumulative discussion.

A number of transportation network changes are proposed for the area surrounding the project site. Some of these improvements are funded, approved, and expected to be constructed and operational by the 2025 analysis year, and thus are included in the 2025 Cumulative conditions. Others are preliminary in nature, possibly without identified funding sources or lacking in project-level detail, and thus are not included in the 2025 Cumulative conditions. Projects not included in the 2025 Cumulative conditions include the California High Speed Rail project, as the segment design through San Francisco is preliminary in nature, although this project is briefly described below for informational purposes. In addition, removal of the northern section of I-280 is under consideration to facilitate construction of the California High Speed Rail project; however, as the rail project itself is preliminary and design alternatives are still under consideration, it is currently unknown if or how this change to the circulation system would occur. It would be speculative to include this project in the cumulative analysis; therefore, removal of I-280 is not considered.

The following transportation improvements, which are part of the projects and plans described below, are examples of major projects included in the 2025 Cumulative analysis. These improvements are anticipated to be constructed and/or implemented by 2025 and would therefore affect the transportation network in the vicinity of the project site.

Muni Forward (formerly Transit Effectiveness Project.) The SFMTA, in partnership with the San Francisco Office of the Controller, is proposing to implement Muni Forward (formerly known as the Transit Effectiveness Project [TEP]) which would implement transit route changes and construct other improvements, including changes to existing bicycle routes. Specifically, the intersection of Seventh, 16th, and Mississippi Streets would be restriped and a bus-only lane, if implemented, would operate in each direction along 16th Street near the project site. These changes would include the relocation of the existing bike lane on 16th Street, between Seventh Street and Kansas Street (Bicycle Route 40), to 17th Street.

San Francisco Bike Plan. The San Francisco Bike Plan, approved in June 2009, proposes minor changes to the existing facilities on Mariposa Street and Indiana Street near the project site. The proposed project would not preclude or conflict with any of the improvements detailed in the San Francisco Bike Plan.

Eastern Neighborhoods Transportation Implementation Planning Study. The Eastern Neighborhoods Transportation Implementation Planning Study (ENTRIPS) is a planning document for the identification of circulation improvements for the area bounded by Market Street, Guerrero Street, Cesar Chavez Street and San Francisco Bay. Much of the identified population and retail growth over the next 25 years in San Francisco would occur in this area and ENTRIPS provides planning and solutions for the transportation and circulation issues facing this area in the future.

The ENTRIPS report recommends several potential redesigns of Eastern Neighborhood Streets, including a proposed transitway on 16th Street to create an east-west transit corridor through the Showplace Square/Potrero Hill and Central Waterfront neighborhoods.

Mission Bay Redevelopment Plan/UCSF Mission Bay Medical Center. The Mission Bay Redevelopment Plan covers approximately 303 acres of land between San Francisco Bay and I-280. The development program would include up to 6,000 housing units, 4.4 million square feet of office/life science/ biotechnology commercial space, a new UCSF research campus, known as the USCF Mission Bay Medical Center, and hospital complex, 500,000 square feet of retail space, a 500 room hotel, 41 acres of open space, a new 500 student public school, and other public amenities. The Mission Bay Redevelopment Plan proposes changes to the transportation network. Intersection improvements near the project site would include modifications to Owens Street, Mariposa Street at the I-280 northbound off-ramp (Intersection 3 in this analysis), and Mariposa Street at the I-280 southbound on-ramp (Intersection 13 in this analysis). During the 2025 Cumulative PM peak hour, the operations at Mariposa Street at the I-280 northbound off-ramp (Intersection 3) would remain at LOS C as compared to Existing conditions.

The intersection of Mariposa Street and I-280 southbound on-ramp (Intersection 13) would also be signalized and intersection geometry modified as part of the Mission Bay South Infrastructure improvement project. Under 2025 Cumulative conditions, intersection operations would improve to LOS B from LOS F under Existing conditions.

1000 16th Street Project. The approved mixed-use project at 1000 16th Street would include a park and plaza area between Seventh Street and 16th Street on the Daggett Street right-of-way and would be known as "Daggett Park." Daggett Street is not currently constructed as an operating street but would align with Missouri Street between Seventh Street and 16th Street.

Caltrain Electrification and High Speed Rail. Caltrain will be implementing a Modernization Program that will electrify the railway to provide upgraded performance and allow more efficient operations and a higher capacity. The Program is scheduled to be complete by 2019. The Modernization Program would increase the number of trains per hour to 12. Additionally, Caltrain is anticipating a "blended system" which will see California High Speed Rail trains running alongside Caltrain on the same tracks. Electrification of Caltrain (and the associated improved travel times and frequencies) as well as the introduction of High Speed Rail may improve transit access for the proposed project.

Project Travel Demand. Travel demand refers to the new vehicle, transit, pedestrian, bicycle, and other trips generated by the proposed project. This section provides an estimate of the travel demand that would be generated by the proposed project, including parking demand and loading demand. Further description of the trip generation and mode split is provided below.

Trip Generation. The proposed project would include retail and residential uses for the site. The trip generation for both uses is based on the SF Guidelines and the existing land use credits are based on peak hour observations of arriving and departing vehicles made at the existing project site during the week of June 24, 2013. The only source of existing trips from the project site during the PM peak hour is from trucks arriving and departing from the MacKenzie Warehouse, which is located on the project

site, at 1601 Mariposa Street. Trips were observed from the entrance to the parking lot for the MacKenzie Warehouse and 15 vehicles entering and 15 vehicles exiting the site were counted.

The person trip generation rates for the proposed uses are detailed in **Table IV.A-8**. The person trip generation represents employee, visitors, and residents, less existing credits to the project site. The proposed project is estimated to generate a net 7,595 daily person trips and 1,082 (607 inbound and 475 outbound) net PM peak hour person trips. Person trips include trips by all modes of travel (vehicle, transit, walking, and bicycling).

Table IV.A-8: Person Trip Rate and Generation

Site Use	Area (SF)/ Units	Trip Rate [a]		Trip Generation			
		Daily Rate	PM Peak Hour	Daily Person	PM Peak Hour		
					In	Out	Total
Restaurants	7,500	0.600	13.5%	4,500	292	316	608
General Retail	2,500	0.150	9.0%	375	16	18	34
Total Retail (10,000 sf)				**4,875**	**308**	**333**	**641**
Residential (Studio/1 bedroom)	192	7.5	17.3%	1,440	166	83	249
Residential (2 and 3 bedroom)	128	10.0	17.3%	1,280	148	74	221
Total Residential (320 Units)				**2,720**	**314**	**157**	**471**
New Person Trips				**7,595**	**622**	**490**	**1,112**
Existing Land Use Credit	–	–	–	–	-15	-15	-30
Net New Person Trips				**7,595**	**607**	**475**	**1,082**

[a] Trip generation rates, PM peak hour percentages, and inbound/outbound splits from City's SF Guidelines Table C-1 and C-2.

Source: DKS Associates, 2014.

Mode Split and Average Vehicle Occupancy. The project-generated person trips were assigned to travel modes in order to determine the number of vehicle, transit, pedestrian, and bicycle trips. **Table IV.A-9** shows daily person trips, by mode based on land use. Further breakdown by point of origin/ destination is included in Appendix K of the TIS. On a daily basis, the proposed project would generate 7,595 person trips[8] which would include an estimated 4,744 auto person trips (3,192 vehicle

[8] Trip credits only applied to PM peak hour trip generation.

trips), 1,240 transit trips, 1,222 walk trips, and 389 "Other" person trips (which includes trips by bicycle, motorcycle and taxi).

Table IV.A-9: Mode Split and Daily Trip Generation by Trip Type

	Daily Person Trips									Average	
	Auto		Transit		Walk		Other		Total	Vehicle	Vehicle
Land Use	%	Trips	%	Trips	%	Trips	%	Trips	Trips	Occupancy	Trips
Retail (Work)[a]	71	139	20	39	6	11	3	6	195	1.23	113
Retail (Non-Work)[a]	64	3,000	12	548	22	1,048	2	84	4,680	1.90	1,579
Residential[b]	59	1,605	24	653	6	163	11	299	2,720	1.07	1,500
Project Total	62	4,744	16	1,240	16	1,222	5	389	7,595	1.49	3,192

[a] Retail mode splits and average vehicle occupancy are based on SF Guidelines Appendix E.
[b] Residential mode splits and average vehicle occupancy are based on the American Community Survey for Census Tract 227.04.
Source: DKS Associates, 2014.

As shown in **Table IV.A-10**, during the weekday PM peak hour, the proposed project would generate a net 1,082 person trips which would include 661 automobile person trips with 452 vehicle trips (261 inbound and 191 outbound), 190 transit trips (111 inbound and 79 outbound), 167 walk trips (87 inbound and 80 outbound), and 64 Other trips (including those made by bicycle, taxi, and motorcycle). Net PM peak hour vehicle trips generated by the proposed project are depicted in **Figure IV.A-6**.

Table IV.A-10: PM Peak Hour Trip Generation by Trip Type and Mode

	Daily Person Trips									Average	
	Auto		Transit		Walk		Other		Total	Vehicle	Vehicle
Land Use	%	Trips	%	Trips	%	Trips	%	Trips	Trips	Occupancy	Trips
Retail (Work)[a]	71	18	20	5	6	1	3	1	25	1.23	15
Retail (Non-Work)[a]	64	395	12	72	22	138	2	11	616	1.90	208
Trip Credit	–	*-30*	–	–	–	–	–	–	*-30*	–	*-30*
Residential[b]	59	278	24	113	6	28	11	52	471	1.07	259
Project Total	61	661	18	190	15	167	6	64	1,082	1.46	452

[a] Retail mode splits and average vehicle occupancy are based on SF Guidelines Appendix E.
[b] Residential mode splits and average vehicle occupancy are based on the American Community Survey for Census Tract 227.04.
Source: DKS Associates, 2014.

Trip Distribution. The trip distribution in **Table IV.A-11** shows the trip distribution patterns assumed for the proposed project based on the SF Guidelines and includes origins or destinations within San Francisco, the East Bay, North Bay, South Bay, and beyond. San Francisco trips are also separated into four "Superdistrict" areas of San Francisco indicated by SD-1 through SD-4 (see the TIS). Each Superdistrict corresponds to a quadrant of the city. The project site is located in Superdistrict 3 (SD-3).

Table IV.A-11: Trip Distribution Patterns

Origin/Destination	Retail (Work)	Retail (Non-Work)	Residential	Aggregate PM Peak Hour
Superdistrict 1	8%	6%	60%	35%
Superdistrict 2	11%	9%	5%	8%
Superdistrict 3	24%	61%	10%	30%
Superdistrict 4	8%	5%	5%	5%
East Bay	16%	6%	6%	5%
North Bay	6%	2%	2%	3%
South Bay	28%	11%	12%	12%
Total	**100%**	**100%**	**100%**	**100%**

Source: DKS Associates, 2014.; SF Guidelines, 2002.

As shown in **Table IV.A-11,** a majority of the retail trips would travel within San Francisco with the largest percentage of those, 61 percent, traveling within SD-3, where the project site is located. Outside San Francisco, most retail trips would travel to or from the South Bay area. The distribution of residential work and non-work trips correspond to the general distribution of employment in San Francisco, with 60 percent of trips destined to greater downtown San Francisco (SD-1) and the remaining 40 percent split between outlying San Francisco neighborhoods and surrounding areas.[9]

[9] SF Transportation Impact Guidelines.

These trip distribution patterns have been applied to the vehicle trip generation for the existing and proposed uses on the project site. This process produces a weighted or aggregate trip distribution pattern based on the total PM peak hour vehicles each land use would generate and are shown in **Table IV.A-11**.

Transit Trips. As shown in **Table IV.A-10**, the proposed project would generate approximately 190 transit trips (111 inbound and 79 outbound) during the PM peak hour. Transit trips to and from the project would likely use the nearby Muni bus and rail lines for local trips,[10] and the regional lines (potentially with transfers to and from Muni) for trips outside San Francisco. The project site is approximately 0.10 miles (1 block) from the 19 Polk bus stops at De Haro Street at 18th Street and De Haro Street at Mariposa Street and from the 10 Townsend and 22 Fillmore bus stops at Wisconsin Street and 17th Street. These bus stops would most easily be accessed by walking or using a bicycle. The project site is approximately 0.5 miles west of the nearest T Third Street light rail line stop at Mariposa Street. The nearest regional transit facility to the project site is the Caltrain station at the 22nd Street station in the Potrero Hill neighborhood, approximately 0.6 miles southeast of the project site. Caltrain terminates at the Fourth/King Station in the South of Market neighborhood, approximately 0.9 miles north of the project site. In addition, the 16th Street BART station is approximately 1.3 miles west of the project site. Access to this station is possible by walking, or more likely, a person may ride the 22 Fillmore bus to and from the 16th Street BART station via the bus stop at Wisconsin Street and 17th Street or access the station via bicycle.

For the PM peak hour, the proposed project would generate 111 inbound and 79 outbound transit trips to the project site. It is estimated that of these transit trips, approximately 74 trips would cross the PM peak hour Muni outbound screenlines and 17 would cross the regional outbound screenlines

[10] It should be noted that inbound and outbound transit trips generated by the project would not necessarily correspond with the inbound and outbound Muni screenlines. For instance, an inbound trip to the project site via the 19 Polk from the north half of Superdistrict 1 would correspond with an inbound trip on the Muni northeast screenline. However, the same trip would correspond to an outbound trip on the Muni southeast screenline.

for BART, AC Transit, Golden Gate Transit, Caltrain, and SamTrans as shown in **Table IV.A-12** and **Table IV.A-13**. The remaining 99 transit trips would not cross an outbound screenline. Of the approximately 74 transit trips that would cross the PM peak hour Muni outbound screenlines, 13 trips would cross the Northeast screenline, 4 trips would cross the Northwest screenline, 56 trips would cross the Southeast screenline and one trip would cross the Southwest screenline.

Table IV.A-12: Existing Plus Project Conditions Muni Screenline Analysis, PM Peak Hour (Outbound)

			Existing Conditions		Existing Plus Project Conditions	
Screenline	**Transit Corridor**	**Capacity**	**Ridership**	**Utilization**	**Ridership[a]**	**Utilization**
Northeast	Kearny/Stockton	3,291	2,158	66%	2,158 (0)	66%
	All Other Lines	1,078	570	53%	583 (13)	54%
	Subtotal	**4,369**	**2,728**	**62%**	**2,741 (13)**	**63%**
Northwest	Geary Corridor	2,528	1,814	72%	1,814 (0)	72%
	California	1,686	1,366	81%	1,367 (1)	81%
	Sutter/Clement	630	470	75%	471 (1)	75%
	Fulton/Hayes	1,176	965	82%	966 (1)	82%
	Balboa	929	637	69%	638 (1)	69%
	Subtotal	**6,949**	**5,252**	**76%**	**5,256 (4)**	**76%**
Southeast	Third Street	714	508	71%	508 (0)	71%
	Mission	2,789	1,529	55%	1,529 (0)	55%
	San Bruno/Bayshore	2,134	1,320	62%	1,320 (0)	62%
	Other Lines	1,712	1,034	60%	1,090 (56)	64%
	Subtotal	**7,349**	**4,391**	**60%**	**4,447 (56)**	**61%**
Southwest	Subway Lines	6,294	4,598	73%	4,599 (1)	73%
	Haight/Noriega	1,651	1,105	67%	1,105 (0)	67%
	All Other Lines	700	276	39%	276 (0)	39%
	Subtotal	**8,645**	**5,979**	**69%**	**5,980 (1)**	**69%**
Total		**27,312**	**18,350**	**67%**	**18,424 (74)**	**67%**

[a] Proposed project trips are in parentheses (XX).

Source: DKS Associates, 2014 and *SFMTA Transit Ridership Counts 2010/2011*.

Table IV.A-13: Existing Plus Project Conditions Regional Transit Screenline Analysis, PM Peak Hour (Outbound)

Screenline	Transit Corridor	Capacity	Existing Conditions		Existing Plus Project Conditions	
			Ridership	Utilization	Ridership[a]	Utilization
East Bay	BART	22,050	19,716	89%	19,721 (5)	89%
	AC Transit	3,926	2,256	57%	2,256	57%
	Ferries	1,615	805	50%	805	50%
	Subtotal	**27,591**	**22,777**	**83%**	**22,782 (5)**	**83%**
North Bay	Golden Gate Transit Bus	2,817	1,384	49%	1,386 (2)	49%
	Ferries	1,959	968	49%	968	49%
	Subtotal	**4,776**	**2,352**	**49%**	**2,354 (2)**	**49%**
South Bay	BART	14,910	10,682	72%	10,692 (10)	72%
	Caltrain	3,100	2,377	77%	2,377	77%
	SamTrans	320	141	44%	141	44%
	Ferries	–	–	–	–	–
	Subtotal	**18,330**	**13,200**	**72%**	**13,210 (10)**	**72%**
Total		**50,697**	**38,329**	**76%**	**38,346 (17)**	**76%**

[a] Proposed Project trips are in parentheses (XX).
Source: SF Planning Department and SFMTA, 2012.

Pedestrian Trips. Pedestrian trips to and from the project site would include walking trips to and from local retail and commercial businesses, walking trips from on-street parking to retail and commercial businesses, and walking trips to and from transit stops. As stated in **Table IV.A-10**, the proposed project would generate 167 walking trips and 190 transit trips during the PM peak hour with the majority (83 percent) of walking trips related to the retail use.

Bicycle Trips. The residential use of the proposed project would generate a net of 79 daily bicycle trips, including 14 bicycle trips in the PM peak hour. All of these trips would pass through the intersections of Mariposa Street and Arkansas Street, 18th Street and Carolina Street or 18th Street and Arkansas Street.

Freight and Service Loading Demand. For the residential portion of the proposed project, the longest truck expected to be generated would be 30 feet (consisting of delivery or moving trucks). As shown in **Table IV.A-14**, it is estimated that 28 daily truck trips would be generated for the proposed retail use and nine daily truck trips would be generated for the residential use, for a total of 37 daily truck

trips. It is estimated that less than two loading spaces would be required in total for retail and residential uses during an average hour. For the peak hour, (rounding up) three loading spaces are estimated to be required.

Table IV.A-14: Project Commercial Vehicle-Trips and Loading Space Demand

Site Use	GSF	Daily Truck Trip Generation	Average Hour Loading Spaces	Peak Hour Loading Spaces
Retail (Restaurant)	7,500	27	1.25	1.56
Retail (Composite)	2,500	0.55	0.02	0.03
Residential	319,832	9	0.44	0.56
Total		**37**	**1.71**	**2.15**

Source: DKS Associates and SF Guidelines, Appendix H, 2013.

A peak hour demand for two to three loading spaces is expected for the proposed project. No off-street loading spaces are proposed with the project. Three on-street loading spaces are proposed – one on Mariposa Street, one on Carolina Street, and one on Arkansas Street – subject to SFMTA review and approval.

Parking Demand. Project-related parking demand consists of both long-term and short-term demands. Long-term parking is typically related to employees and residents while short-term parking is in reference to patrons and visitors and is typically less than four hours in length.

As shown in **Table IV.A-15**, on a daily basis, the proposed project would generate short term demand for 145 spaces from the proposed retail use and long term demand for 357 spaces from the proposed residential and retail use. Parking credits are based on number of employees who currently work for MacKenzie Warehouse and park on–street. Combining the short term and long term parking demand, the proposed project would result in a demand of 502 parking spaces.

Table IV.A-15: Project Parking Demand – Daily

Site Use	GSF/Units	Short Term [a]	Long Term
Retail (Restaurant)	7,500	133	13
Retail (Composite)	2,500	12	5
Residential (Studio/1-Bedroom)	192	–	212
Residential (2- and 3-Bedroom)	128	–	192
Total		**145**	**422**
Existing Use Credits [b]		–	-65
Net Total		**145**	**357**

[a] Long-term retail demand is based on work-based retail trips, whereas short-term retail demand is based on non-work retail trips.

[b] Existing Use Credits based on number of employees who work for MacKenzie Warehouse and park on the street.

Source: DKS Associates, 2014.

Existing Plus Project-Level Impact Evaluation

Existing Plus Project impacts to study area intersections and roadway circulation, transit, pedestrian access, bicycle access, loading, emergency vehicle access, construction conflicts, and parking are discussed below.

Traffic Impacts

Existing Plus Project impacts to study area intersections and traffic circulation within the vicinity of the project site are discussed below.

Impact TR-1: The proposed project would not cause a substantial increase in traffic that would adversely affect traffic operations at 12 of the 13 study intersections or otherwise conflict with traffic circulation in the vicinity. (Less than Significant)

Intersection LOS Analysis

Level of service calculations were performed at the 13 study intersections in the project vicinity for the weekday PM peak hour. As previously described, the proposed project would generate 261 inbound and 191 outbound net vehicle trips during the PM peak hour, for a total of 452 PM peak hour vehicle trips. The project weekday PM peak hour vehicle trips were added to existing traffic

volumes to obtain Existing Plus Project traffic volumes. **Figure IV.A-6** illustrates the PM peak hour project vehicle trips while the Existing Plus Project traffic volumes are illustrated in **Figure IV.A-7** for each study intersection. The TIS includes the detailed calculation level of service analysis sheets for the PM peak hour Existing Plus Project conditions.

As shown in **Table IV.A-16**, based on the results of the LOS analysis, the following study intersections would operate at LOS D or better during the PM peak hour. Therefore, based on the level of service calculations, impacts to the following nine study intersections would be less than significant under Existing Plus Project conditions:

- 16th Street and Kansas Street (Intersection 2);
- Mariposa Street and I-280 NB off-ramp (Intersection 3)
- Mariposa Street and Arkansas Street (Intersection 6);
- Mariposa Street and Carolina Street (Intersection 7);
- Mariposa Street/US-101 NB off-ramp and Vermont Street (Intersection 8);
- 18th Street and Pennsylvania Avenue (Intersection 9);
- 18th Street and Arkansas Street (Intersection 10);
- 18th Street and Carolina Street (Intersection 11); and
- 18th Street and De Haro Street (Intersection 12).

As shown in **Table IV.A-16,** the following intersections operate at unacceptable levels of service (LOS E or F) under Existing conditions and would continue to do so under Existing Plus Project conditions:

- 16th Street and Arkansas Street (Intersection 1);
- Mariposa Street and Pennsylvania Avenue (Intersection 4);
- Mariposa Street and I-280 SB on-ramp (Intersection 13).

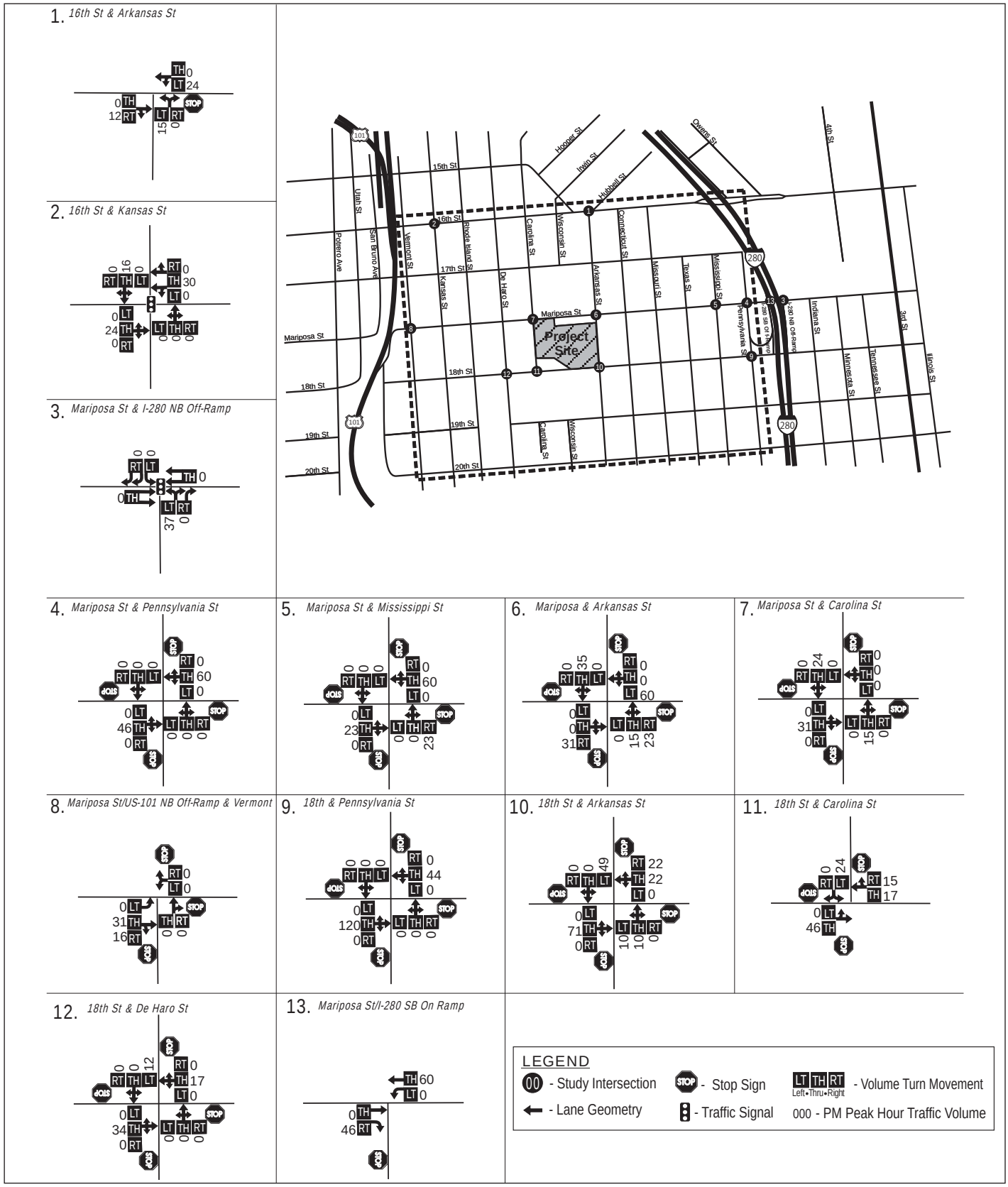

FIGURE IV.A-6

NOT TO SCALE

SOURCE: DKS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR

PM Peak Hour Project Generated Vehicle Trips

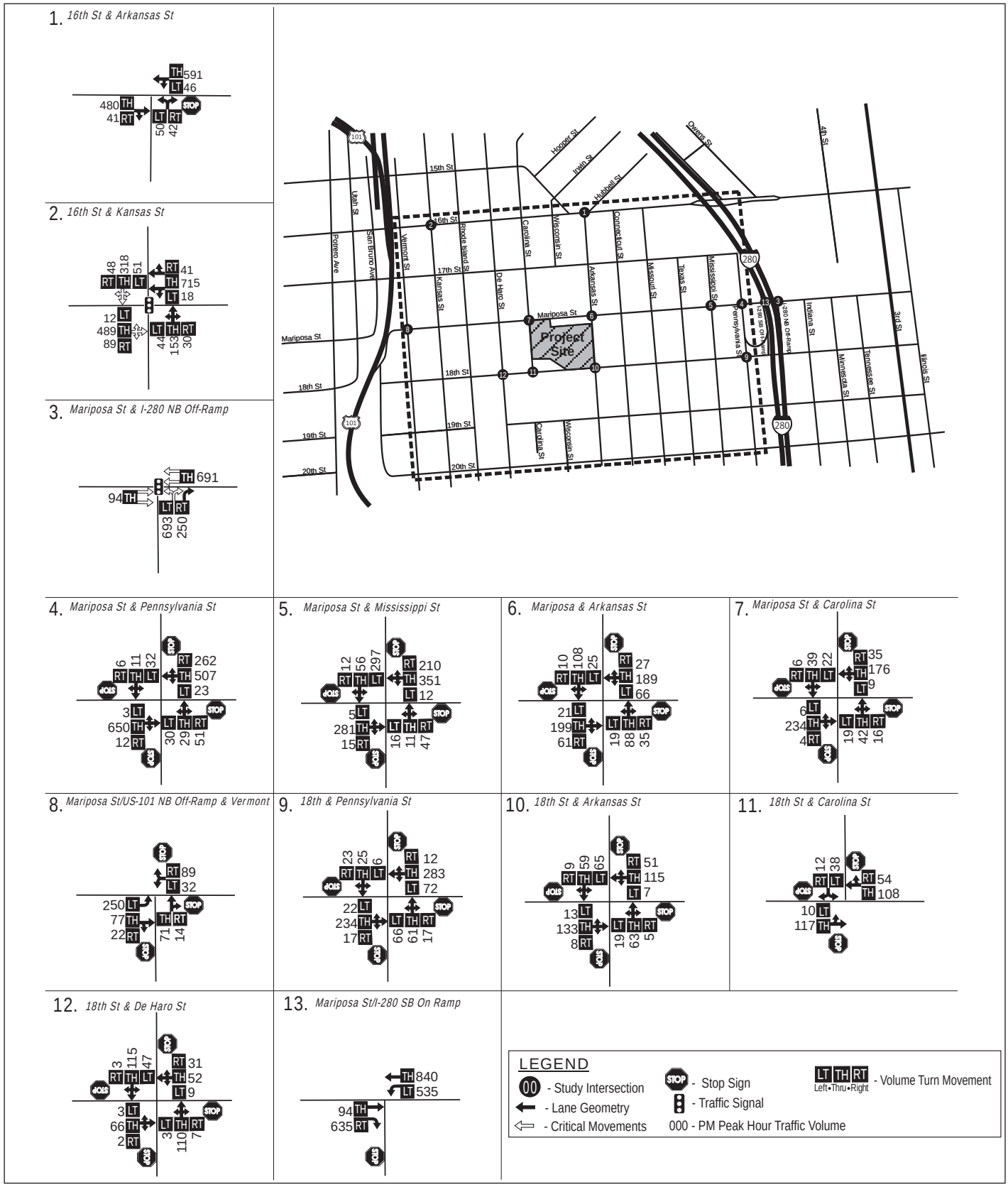

FIGURE IV.A-7

NOT TO SCALE

SOURCE: DKS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Existing Plus Project Traffic Volumes

Table IV.A-16: Existing Plus Project Conditions Intersection Level of Service

No.	Intersection Name	Control	PM Peak Hour			
			Existing Conditions		Existing Plus Project Conditions	
			Delay[a]	LOS[b,c]	Delay[a]	LOS[b,c]
1	16th Street and Arkansas Street	Unsignalized	25.7	D	**36.7 (NB)**	**E**
2	16th Street and Kansas Street	Signalized	16.9	B	17.7	B
3	Mariposa Street and I-280 NB off-ramp	Signalized	28.6	C	34.0	C
4	Mariposa Street and Pennsylvania Avenue	Unsignalized	**>50 (SB)**	**F**	**>50 (SB)**	**F**
5	Mariposa Street and Mississippi Street	Unsignalized	**>50 (WB)**	**F**	**>50 (WB)**	**F**
6	Mariposa Street and Arkansas Street (WB)	Unsignalized	9.8	A	11.3	B
7	Mariposa Street and Carolina Street (EB)	Unsignalized	9.2	A	9.5	A
8	Mariposa Street and US-101 NB off-ramp/ Vermont Street (EB)	Unsignalized	9.8	A	9.5	A
9	18th Street and Pennsylvania Avenue (WB)	Unsignalized	11.8	B	12.2	B
10	18th Street and Arkansas Street (WB)	Unsignalized	8.2	A	9.5	A
11	18th Street and Carolina Street (EB)	Unsignalized	7.7	A	8.3	A
12	18th Street and De Haro Street (SB)	Unsignalized	8.6	A	9.0	A
13	Mariposa Street and I-280 SB on-ramp	Unsignalized	**>50 (WB)**	**F**	**>50 (WB)**	**F**

[a] Delay is in seconds per vehicle and is based on average stopped delay. Where signalized intersection is LOS F, volume to capacity (v/c) ratio is also reported.

[b] LOS = Level of Service

[c] For unsignalized intersections, LOS is reported based on worst approach, which is indicated in parenthesis.

BOLD indicates unacceptable LOS of E or F.

Source: DKS Associates, 2014.

Under Existing conditions, the unsignalized intersection of 16th Street and Arkansas Street (Intersection 1) operates at LOS D for the PM peak hour and the Caltrans peak hour signal warrants are not met; under Existing Plus Project conditions the intersection would deteriorate to LOS E. The proposed project would add 15 vehicle trips to the worst approach (northbound) during the PM peak hour, representing 16 percent of the total PM peak hour northbound approach volume. However, the Caltrans signal warrants would continue to not be met. Given that the contribution from the proposed project would not cause Caltrans signal warrants to be met, even though the LOS would deteriorate from LOS D to LOS E, the proposed project would have a less-than-significant impact to the operating conditions at the intersection of 16th Street and Arkansas Street.

Under Existing conditions, the unsignalized intersection of Mariposa Street and Pennsylvania Avenue (Intersection 4) operates at LOS F during the PM peak hour. The proposed project would add no vehicle trips to worst approach (southbound) during the PM peak hour. Under Existing Plus Project conditions, the LOS would remain at F, and Caltrans signal warrants would be met for the intersection. However, given that there is no project contribution to the worst approach, the proposed project would have a less-than-significant impact to the operating conditions at the intersection of Mariposa Street and Pennsylvania Avenue.

Under Existing Conditions, the unsignalized intersection of Mariposa Street and the I-280 south-bound on-ramp (Intersection 13) operates at LOS F during the PM peak hour. Under Existing Plus Project conditions, the LOS of this intersection would remain at LOS F, and the proposed project would add 60 vehicle trips to the worst approach during the PM peak hour, representing 4 percent of the total PM peak hour westbound approach volume. The proposed project's contribution to the worst approach (westbound) is less than 5 percent; therefore, the proposed project's contribution to the unacceptable operating conditions at the intersection of Mariposa Street and the I-280 southbound on-ramp would be less than significant. It should also be noted that signalization of this intersection is planned as part of the Mission Bay South Infrastructure Plan. This signalization has already been identified and is expected to be implemented early 2015, before the opening of the proposed project. Signal timing coordination between Mariposa Street and I-280 northbound off-ramp and Mariposa Street and I-280 southbound on-ramp would occur.

As described above, the proposed project would have a less-than-significant impact on 12 of the 13 study intersections. It should also be noted that none of the abovementioned intersections were identified as operating at unacceptable levels of service under Existing Plus Project conditions in the *Eastern Neighborhoods FEIR*.

Although impacts to the above intersections would be less than significant, the project sponsor should implement Transportation Demand Management (TDM) measures to reduce vehicle trips to and from the project site and encourage use of alternative modes of travel as much as feasible. The

project sponsor has completed the City's TDM checklist,[11] which details the vehicle reduction measures that the project applicant intends to implement. These measures are outlined in the recommended Improvement Measure I-TR-1a, below.

Improvement Measure I-TR-1a: The project sponsor should implement Transportation Demand Management (TDM) measures to reduce vehicle traffic generated by the proposed project and to encourage the use of rideshare, transit, bicycle, and walk modes for trips to and from the proposed project. The TDM plan could include the following measures. Recommended components of the TDM program include the following:

- Provide information in the move-in packets for transit service (Muni and BART lines, schedules and fares), particularly for local trips (such as to the nearest grocery store, hardware store, shopping center, restaurants, and other nearby neighborhood commercial areas), information on where transit passes could be purchased in person and on-line, and information on the Clipper Card and 511 Regional Rideshare Program;
- Provide TDM training for property managers and coordinators; and have at least one contact person, preferably in the building for tenants with alternative mode travel questions;
- Promote and coordinate ridesharing activities (i.e., establish a "ride board") for all building residents and employees, particularly to popular local events;
- Facilitate access to car share spaces provided in the parking garage through on-site signage and information on the car share company, rates, and how to enroll in the car share program;

[11] Rick Westberg, Related, *Transportation Demand Management (TDM) Checklist Table: Private Development Projects, 1601 Mariposa Street*, November 20, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

- Ensure that the points of access to bicycle parking through elevators on the ground floor and the garage ramp include signage indicating the location of these facilities;
- Ensure that bicycle safety strategies are developed along the sides of the property, avoiding conflicts with private cars, transit vehicles and loading vehicles, posting signs where necessary to increase awareness of the presence of bicycle traffic;
- Facilitate access to the 16th Street, 17th Street and Mariposa Street bicycle routes via on-site signage;
- Coordinate with SFMTA on potential on-street (sidewalk) bicycle racks. In addition, post information in the bicycle parking area to inform bikers of nearby routes and bicycle parking information would encourage bicycle use and safe routes;
- Actively encourage alternative mode choice by actively monitoring above efforts effectiveness, and fostering local deliveries from nearby businesses where appropriate; and
- Participate with other project sponsors in a network of transportation brokerage services.

Driveway Operations

Inbound project traffic would use either the proposed garage entrance located at mid-block Arkansas Street or mid-block 18th Street. The curb cuts for the garage would be 20 feet wide, allowing for both inbound and outbound vehicles to have their own travel lane. The proposed residential building would generate 191 inbound vehicle trips during the PM peak hour and, using the methodology described in Appendix H of the SF Guidelines, this would represent approximately three inbound vehicle trips per minute throughout the PM peak hour for each parking garage entrance.[12] The gate to the garage would be flush with the wall of the garage, allowing no space for queuing off street; however, inbound drivers would have the ability to remotely trigger the garage gate to open during their approach and any queue of inbound vehicles arriving at the same time would have the

[12] ((191 inbound vehicle trips during the PM peak hour * peaking factor of two)/four))/15/2 entrances = 3 during any one minute of the peak 15-minute period.

advantage of having the gate already open. Based on this operational design there should not be any cars dwelling within traffic flow or on the sidewalk; however, there is the potential for inbound vehicles to conflict with pedestrians walking along the north side of 18th Street or the west side of Arkansas Street; therefore, Improvement Measure I-TR-1b, below is recommended. Outbound drivers exiting the residential parking facility may also conflict with pedestrians walking along the north side of 18th Street or the west side of Arkansas Street. Further discussion is included in the Pedestrian Impact analysis subsection, below (Impact TR-4).

Improvement Measure I-TR-1b: As an improvement measure to minimize vehicle queues at the proposed project driveway into the public right-of-way, the proposed project would be subject to the Planning Department's vehicle queue abatement Conditions of Approval (see TIS Appendix M), which state the following:

> It shall be the responsibility of the owner/operator of any off-street parking facility primarily serving a non-residential use, as determined by the Planning Director, with more than 20 parking spaces (excluding loading and car-share spaces) to ensure that recurring vehicle queues do not occur on the public right-of-way. A vehicle queue is defined as one or more vehicles blocking any portion of any public street, alley or sidewalk for a consecutive period of three minutes or longer on a daily or weekly basis.
>
> If a recurring queue occurs, the owner/operator of the parking facility shall employ abatement methods as needed to abate the queue. Suggested abatement methods include but are not limited to the following: redesign of facility layout to improve vehicle circulation and/or on-site queue capacity; employment of parking attendants; installation of LOT FULL signs with active management by parking attendants; use of valet parking or other space-efficient parking techniques; use of off-site parking facilities or shared parking with nearby uses; use of parking occupancy sensors and signage directing drivers to available spaces; travel demand management strategies such as additional bicycle parking, customer shuttles or delivery services; and/or parking demand management strategies such as parking time limits, paid parking or validated parking.

> If the Planning Director, or his or her designee, suspects that a recurring queue is present, the Department shall notify the property owner in writing. Upon request, the owner/ operator shall hire a qualified transportation consultant to evaluate the conditions at the site for no less than seven days. The consultant shall prepare a monitoring report to be submitted to the Department for review. If the Department determines that a recurring queue does exist, the facility owner/operator shall have 90 days from the date of the written determination to abate the queue.

School Pick-Up/Drop-Off Operations

The project is located near two schools, Live Oak School and International Studies Academy, and is also located across from Jackson Playground. The drop-off/pick-up area for Live Oak School is located on Mariposa Street and the drop-off/pick-up area for International Studies Academy is on De Haro Street. The project would not substantially increase traffic on these roadways such that project trips would contribute to unacceptable operating conditions or substantial increases in congestion on De Haro Street or Mariposa Street, as such, existing drop-off and pick-up activity for these schools would not substantially be affected by the proposed project. Further discussion is included in the Pedestrian Impact analysis subsection, below (Impact TR-4) and in the Loading Impact analysis subsection (Impact TR-6).

Impact TR-2: The proposed project would cause a substantial increase in traffic that would substantially affect traffic operations at one of the 13 study intersections – Mariposa Street and Mississippi Street (Intersection 5). (Significant and Unavoidable)

As shown in **Table IV.A-16**, under Existing conditions, the unsignalized intersection of Mariposa Street and Mississippi Street (Intersection 5) operates at LOS F during the PM peak hour and Caltrans signal warrants are met for the intersection. The proposed project would add 60 vehicle trips to the worst (westbound) approach during the PM peak hour, representing about 10 percent of the total PM peak hour volumes for the westbound approach. Under Existing Plus Project conditions, the LOS at this intersection would remain at LOS F, and the Caltrans signal warrants would continue to be met.

The proposed project's contribution to existing unacceptable operating conditions at this intersection would therefore be substantial (since project contribution is over five percent) and the proposed project's impacts to the Mariposa Street and Mississippi Street intersection would be a significant impact.

To mitigate poor operating conditions at Mariposa Street and Mississippi Street, the signalization of this intersection and other measures to improve operations were considered. With signalization, the intersection would operate at LOS D during the Existing Plus Project weekday PM peak hour conditions, thereby reducing the project's existing plus project impact at this intersection to a less-than-significant level. SFMTA considers meeting Caltrans signal warrants, as well as other site specific conditions, when determining whether an unsignalized intersections should be signalized or not. Considering the intersection of Mariposa Street and Mississippi Street, SFMTA does not recommend signalization because the intersection was not identified as a candidate or priority for signalization, at this time.[13]

Other improvements, such as the installation of a right-turn pocket at the intersection were also considered and, if implemented, would remove existing parking on westbound Mariposa Street. However, according to SFMTA, proposed traffic calming and pedestrian improvement projects planned for implementation at this intersection would preclude the installation of a turn-pocket at this location. Therefore, no feasible mitigation was found to reduce the proposed project's significant impact at the intersection of Mariposa Street and Mississippi Street to less-than-significant levels and the Existing Plus Project traffic impact at the intersection would be significant and unavoidable.

The *Eastern Neighborhoods FEIR* did not identify significant impacts related to operation of this intersection. The proposed project would therefore result in a significant unavoidable impact to one of the 13 study intersections that is specific to the proposed project.

[13] DKS Associates, personal communication with Chris Espiritu, San Francisco Municipal Transportation Agency, March 10, 2014.

Transit Impacts

Existing Plus Project impacts to the local and regional transit network are discussed below.

Impact TR-3: The proposed project would not result in a substantial increase in transit demand that could not be accommodated by Muni transit capacity; nor would it affect transit operating conditions within the project vicinity such that adverse impacts to Muni transit service could occur. (Less than Significant)

Local Transit

As previously discussed, the *Eastern Neighborhoods FEIR* determined that even with mitigation, impacts to Muni services would be significant and unavoidable with implementation of the *Eastern Neighborhoods Plan*. As discussed in detail below, although the proposed project would contribute to this impact, the project contribution would not be substantial and this impact would be less than significant.

The proposed project would add 74 outbound transit trips that would be distributed among the Muni screenlines under Existing Plus Project conditions (as shown in **Table IV.A-12**); however, all screenlines and corridors would continue to operate under the Muni 85 percent capacity utilization threshold. Therefore, the proposed project would have a less-than-significant impact on Muni ridership and capacity utilization.

Of the transit lines serving the project site, only the 10 Townsend bus route is currently operating at or above 85 percent capacity utilization as shown in **Table IV.A-3**. The proposed project would add five trips to the outbound 10 Townsend bus route, crossing the Northeast screenline; however, this represents only 3 percent of the ridership and would therefore be less than significant.

The proposed project would add vehicle trips to streets with Muni bus service, including 16th Street, 18th Street, Rhode Island Street, and De Haro Street. However, as the relevant intersections and approaches are continuing to operate at an acceptable level of service, it is expected that these vehicle

trips would not affect transit operations and would generally not be in direct conflict with Muni buses and light rail vehicles. Additionally, there are no existing bus and light rail stop locations directly adjacent to the project site. The nearest bus stop is located at Mariposa Street and De Haro Street and the nearest light rail stop at Third Street and Mariposa Street. As such, the proposed project would not affect Muni transit operations. Therefore, Muni transit impacts as a result of the proposed project would be less than significant.

It should be noted that the proposed project would be subject to the Transit Impact Development Fee (TIDF). The TIDF attempts to recover the cost of carrying additional riders generated by new development by obtaining fees on a square footage basis. TIDF funds may be used to increase transit service.

Regional Transit

The *Eastern Neighborhoods FEIR* determined that impacts to regional transit would be less than significant with implementation of the *Eastern Neighborhoods Plan*. As discussed in detail below, the proposed project's impact to regional transit operations would also be less than significant.

Similar to Muni, the analysis for regional transit screenlines assesses the effect of project-generated transit trips in the outbound direction during the weekday PM peak hour. As shown in **Table IV.A-13**, the proposed project would add approximately 17 new transit riders in the weekday PM peak hour to the three regional screenlines: five transit trips to the East Bay, two transit trips to the North Bay, and 10 transit trips to the South Bay. The proposed project would not cause the regional transit services to exceed their established capacity utilization standards of 100 percent utilization. As a result, the proposed project would have a less-than-significant impact on ridership and capacity utilization for the regional transit operators.

There are no adjacent regional transit facilities or service to the project site, and therefore, similar to local transit, the proposed project trips would not alter any regional transit operations in the project

area. As such, the proposed project would not adversely affect regional transit operations and would have a less-than-significant impact on regional transit.

While the proposed project's impact related to regional transit operations would be less than significant, Improvement Measure TR-1a, above is recommended for consideration by City decision-makers to reduce the proposed project's less-than-significant impacts related to transit operations.

Pedestrian Impacts

Impacts to the pedestrian network within the vicinity of the project site are discussed below.

Impact TR-4: The proposed project would not result in an increase in the amount of overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, nor create potentially hazardous conditions for pedestrians. (Less than Significant)

As previously discussed, the *Eastern Neighborhoods FEIR* determined that because baseline pedestrian volumes within the Showplace Square/Potrero Hill neighborhood are relatively low, the addition of pedestrian trips associated with the rezoning options would not substantially affect baseline pedestrian operating conditions and impacts to pedestrian circulation were identified as less than significant. As previously discussed, the *Eastern Neighborhoods FEIR* determined that pedestrian impact analyses would be conducted for future development, and individual development projects would make localized sidewalk improvements and improvements to reduce pedestrian-vehicle and bicycle conflicts. However, such development projects would not typically be required to improve system-wide or area-wide deficiencies and this impact was identified as less than significant. As discussed below, proposed project impacts to pedestrian circulation would also be less than significant.

The proposed project would include an average 43-foot-wide public greenway dividing the east and west buildings and would provide a north-south pedestrian connection between Mariposa Street and 18th Street that would be accessible 24-hours a day. The primary residential entry points would be

accessed through a public greenway connecting mid-block Mariposa Street with mid-block 18th Street. An additional residential-only access point for the West Building would be via Mariposa Street and Carolina Street at mid-block and for the East Building via 18th Street and Arkansas Street. Retail access would be located along Carolina Street and Mariposa Street and pedestrians walking from on-street parking to retail space would generally use the greenway and sidewalks surrounding the project. Sidewalks exist along the perimeter of the project site.

As stated in **Table IV.A-10**, the proposed project would generate 167 walking trips and 190 transit trips during the PM peak hour with the majority (83 percent) of walking trips related to the retail use. As described in the Existing conditions section, pedestrian volumes in the area of the project site were observed to be light and the added project-related pedestrian traffic could be accommodated by existing and improved pedestrian facilities. Potential conflicts between vehicles generated by the proposed project and pedestrians may occur at intersections near the project site and at driveway access points; however, all crosswalks at adjacent intersections are striped and there are signs in place warning drivers to drive cautiously related to the adjacent Live Oak School and International Studies Academy.[14] The proposed project would include two separate driveway access points to the parking garage– one on the west side of Arkansas Street and one on the north side of 18th Street. The proposed project would generate more traffic at these two driveways than that which is currently generated at the existing site and would have the potential to conflict with pedestrians along the Arkansas Street and 18th Street sidewalks. While these potential conflicts may occur, the increase in vehicle traffic due to the proposed project would not create potentially hazardous conditions because adequate facilities are already in place to accommodate the increase in pedestrian traffic within the vicinity. In addition, Improvement Measure I-TR-1b, above is recommended to minimize the vehicle queues at the proposed project driveways and into the public right-of-way, which would further reduce the already less than significant impact related to vehicle queues at the project driveways.

[14] Travel speeds along adjacent roadways are also enforced by the San Francisco Police Department and posted speed limits are consistent with the nearby school uses.

To further reduce the less-than-significant pedestrian impacts, Improvement Measure I-TR-4, below, is recommended to provide warnings to pedestrians to the presence of vehicles exiting the parking facilities and further improve pedestrian safety at the project site.

Pedestrians in the vicinity of the project site may also be accessing transit. As previously described, three local transit stops are located near the project site. The project site is approximately 0.10 miles (1 block) from the 19 Polk bus stops at De Haro Street at 18th Street and De Haro Street at Mariposa Street and from the 10 Townsend and 22 Fillmore bus stops at Wisconsin Street and 17th Street.

Pedestrian activity related to the Live Oak School and other schools would not substantially change as a result of the proposed project conditions, since there would be no change in the pick-up/drop-off times that would occur upon implementation of the proposed project. Pedestrian traffic would continue to be heaviest during drop-off/pick-up times and observations of the project vicinity showed minimal pedestrian traffic during the PM peak hour under Existing conditions, which would remain low under Existing Plus Project conditions. Although Live Oak School is currently expanding its enrollment, the additional pedestrian traffic generated by this expansion (estimated at about 36 additional students) would be minimal. Additionally, Jackson Playground, located across the street from the project site, would not experience substantial changes related to pedestrian traffic over Existing conditions since implementation of the project would not require the relocation of the two existing entrances/exits to the park along Mariposa Street. Pedestrians were not observed crossing the street from the school to the park during the PM peak hour under Existing conditions and this low volume would likely continue under Existing Plus Project conditions.

The proposed project would result in an increase in pedestrians within the vicinity of the site; however, not in an amount that public sidewalks would become overcrowded, interfere with pedestrian circulation and circulation to nearby areas and buildings, or create potentially hazardous conditions for pedestrians. Furthermore, the project would create additional corridors for pedestrian circulation. As such, pedestrian impacts resulting from the project would be less than significant.

While the proposed project's impact related to pedestrian circulation would be less than significant, Improvement Measure I-TR-4, below is recommended for consideration by City decision-makers to reduce the proposed project's less-than-significant impacts related to pedestrian circulation.

> Improvement Measure I-TR-4: Audio and visual alerts would aid pedestrians along the north side of 18th Street and the west side of Arkansas Street to the presence of vehicles in an effort to reduce conflicts.

Bicycle Impacts

Impacts to the bicycle network within the vicinity of the project site are discussed below.

Impact TR-5: The proposed project would not result in potentially hazardous conditions for bicyclists, or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas. (Less than Significant)

The *Eastern Neighborhoods FEIR* determined that individual development projects would be required to comply with provisions of the Planning Code pertaining to bicycle parking spaces in off-street parking facilities, and other support facilities, such as showers and lockers, and bicycle impacts were determined to be less than significant. As discussed below, project-specific impacts to bicycle operations would also be less than significant.

Under Planning Code Section 155.2, the residential portion of the proposed project (320 units) would be required to provide 155 Class 1 and 16 Class 2[15] bicycle parking spaces. Under Planning Code Section 155.4 the residential portion of the proposed project would be exempt from providing

[15] Class 1 bicycle parking spaces are defined as facilities which protect the entire bicycle, its components and accessories against theft and against inclement weather, including wind-driven rain. Class 2 bicycle parking spaces are defined as standard racks to which you can lock a bicycle.

showers and clothes lockers,[16] as would the retail portion because it contains less than 25,000 gross square feet. As proposed, the proposed project would provide more than the required amount, approximately 441 Class 1 bicycle parking spaces and up to 28 Class 2 bicycle parking spaces in sidewalk racks.[17,18] The Class 1 bicycle parking areas would be accessed from pedestrian access points on all four facing streets and from the parking facility access points along the western side of Arkansas Street and the north side of 18th Street.

The residential use of the proposed project would generate a net of 79 daily bicycle trips (14 bicycle trips in the PM peak hour) and 1,934 daily vehicle trips (335 vehicle trips in the PM peak hour). In order to access the bicycle and vehicle parking facility, two new curb cuts for the two parking facilities on the west side of Arkansas Street and the north side of 18th Street would be included as part of the proposed project. As mentioned previously, the proposed project would generate more vehicle trips than the current use at the existing site. Vehicles accessing these two driveways would be turning to or from Arkansas Street or 18th Street and may result in potential vehicle-bicycle conflicts. It is not anticipated that vehicles at the loading spaces around the proposed project would substantially conflict with bicycle travel in the area because there are no bicycle routes located adjacent to the project site and no Class 1 or Class 2 bicycle parking areas are near the loading spaces.

It should be noted that on Mariposa Street, several blocks east of the project site, there is a Class II bicycle facility that also experiences a higher volume of vehicles than other local streets south of 16th Street. The proposed project would add to this volume with vehicles traveling between the project site and the I-280 ramps, Third Street, and local streets south of the project site. Based on field observations in the area by consultants and Planning Department staff, bicycles are in close proximity

[16] San Francisco Planning Code; Section 155.2, Table 155.2 states for residential developments: "For projects over 100 dwelling units, 100 Class 1 spaces plus 1 Class 1 space for every 4 dwelling units over 100." 320 dwelling units equals 155 required bicycle parking spaces.

[17] Subject to SFMTA approval.

[18] Calculation based on gross square footage, whereas requirement is based on occupied square footage, so the requirement may be less.

with vehicles along 16th Street, Mississippi Street, and Mariposa Street. In some instances, turning vehicles created conflicts with bicycles. Bicycles traveling on the Class III bicycle route along Mariposa Street at the I-280 southbound on-ramp were observed to conflict with vehicles turning from eastbound or westbound Mariposa Street to the I-280 southbound on-ramp. This intersection is stop-controlled in the eastbound direction but free-flow in the westbound direction. The Mariposa Street and I-280 northbound off-ramp is signalized but conflicts between vehicles turning east or west to Mariposa Street were observed. In general, vehicles traveling to and from the I-280 ramps were seen traveling at rates of speed higher than those along Mariposa Street resulting in shorter reaction times for turning vehicles avoiding bicycles. However, while bicycle traffic generated by the proposed project may be subject to these existing conditions, vehicle and bicycle traffic generated by the project would not substantially exacerbate these conditions such that the occurrence of such conflicts would substantially increase.

Given the existing utilization of nearby bicycle facilities and proposed improvements to existing facilities in the project vicinity, the additional bicycle trips would have a less-than-significant impact on nearby bicycle facilities. Additionally, the proposed project would include approximately 441 Class 1 bicycle spaces and 28 Class 2 bicycle spaces to accommodate the expected bicycle parking demand. The project would not result in overcrowding on nearby bicycle routes, interfere with bicycle circulation, or create potentially hazardous conditions for bicycles. As such, the project would have a less-than-significant impact on bicycle facilities or bicycle travel in the vicinity of the project site. Improvement Measure I-TR-1a, which include measures such as enhanced signage for bicycle parking and routes and implementation of bicycle safety strategies, may be implemented to further improve upon this less-than-significant bicycle impact.

Loading Impacts

Potential conflicts related to loading facilities are described below.

Impact TR-6: The loading demand of the proposed project would be accommodated within the proposed on-street loading spaces, and would not create potentially hazardous conditions or significant delays for traffic, transit, bicyclists or pedestrians. (Less than Significant)

As previously discussed, the *Eastern Neighborhoods FEIR* determined that impacts related to loading would be less than significant with implementation of the *Eastern Neighborhoods Plan*. As discussed below, the proposed project's loading-related impacts would also be less than significant.

As previously discussed, it is estimated that 37 daily truck trips would be generated by the project. Less than two loading spaces would be required on average with a peak demand of three loading spaces required. This demand could be accommodated by the three proposed on-street loading spaces (subject to SFMTA approval); one each at the entrance to the residential portions of the buildings, including mid-block on Carolina Street, mid-block on Arkansas Street, and mid-block Mariposa Street by the entrance to the public greenway. The loading space on Carolina Street would be 40 feet long while the spaces on Mariposa Street and Arkansas Street would each be 28 feet long. Residential freight loading vehicles are typically 25 feet long and 8 feet wide with larger vehicles reaching 30 feet long and 8 feet wide. As mentioned previously under trip generation, the residential portion of the proposed project is expected to generate a peak hour freight demand of three vehicles. The proposed loading spaces would be able to accommodate this demand. All of the expected residential-related freight loading demand would be accommodated by the on-street loading spaces.

Planning Code section 152.1 requires no off-street loading spaces for retail and restaurant use of 10,000 square feet or less, and two for residential uses of between 200,000 and 500,000 square feet. Therefore, the proposed project, under Planning Code Section 152.1, would be required to provide two residential off-street loading spaces. Although no off-street parking loading is proposed, any necessary commercial and residential loading could be accommodated by the on-street loading spaces located on Carolina Street, Mariposa Street and Arkansas Street and while SFMTA discourages the use of on-street loading spaces to meet project commercial loading parking

requirements, the distance between commercial uses on the West Building and off-street parking in the East Building would make off-street loading for commercial uses difficult to access.

The on-street loading spaces for the proposed project would require approval from the SFMTA. The proposed loading spaces would be subject to review and approval through the SFMTA's Color Curb Program. Whether approved or not, the proposed project would be required to meet the Planning Code off-street loading requirements, by seeking an exception for the loading, and therefore the project would have a less-than-significant impact related to loading conditions.

Garbage and recycling pick-up for the east building of the proposed project is expected to be brought to the curb along the north side of 18th Street for pick-up and for the west building would be brought to the curb along the east side of Carolina Street. Pick-up would depend on coordination between the garbage and recycling services and the building management.

The on-street loading spaces would not conflict with pedestrian activity in the area given that pedestrian activity on area sidewalks is generally light and would not substantially increase with the proposed project (see discussion under Impact TR-4). The additional on-street activities associated with delivery services and movers would not occur in a heavily congested area which could in turn affect pedestrian movements and this impact would be less than significant. In addition, the dedicated on-street loading zones would reduce the potential for delivery vehicles to double-park and would ensure that vehicle conflicts with loading activities would also be less than significant.

However, during pick-up times for Live Oak School, there is the potential for interaction between parents queuing along Mariposa Street waiting to pick up their children and vehicles using the proposed loading space on Mariposa Street. This interaction could be avoided by restricting move-in times so as to not interfere with peak pick-up times for the school; therefore, Improvement Measure I-TR-6, below, is recommended for consideration by City decision-makers to reduce the proposed project's less-than-significant impacts related to pedestrian circulation.

Improvement Measure I-TR-6: Active loading on Mariposa Street for residential uses (such as move-in/move-out) should be restricted to off-peak school hours. Peak pick-up/drop-off times at Live Oak School are generally between 8:15 a.m. and 8:35 a.m. and 2:40 p.m. and 3:35 p.m.

Emergency Access Impacts

Potential impacts related to emergency access are discussed below.

Impact TR-7: The proposed project would not result in significant impacts on emergency vehicle access. (Less than Significant)

Emergency vehicle access would be provided along Carolina Street, Mariposa Street, Arkansas Street and 18th Street. The proposed loading spaces, pending SFMTA approval, on Carolina Street and Mariposa Street could provide direct emergency access to the residential buildings because vehicles could be easily cleared in this area. The loading spaces are adjacent to the main residential entrances. Because emergency service providers would continue to have adequate emergency vehicle access, the proposed project would have a less-than-significant impact on emergency vehicle access.

Construction Impacts

Potential impacts associated with project construction are discussed below.

Impact TR-8: The proposed project would not result in construction-related transportation impacts because of the temporary and limited duration of these activities. (Less than Significant)

Based on preliminary construction information provided by the project sponsor, construction is estimated to take approximately 24 months, staggered slightly between the two buildings. Typical hours of construction would occur on weekdays between 7:00 a.m. and 4:00 p.m. The hours of

construction would be consistent with the Department of Building Inspection requirements, and the contractor would need to comply with the San Francisco Noise Ordinance.[19] There may be some need for additional construction activity later during weekdays, on Saturdays, or on an as-needed basis. This construction activity, if outside of regulated construction days/hours, would be subject to review by the Department of Public Works and Department of Building Inspection and would be required to meet the Noise Ordinance.

Construction staging and delivery activities would generally occur on-site. Loading and unloading of materials could occur on Arkansas Street, 18th Street and Carolina Street. In addition, the Draft Response Plan for the hazardous materials clean-up actions indicates that approximately 40 truckloads of soil would be required for off-site disposal. The soils for disposal will be stockpiled on site, sampled, and characterized, then transported to Kettleman Hills (if hazardous waste) and/or Altamont Landfill (if non-hazardous waste)[20] or other landfills. A more detailed Transportation Plan would be developed as part of the excavation Remedial Design and Implementation Plan process which is discussed further in Section IV.D, Hazards and Hazardous Materials.

If any temporary traffic lane, parking lane, or sidewalk closures are necessary, closures would be required to be coordinated with City agencies to lessen the effects of the construction-related activities. Any traffic lane closures and sidewalk closures are subject to review and approval by the City's Transportation Advisory Staff Committee (TASC) which involves several departments including DPW, SFMTA, San Francisco Police Department, and San Francisco Fire Department. In addition, the contractor is required to follow "Regulations for Working in San Francisco Streets" (the Blue Book), which is available from SFMTA (www.sfmta.com/cms/vcons/bluebook.htm). Also, although conflicts with transit operations are not anticipated, the project sponsor/contractor is

[19] The San Francisco Noise Ordinance, Article 29 of the Police Code, permits construction activities seven days a week, between 7:00 a.m. and 8:00 p.m.

[20] These landfills are located in Kettlemen City, Kings County and Livermore, Alameda County, respectively.

required to coordinate with the Street Operations and Special Events Office at Muni to coordinate the schedule of construction activities and to decrease any potential conflicts construction activities may have on transit services or facilities.

Additionally, the proposed project's construction timeline may overlap with other projects under construction or implementation at the same time. While the proposed project's construction may occur concurrently with other projects in the project vicinity, it is not expected that the construction schedule of the proposed project would be in conflict with other projects in the area.

Construction impacts would be predominantly limited to the site and limited in duration; therefore, the proposed project impacts were determined to be less than significant. An improvement measure below is identified to reduce potential conflicts between construction activities and pedestrians, bicyclists, transit and vehicles, including the preparation of a traffic control plan for construction, carpool and transit access for construction workers, and construction truck traffic management.

While the proposed project's construction-related transportation impacts would be less than significant, Improvement Measure I-TR-8, below, which recommends that the project sponsor coordinate with various groups to develop a construction management plan, may be recommended for consideration by City decision makers to further reduce the project's less-than-significant impacts related to potential conflicts between construction activities and pedestrians, transit, and autos.

> Improvement Measure I-TR-8: The project sponsor should consult with other agencies including Muni/SFMTA and property owners near the project site to assist coordination of construction traffic management strategies as they relate to transit operations and the needs of other users adjacent to the project site. The project sponsor should proactively coordinate with these groups prior to developing the construction management plan to ensure that the plan adequately meets these needs, including designating a construction management contact person, advertisement of construction schedule to local businesses and schools, and encouragement of construction workers to carpool or use alternative modes of travel.

Parking Discussion

As discussed in Summary, SB 743 amended CEQA by adding Public Resources Code Section 21099 regarding the analysis of parking impacts for certain urban infill projects in transit priority areas.[21] Public Resources Code Section 21099(d), effective January 1, 2014, provides that "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." As previously discussed, the proposed project is within a transit priority area. Thus, this EIR does not consider adequacy of parking in determining the significance of project impacts under CEQA. However, the Planning Department acknowledges that parking conditions may be of interest to the public and the decision makers. Therefore, this analysis presents a parking demand, supply and the Planning Code requirements for informational purposes.

Parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel.

The absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, taxis, bicycles or travel by foot) and a relatively dense pattern of urban development, induces many drivers to seek and find alternative parking facilities, shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service or other modes (walking and biking), would be in keeping with the City's "Transit First" policy and numerous San Francisco General Plan Polices, including those in the Transportation Element. The

[21] A "transit priority area" is defined as an area within ½ mile of an existing or planned major transit stop. A "major transit stop" is defined in California Public Resources Code 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. A map of San Francisco's Transit Priority Areas is available online at: sfmea.sfplanning.org/Map%20of%20San%20Francisco%20Transit%20Priority%20Areas.pdf.

City's Transit First Policy, established in the City's Charter Article 8A, Section 8A.115, provides that "parking policies for areas well served by public transit shall be designed to encourage travel by public transportation and alternative transportation."

The transportation analysis accounts for potential secondary effects, such as cars circling and looking for a parking space in areas of limited parking supply, by assuming that all drivers would attempt to find parking at or near the project site and then seek parking farther away if convenient parking is unavailable. The secondary effects of drivers searching for parking is typically offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area, and thus choose to reach their destination by other modes (i.e. walking, biking, transit, taxi). If this occurs, any secondary environmental impacts that may result from a shortfall in parking in the vicinity of the proposed project would be minor, and the traffic assignments used in the transportation analysis, as well as in the associated air quality, noise and pedestrian safety analyses, would reasonably address potential secondary effects.

Section 151.1 of the San Francisco Planning Code for UMU Districts allows off-street parking at a rate of one spot per 2-bedroom and higher units and 0.75 space per 1-bedroom or fewer units. Within the UMU zone, there is no minimum requirement to provide off-street parking for commercial uses, although a maximum of one space for every 200 square feet of restaurant use and one space for every 500 square feet of retail use is allowed. Planning Code Section 155(i) requires that one handicap-accessible parking space be provided for every 25 off-street parking spaces provided. Planning Code Section 166 requires two car share spaces for every 200 residential dwelling units, plus one additional space for each additional 200 units. Additionally, parking spaces are not "bundled" with the residential units. In other words, residents would have the option to rent or purchase a parking space, but one would not be automatically provided with the residential unit. Therefore, the proposed project would be permitted to have up to 272 residential off-street parking spaces and up to 42 commercial off-street parking spaces. The proposed project would include between 265 and 275 parking spaces.

The parking demand for the new uses associated with the proposed project was determined based on the methodology presented in the SF Guidelines. As shown in **Table IV.A-17**, on an average weekday, the demand for parking for the proposed project would be 502 spaces. The TIS for the proposed project assumed that the project would provide up to 277 off-street parking spaces (including 10 handicap spaces, 10 to 20 spaces for the commercial uses, and between two and six car share spaces) and result in an increase of four on-street parking spaces. Thus, as proposed, the project would have an unmet parking demand of 221 spaces.[22] Within a reasonable distance of the project vicinity, there are approximately 600 unoccupied spaces during midday and 1,350 unoccupied spaces in the evening, therefore the unmet parking demand could be accommodated within existing on-street parking spaces. Additionally, the project site is well served by public transit and bicycle facilities. Therefore, any unmet parking demand associated with the project would not materially affect the overall parking conditions in the project vicinity such that hazardous conditions or significant delays are created for traffic, transit, bicycles or pedestrians.

The unmet demand for parking on the project site could be met by existing facilities within the vicinity and that the proposed project site is well-served by transit and bicycle facilities. Therefore, a reduction in the number of off-street parking spaces associated with the proposed project, even if no off-street spaces are provided, would not result in substantial delays or hazardous conditions to traffic, transit, bicycles or pedestrians.

[22] The proposed project has since been revised to include approximately 265 to 275 spaces; however, because the unmet demand would be accommodated by on-street spaces in the vicinity, fewer parking spaces would not alter the conclusions of the parking analysis provided in this section.

Table IV.A-17: Existing Plus Project Conditions Parking Analysis

Parking Facility	Capacity	Midday (1:30 p.m. – 3:00 p.m.)		Evening (6:30 p.m. – 8:00 p.m.)	
		Demand	Utilization	Demand	Utilization
Existing On-Street Parking	3,832	3,241	85%	2,470	64%
Existing Total	**3,832**	**3,241**	**85%**	**2,470**	**64%**
Project Contribution On-Street	4	98	–	98	–
Residential Contribution Off-Street	277	404	145%	404	145%
Existing Plus Project Total	**4,113**	**3,743**	**91%**	**2,972**	**72%**

Source: DKS Associates, 2013. *On-Street Parking Survey*.

Additionally, parking conditions are not static, as parking supply and demand varies from day to day, from day to night, from month to month, etc. Hence, the availability of parking spaces (or lack thereof) is not a permanent physical condition, but changes over time as people change their modes and patterns of travel. In summary, the proposed project would not result in a substantial parking deficit with or without the off-street parking currently proposed that would create hazardous conditions or significant delays affecting traffic, transit, bicycles or pedestrians.

2025 Cumulative-Level Impact Evaluation

As previously discussed, the 2025 Cumulative conditions traffic volumes have been developed from the existing and cumulative intersection turning movement volumes for the *Eastern Neighborhoods FEIR*. For intersections not included in the *Eastern Neighborhoods FEIR*, the annual percent growth rate for intersection turning movement volumes between the existing and cumulative conditions analysis years have been determined. This annual percent growth rate has been applied to the observed 2013 turning movement volumes to determine the 2025 Cumulative conditions turning movement volumes.

The *Eastern Neighborhoods FEIR* identified cumulative level impacts at the 13th and Bryant Streets; South Van Ness, Howard, and 13th Streets; Seventh and Brannan Streets; Seventh and Townsend Streets; Eighth and Brannan Streets; Eight and Bryant Streets; Eighth and Harrison Streets; Third and Cesar Chavez Streets; and Cesar Chavez and Evans Streets intersections, none of which are (or are comparable to) the project study intersections. Cumulative impacts were also identified for up to

seven Muni transit lines. Impacts related to pedestrian and bicycle access, loading, and construction were identified as less than significant.

Cumulative impacts to study area intersections and roadway circulation, transit, pedestrian access, bicycle access, and potential construction conflicts are discussed below.

Traffic Impacts

2025 Cumulative impacts to study area intersections and traffic circulation within the vicinity of the project site are discussed below.

Impact C-TR-1: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to significant cumulative traffic impacts at 11 of the 13 study intersections. (Less than Significant)

Similar to the Existing Plus Project condition, level of service calculations were performed at the 13 study intersections for the weekday PM peak hour. As discussed under the Travel Demand subsection, the project would generate an estimated 452 vehicle trips during a typical weekday PM peak hour.

Figure IV.A-8 shows the 2025 Cumulative conditions traffic volumes at the study intersections for the PM peak hour. **Table IV.A-18** shows the intersection operating conditions for the 2025 Cumulative conditions. It should be noted that the 2025 Cumulative traffic volumes already include the vehicle trips generated by the proposed project. Detailed LOS calculations can be found in Appendix G of the TIS.

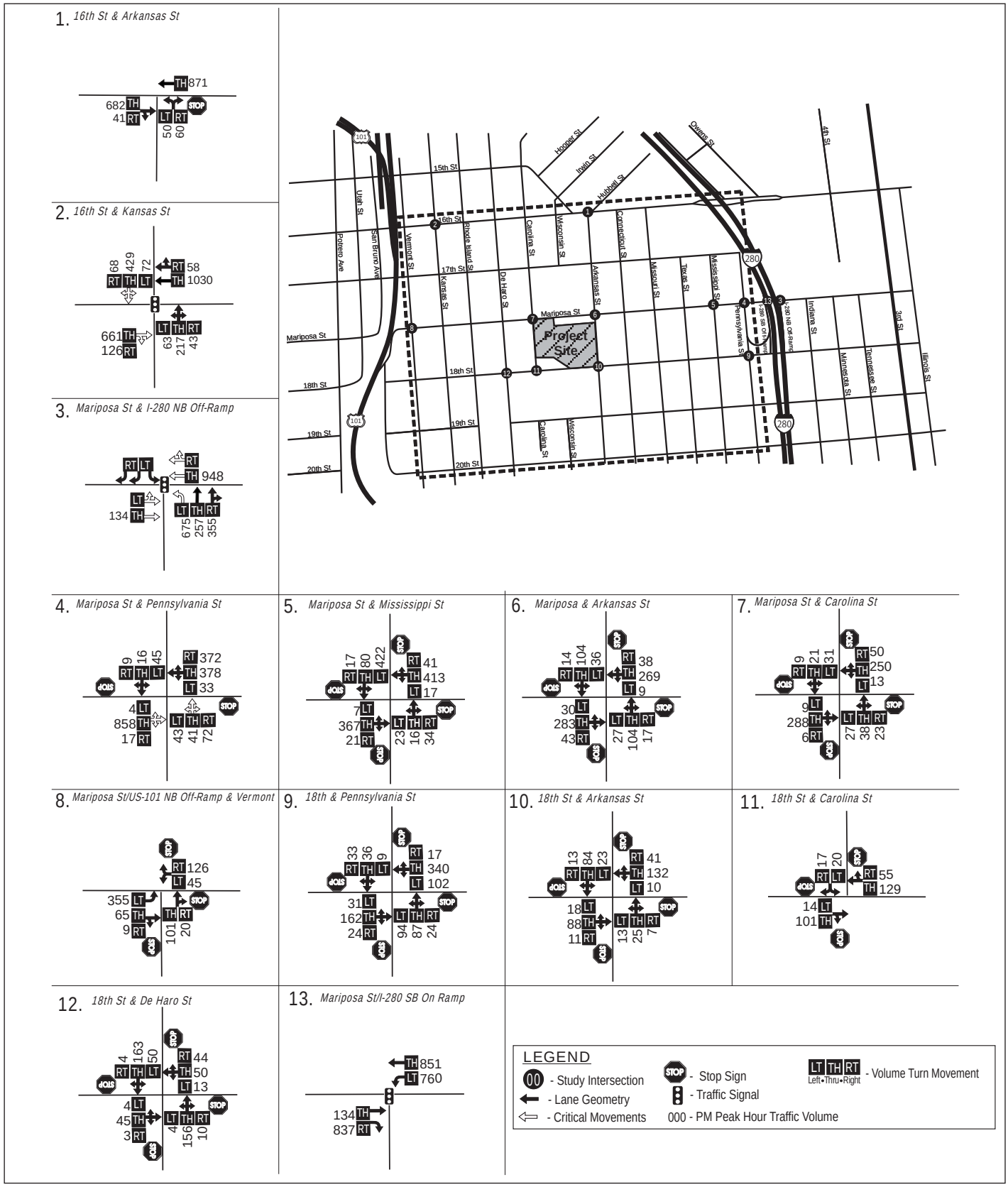

FIGURE IV.A-8

NOT TO SCALE

SOURCE: DKS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
2025 Cumulative Traffic Volumes

As shown in **Table IV.A-18**, the following 10 of the 13 study intersections would operate acceptably at LOS D or better during the PM peak hour under 2025 Cumulative conditions:

- 16th Street and Kansas Street (Intersection 2);
- Mariposa Street and I-280 NB off-ramp (Intersection 3);
- Mariposa Street and Arkansas Street (Intersection 6);
- Mariposa Street and Carolina Street (Intersection 7);
- Mariposa Street/US-101 NB off-ramp and Vermont Street (Intersection 8);
- 18th Street and Pennsylvania Avenue (Intersection 9);
- 18th Street and Arkansas Street (Intersection 10);
- 18th Street and Carolina Street (Intersection 11);
- 18th Street and De Haro Street (Intersection 12); and
- Mariposa Street and I-280 SB on-ramp (Intersection 13).

As shown in **Table IV.A-18**, at the unsignalized intersection of Mariposa Street and Pennsylvania Avenue (Intersection 4) operates at LOS F during the PM peak hour under 2025 Cumulative conditions. However, the proposed project would not add any vehicles to the worst approach (northbound) which would operate at LOS F under 2025 Cumulative conditions and the Caltrans peak hour signal warrants would be met. Given that there is no contribution to the worst approach, the proposed project's contribution to unacceptable operations at this intersection would be less than significant.

Table IV.A-18: 2025 Cumulative Conditions PM Peak Hour Intersection LOS

No.	Intersection Name	Control	PM Peak Hour	
			Delay[a]	LOS[b,c]
1	16th Street and Arkansas Street	Unsignalized	**>50 (NB)**	**F**
2	16th Street and Kansas Street	Signalized	32.5	C
3	Mariposa Street and I-280 NB off-ramp	Signalized	21.6	C
4	Mariposa Street and Pennsylvania Avenue	Unsignalized	**>50 (NB)**	**F**
5	Mariposa Street and Mississippi Street	Unsignalized	**>50 (WB)**	**F**
6	Mariposa Street and Arkansas Street (EB)	Unsignalized	14.6	B
7	Mariposa Street and Carolina Street (EB/WB)	Unsignalized	11.2	B
8	Mariposa Street and US-101 NB off-ramp/Vermont Street (EB)	Unsignalized	12.9	B
9	18th Street and Pennsylvania Avenue (EB)	Unsignalized	20.0	C
10	18th Street and Arkansas Street (WB)	Unsignalized	9.0	A
11	18th Street and Carolina Street (WB)	Unsignalized	8.0	A
12	18th Street and De Haro Street (SB)	Unsignalized	9.5	A
13	Mariposa Street and I-280 SB on-ramp	Signalized	10.3	B

[a] Delay is in seconds per vehicle and is based on average stopped delay. Where signalized intersection is LOS F, volume to capacity (v/c) ratio is also reported.

[b] LOS = Level of Service

[c] For unsignalized intersections, LOS is reported based on worst approach, which is indicated in parenthesis.

BOLD indicates unacceptable LOS of E or F.

Source: DKS Associates, 2014.

Impact C-TR-2: The proposed project, combined with past, present, and reasonably foreseeable future projects, would contribute considerably to significant cumulative traffic impacts at two of the 13 study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5). (Significant and Unavoidable)

As shown in **Table IV.A-18**, the following two study intersections would operate at LOS F during the PM peak hour under 2025 Cumulative conditions, as follows:

- 16th Street and Arkansas Street (Intersection 1); and
- Mariposa Street and Mississippi Street (Intersection 5).

Under 2025 Cumulative conditions, impacts to the 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5) intersections would be significant and unavoidable, as further discussed below.

At the unsignalized intersection of 16th Street and Arkansas Street (Intersection 1), during the PM peak hour, the proposed project would add 15 vehicles to the northbound approach which would operate at LOS F under 2025 Cumulative conditions and the Caltrans peak hour signal warrants would be met. This project-related contribution would represent 14 percent of the total PM peak hour volume for this approach under Cumulative conditions. The proposed project's contribution to the northbound approach would therefore be cumulatively considerable (greater than 5 percent contribution); therefore, the proposed project would result in a significant impact to the intersection of 16th Street and Arkansas Street. Signalization and other improvements were considered for mitigation of this impact at this intersection. Specifically, additional lane capacity through the restriping of the northbound approach and the addition of a right-turn pocket was considered, but would not result in any improvement to the intersection LOS operating conditions. The uncontrolled eastbound and westbound approaches restrict the ability for vehicles traveling in the northbound direction to turn on to 16th Street. Thus, the addition of a right-turn pocket (and additional capacity at 16th and Arkansas for the worst approach) would not be a feasible mitigation measure for the proposed project's cumulative traffic impact at this intersection. To mitigate unacceptable operating conditions at this intersection, the intersection could be signalized. However, due to its location on the 16th Street corridor and proposed improvements related to the SFMTA's Muni Forward project (with other signalization of intersections and relocation of transit stops), SFMTA would not recommend signalization of this intersection.[23] Therefore, this mitigation measure would not be considered feasible and the proposed project's traffic impact under 2025 Cumulative conditions at the intersection would be considered significant and unavoidable.

Under 2025 Cumulative conditions, the westbound approach of the unsignalized intersection of Mariposa Street and Mississippi Street (Intersection 5) would, like Existing Plus Project conditions, continue to operate at LOS F during the PM peak hour and Caltrans signal warrants would continue to be met. Since the proposed project would result in a significant and unavoidable Existing Plus

[23] DKS Associates, personal communication with Chris Espiritu, San Francisco Municipal Transportation Agency, March 10, 2014.

Project impact on the operation of this intersection, it would similarly result in a significant impact under 2025 Cumulative conditions. Signalization of this intersection, or other measures to improve operations were considered, but deemed infeasible or otherwise would not improve operating conditions, as discussed under the Existing Plus Project analysis. Under 2025 Cumulative conditions, these improvements would similarly remain infeasible, or would not improve operating conditions; therefore, the proposed project would result in a significant and unavoidable impact to the intersection of Mariposa Street and Mississippi Street under 2025 Cumulative conditions.

The *Eastern Neighborhoods FEIR* did not identify significant impacts related to operation of the above-mentioned intersections. The proposed project would therefore result in significant unavoidable cumulative impacts to two of the 13 study intersections that are specific to the proposed project.

Transit Impacts

2025 Cumulative impacts to local and regional transit within the vicinity of the project site are discussed below.

Impact C-TR-3: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative transit impacts. (Less than Significant)

As previously discussed, cumulative impacts were identified for up to seven Muni transit lines in the *Eastern Neighborhoods FEIR* (including the 9 San Bruno, 22 Fillmore, 26 Valencia, 27 Bryant, 33 Stanyan, 48 Quintara, and 49 Van Ness/Mission lines). None of these lines would be substantially affected by the proposed project.

Local Transit

Muni transit service under the 2025 Cumulative conditions would include the service changes previously described for the SFMTA Muni Forward (see the TIS), including changes to the 22

Fillmore, 10 Sansome, 19 Polk, and 33 Stanyan. These service changes would help to improve the efficiency, effectiveness, and reliability of public transit in San Francisco.

Table IV.A-19 shows the PM peak hour Muni outbound screenline analysis for the Existing and 2025 Cumulative conditions.[24] To counter the increase in demand between the Existing conditions and the 2025 Cumulative conditions, capacity would increase by 14 percent largely in part to the new Central Subway, the E-Embarcadero Line, regular increases to services on the major bus corridors, and service improvements under SFMTA's Muni Forward.

Table IV.A-19: 2025 Cumulative Conditions Muni Screenline Analysis – PM Peak Hour (Outbound)

		Existing Conditions[a]			2025 Cumulative Conditions		
Screenline	**Transit Corridor**	**Capacity**	**Ridership**	**Utilization**	**Capacity**	**Ridership [b]**	**Utilization**
Northeast	Kearny/Stockton	3,291	2,158	66%	3,468	1,841 (0)	78%
	All Other Lines	1,078	570	53%	1,596	799 (13)	66%
	Subtotal	**4,369**	**2,728**	**62%**	**5,064**	**2,640 (13)**	**74%**
Northwest	Geary Corridor	2,528	1,814	72%	3,099	3,267 (0)	85%
	All Other Lines	4,216	3,438	78%	8,293	6,939 (4)	84%
	Subtotal	**6,949**	**5,252**	**76%**	**11,392**	**9,854 (4)**	**87%**
Southeast	Third Street	714	508	71%	893	759 (0)	64%
	Mission	2,789	1,529	55%	1,685	1,497 (0)	89%
	Other Lines	3,846	2,354	61%	2,600	2,818 (56)	110%
	Subtotal	**7,349**	**4,391**	**60%**	**5,178**	**5,073 (56)**	**99%**
Southwest	Subway Lines	6,294	4,598	73%	6,188	5,927 (1)	86%
	All Other Lines	2,351	1,381	59%	1,837	1,587 (0)	86%
	Subtotal	**8,645**	**5,979**	**69%**	**8,025**	**7,514 (1)**	**94%**
Total		**27,312**	**18,350**	**67%**	29,659	**26,123 (93)**	**88%**

[a] Existing Muni bus data collected between August 2011 and October 2011 (except 1AX and 1BX which is January to March 2012). Muni rail data collected between September 2010 and February 2011.

[b] Proposed Project trips are in parentheses (XX).

Source: SF Planning Department and SFMTA, 2012.

[24] The transit ridership and capacity presented in **Table IV.A-19** are from the SF Guidelines, and were developed to reflect 2020 Cumulative conditions. As stated in the Eastern Neighborhoods Rezoning and Area Plans Transportation Study, SFCTA travel demand model runs indicate similar or slightly lower levels of growth in transit demand at the screenlines for the period between 2000 and 2025. Therefore, for purposes of analysis, the 2020 Cumulative conditions screenlines were assumed to also reflect 2025 Cumulative conditions.

Between the Existing and 2025 Cumulative conditions, the capacity across the screenlines would respectively increase from 27,312 to 29,659 while the demand would increase from 18,350 to 26,123. The proposed project would result in 74 new transit trips to the outbound PM peak hour Muni screenline which would increase demand by 13 passenger trips to the northeast screenline, 4 trips to the northwest screenline, 56 trips to the southeast screenline, and 1 trip to the southwest screenline. All of the respective project contributions to the four screenlines would result in the screenlines operating at a capacity utilization of 99 percent or below, with all but one (northeast) screenline with a capacity utilization of about 85 percent. Therefore, the proposed project would not contribute considerably to any significant cumulative local transit impacts and this impact would be less than significant.

Regional Transit

No regional screenline analysis for future year 2025 conditions was performed. However, as presented in **Tables IV.A-4 and IV.A-5**, about 17 new transit trips associated with the proposed project would cross regional screenlines and no impacts were identified under Existing Plus Project conditions. Furthermore, the marginal increase in regional trips would mostly be "reverse commute"[25] trips and would not substantially affect future ridership levels in the peak direction during the evening commute hours and it is reasonable to assume that regional providers would have sufficient capacity to accommodate 17 new transit trips under future conditions. Based on these findings, the proposed project would not conflict with proposals in SFMTA's Muni Forward (formerly TEP) and the ENTRIPS report or result in overcrowding on regional and local transit services under 2025 Cumulative conditions. Therefore, the project would result in a less-than-significant cumulative impact on transit.

[25] The reverse commuter travels in the opposite direction to the regular daily population flow, and therefore encounters fewer of the congestion problems faced by regular commuters.

Pedestrian Impacts

2025 Cumulative impacts related to pedestrian circulation within the vicinity of the project site are discussed below.

Impact C-TR-4: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative pedestrian impacts. (Less than Significant)

Pedestrian circulation impacts by their nature are site-specific and generally do not contribute to impacts from other development projects. Pedestrian trips throughout the City may increase under the cumulative scenario due general growth. The project site fronts Mariposa Street, Arkansas Street, 18th Street, and Carolina Street which are all classified as Neighborhood Residential streets under the Better Streets Plan. The proposed project would not result in an increase in the amount of overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, or create potentially hazardous conditions for pedestrians, and would create additional corridors for pedestrian circulation under the 2025 Cumulative conditions. Pedestrian impacts resulting from the project would be less than significant for the 2025 Cumulative conditions.

Considering the proposed project, cumulatively with past, present, and reasonably foreseeable future projects and growth throughout the City, the cumulative effects of the proposed project would not result in hazardous conditions for pedestrians or otherwise interfere with pedestrian facilities or accessibility. For the above reasons, the proposed project would not contribute considerably to any significant cumulative pedestrian impacts and this impact would be less than significant.

Bicycle Impacts

2025 Cumulative impacts related to bicycle circulation within the vicinity of the project site are discussed below.

Impact C-TR-5: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative bicycle impacts. (Less than Significant)

Bicycle circulation impacts by their nature are site-specific and generally do not contribute to impacts from other development projects. Bicycle trips throughout the City may increase under the cumulative scenario due general growth. Minor improvements to Bicycle Routes 23 and 7 along Mariposa Street were included in the San Francisco Bicycle Plan.[26] These minor improvements include minor pavement marking and signage changes to improvement bicycle travel such as the installation of colored pavements materials, the installation of shared roadway bicycle markings, minor changes to parking configurations and minor changes to intersection traffic signal timing plans. Implementation of the proposed project would not conflict with these improvements. Other minor improvements, including markings, signage and, and facilities, are considered treatments necessary to improve conditions for bicycle use, and are not specified in more detail by route in the San Francisco Bicycle Plan. The proposed project would remain consistent with and would not create new conflicts with the San Francisco Bicycle Plan.

As part of Muni Forward, Bicycle Route 40 would be relocated from 16th Street between Kansas Street and Mississippi Street to 17th Street between Kansas Street and Mississippi Street. This Class II bicycle facility would be relocated due to the construction of the bus-only lanes on 16th Street.

The project would not result in overcrowding on nearby bicycle routes, interfere with bicycle circulation, or create potentially hazardous conditions for bicycles. The project would conform to future changes in the bicycle network. These include relocating the existing Class II bicycle facility from 16th Street to 17th Street and minor improvements detailed in the San Francisco Bicycle Plan. Considering the proposed project, cumulatively with past, present, and reasonably foreseeable future

[26] San Francisco Municipal Transportation Agency, *San Francisco Bicycle Plan*, July 2009.

projects and growth throughout the City, the cumulative effects of the proposed project would not result in hazardous conditions for bicyclists or otherwise interfere with bicycle facilities or accessibility. For the above reasons, the project, in combination with past, present and reasonably foreseeable development in San Francisco, would result in less-than-significant cumulative bicycle impacts.

Construction Impacts

Cumulative impacts related to construction activities within the vicinity of the project site are discussed below.

Impact C-TR-6: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative construction-related transportation impacts. (Less than Significant)

Construction of the proposed project may overlap with the construction of other projects under construction within the project vicinity. Construction activities could affect access, traffic, and pedestrians on streets used as access routes to and from study areas and project sites. Overall, localized cumulative construction-related transportation impacts could occur as a result of cumulative projects that generate increased traffic at the same time and on the same roads as the proposed project. The construction manager for the project would be required to work with the various departments of the City to develop a detailed and coordinated plan that would address construction vehicle routing, traffic control, and pedestrian movements adjacent to the construction area for the duration of any overlap in construction activity. The cumulative impacts of multiple nearby construction projects would not be cumulatively considerable, as the construction would be of temporary duration, and the proposed project would coordinate with various City departments such as SFMTA and DPW through the TASC to develop coordinated plans that would address construction-related vehicle routing and pedestrian movements adjacent to the construction area for the duration of construction overlap. Therefore, for the above reasons, the proposed project, in

combination with past, present and reasonably foreseeable development in San Francisco, would result in less-than-significant cumulative construction-related transportation impacts.

B. SHADOW

This section, which discusses the anticipated effects of the proposed project on shadow patterns, is based on a Shadow Technical Report[1] prepared by Environmental Vision (representative diagrams are provided as **Figures IV.B-4 through IV-B-18**). As discussed on page 59 of the CPE Checklist included in Appendix A, the proposed project could create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.

Environmental Setting

The following section provides background information about shadow conditions, a description of areas that could be exposed to new shadows cast by the project, and a general description of existing shadow patterns within the project area.

Background

In an urban environment, shadow is a function of the height, size, and massing of buildings and other elements of the built environment, and the angle of the sun. The angle of the sun varies due to the time of day (rotation of the earth) and the change in seasons (elliptical orbit). The longest shadows are cast during the winter (when the sun is at the greatest distance below the celestial equator) and the shortest shadows are cast during the summer (when the sun is at the greatest distance above the celestial equator). At the time of the summer solstice (which fell on June 21 in 2014), the sun is directly overhead at noon (in the northern hemisphere), and the longest day and shortest night occur on this date. Conversely, the shortest day and longest night occur on the winter solstice (which falls on December 21 in 2014). The fall and spring equinoxes, which fall on September 21 and March 21, respectively, represent the half-way point between the shortening and lengthening phases at the

[1] Environmental Vision, *Shadow Technical Memorandum for Jackson Playground – 1601 Mariposa Street Project*, November 20, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

solstices.[2] Thus measuring shadow lengths during the summer and winter solstices captures the extremes of shadow patterns that occur throughout the year.

Open Spaces in the Vicinity of the Project Site. Open space areas within the immediate vicinity of the project site could be affected by project-related shadow. Open space areas within San Francisco consist of park and recreational spaces under the jurisdiction of the San Francisco Recreation and Park Department (SFRPD) (and subject to the provisions of Planning Code Section 295, described below under "Regulatory Setting"), other public open spaces which may be open to and accessed by the public but are not under the jurisdiction of the SFRPD, and Privately Owned Public Open Spaces (POPOs). Jackson Playground, located immediately across Mariposa Street to the north of the project site, is the only open space under the jurisdiction of the SFRPD that could be affected by project-related shadow. This facility is described in detail below and is also discussed in Section IV.C, Recreation. Other public open spaces include the streets and sidewalks around the project site. There are no additional public park, recreation, or other open spaces (either publicly or privately held) within the vicinity of the project site that could be affected by shadows from the proposed project.

Within the vicinity of the project site, recreation and open space areas that are privately owned and not accessible to the public include Live Oak School's outdoor recreation area; this area is also described in this section for informational purposes, although it is not subject to any City regulations that prohibit new structures from casting new shadows onto this space.

Open Spaces Under the Jurisdiction of the Recreation and Park Commission. As shown in **Figure IV.B-1**, Jackson Playground is located immediately to the north of the project site's northwestern boundary and across Mariposa Street. To the east, the park's southern boundary is across from Live Oak School. The 4.41-acre park occupies two full city blocks bounded by 17th Street to the north, Mariposa Street to the south, Carolina Street to the west, and Arkansas Street to the east. Jackson Playground is located on a relatively flat site and topography toward the north is fairly level.

[2] Shadows for the fall and spring equinoxes, when day and night are of approximately equal length, are the same; therefore, only representative September 21 shadow diagrams are provided for this analysis.

However, in all other directions, the terrain slopes uphill subtly within the block or two surrounding the park. To the south, topography becomes markedly steeper as it rises toward the peak of Potrero Hill.

A six-foot-tall chain link fence extends along the perimeter of Jackson Playground. Because the ground elevation within the park is slightly higher than that of surrounding sidewalks, a retaining wall which ranges in height from approximately two to four feet also delineates the park's edge. As shown in **Figure IV.B-2**, pedestrian access is available at a landscaped entrance along Arkansas Street near the southeast corner of the park, two gates located along Mariposa Street, and one gate on 17th Street near the northwest corner of the park.

Jackson Playground primarily serves the Potrero Hill and Showplace Square neighborhoods, and also accommodates City-wide softball/baseball league games and high school ballgames. The park includes space for active and passive uses. Active uses are those that provide space for activities such as sports and play areas; passive uses typically consist of low-activity areas such picnic areas, benches, and walking paths. The park includes a children's play area, picnic tables, tennis and basketball courts, two ball fields, and a garden. **Figure IV.B-2** shows an annotated aerial photograph of the park that identifies key park features and facilities, including active and passive uses. **Figure IV.B-3** presents seven views of the park features.

Two baseball/softball fields occupy the northern three-quarters of the park. Bleachers, as well as team benches and two small storage buildings, flank the home-plate area of the larger of the two fields, located in the northwest corner of the park. The smaller field also includes team benches and bleacher seating. In addition, at the southeast corner several picnic tables are situated behind the backstop fence near Arkansas Street.

A one-story recreation center building, the Lou Spadia Clubhouse, is located at the southeast corner of the park, near the Arkansas Street and Mariposa Street intersection. The building includes a small entry space, wooden floor gym, and public restrooms. Directly west of the recreation center building is a play area for pre-school age children, consisting of several climbing structures and swings on a sand covered surface. Several small tables as well as benches along the periphery and a curving wall

that provides additional seating are also found within this play area that was updated and renovated in 1999. A basketball court is situated west of and adjacent to the play area. A tennis court occupies the southwest corner of the park. Wrapping around the west and south sides of the tennis court, a narrow approximately eight-foot-wide "L" shaped garden space is located inside the park's perimeter chain link fence, near the edge of the sidewalk along Mariposa Street.

Within Jackson Playground, an evenly spaced row of mature, primarily deciduous canopy trees lines the west, north and east edges of the ball fields. Additionally, some smaller size canopy trees and shrubs are located around the recreation center and in the children's play area. Street trees are found intermittently along the blocks surrounding the park, most noticeably on the south side of Mariposa Street and on the east side of Arkansas Street.

Hours of operation of Jackson Playground are 5:00 a.m. to 12:00 a.m. (midnight) daily. The Lou Spadia Clubhouse is actively used for after school programs weekdays from 3:00 p.m. to 6:00 p.m. The Clubhouse facility is also available on weekends and at other times by special arrangement. Public restrooms on the west side of this building are open during park hours. To facilitate nighttime use, the basketball court, tennis courts, and ball fields are lighted until 10:00 p.m. nightly.

The two ball fields are available to the public by reservation through the SFRPD. The fields are among the City's more popular ball fields and are used consistently on weekends as well as during the week. On weekdays, local high school teams use the fields in the afternoon for games and practices. All other facilities within the park are open to the public on a first-come, first-served basis. By permission of SFRPD, Live Oak School has access to the park for physical education programming during the school day. Live Oak School also partners with the SFRPD to operate the community program garden under City guidance.[3]

[3] Due to the operational characteristics of the space, the garden is referred to as a "community program garden" to distinguish it from "community gardens," which are gardens maintained by community membership and supported and managed by SFRPD as part of the City-wide system.

FIGURE IV.B-1

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

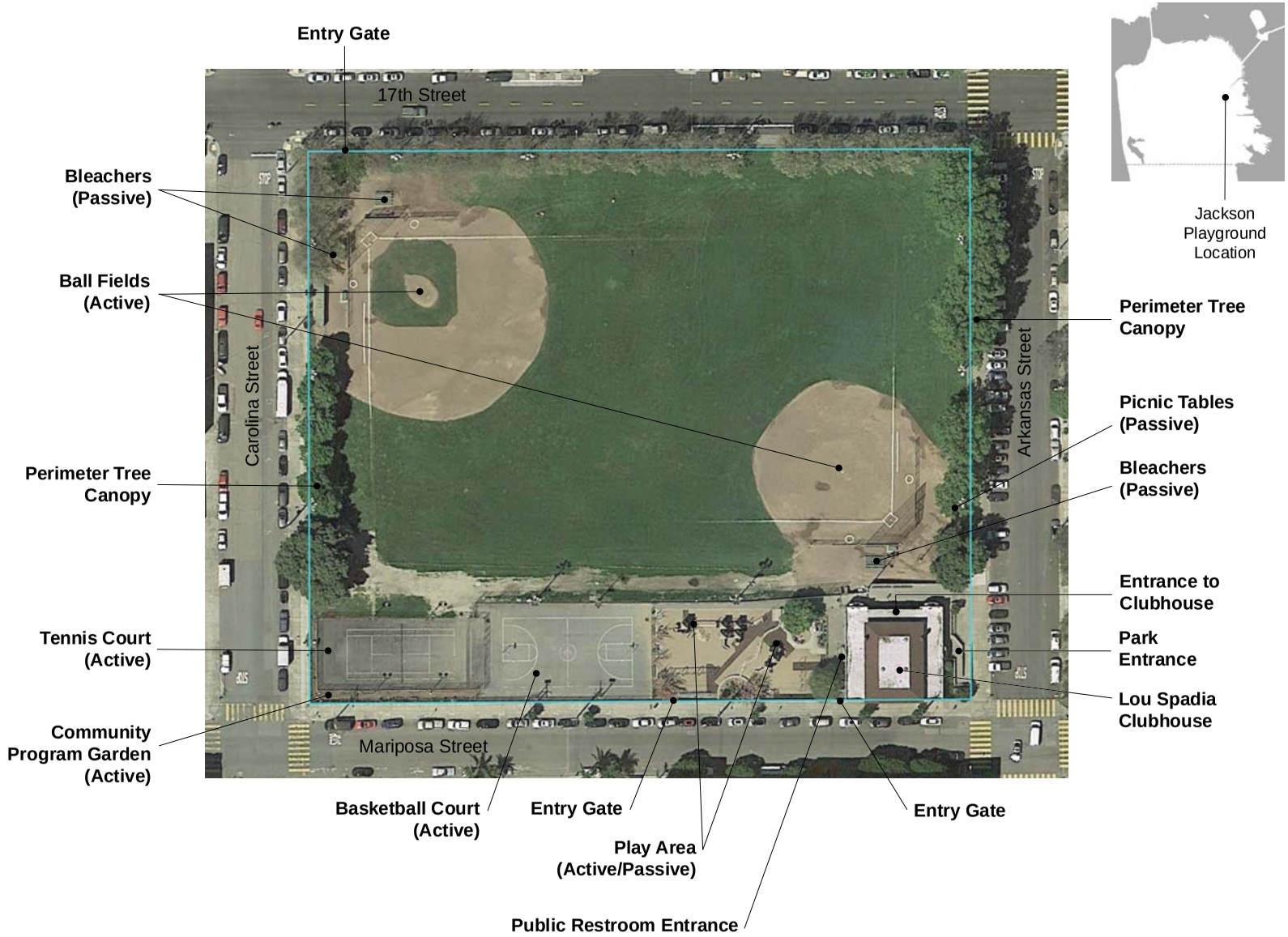

FIGURE IV.B-2

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR

Jackson Playground Recreational Facilities Locations

Bleachers

Ball fields with Lou Spadia Clubhouse in background

Community program garden and tennis court

Ball fields

Basketball court

Children's play area with basketball court in background

Lou Spadia Clubhouse

FIGURE IV.B-3

NOT TO SCALE

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1601 Mariposa Street Mixed Use Project EIR

Jackson Playground Photos

SOURCE: ENVIRONMENTAL VISION, MAY 2014.

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Casual site observations conducted by Environmental Vision in December, February and March 2014, suggest that the children's play area is well used throughout the week by parents and young children. These observations also suggest that the courts and ball fields are actively used throughout the day.

Private Recreation Areas. Live Oak School's outdoor recreation area is located immediately adjacent to the project site's northern and eastern boundary, as shown in **Figure IV.B-1**. The space is partially located between two existing buildings within the Live Oak School property and includes picnic tables and play structures. The space is primarily used by kindergarten students during recess.

Existing Shadow Patterns

Shadow conditions within the vicinity of the site are characteristic of a built-up urban environment with varying densities and building heights and massing. Building heights in the area generally range between one and four stories. Two recently constructed four-story (48-foot tall) mixed-use buildings are located approximately 0.1 miles northwest of the project site, at the southwest corner of the 17th Street and Carolina Street intersection at 1717 17th Street (Case No. 204.0946E). These and other buildings within the vicinity of the site cast shadows onto Jackson Playground during various periods of the day and throughout the year, as described below.

As shown in **Figures IV.B-4 through IV.B-9**, which provide shadow patterns on June 21 and September 21, portions of the children's play area, located within the southeast part of Jackson Park, are shaded in the early morning hours by the Lou Spadia Clubhouse under existing conditions. In addition, some shadow occurs along a portion of the entire eastern edge of the park in the early morning hours. As shown in **Figures IV.B-10 through IV.B-12**, which provide shadow patterns on December 21, under existing conditions, portions of the park are shaded throughout the day. On December 21 existing structures cast shade on an average of approximately 32,000 square feet, or 16.7 percent of the park. Existing shadows primarily fall on the southern portion of the park, in the vicinity of the children's play area, basketball and tennis courts, and the community program garden. These winter shadow patterns are primarily cast by buildings located to the immediate south and

southwest of the park (the three- to four-story Live Oak School/office building and the four-story Anchor Steam Brewery building), as well as the clubhouse.

The existing buildings at 1717 17th Street also cast shadows onto Jackson Playground. Shadows cast by the buildings at 1717 17th Street primarily occur within the last few hours of the day throughout the year. On the best-case shadow day (June 21), a total of 25,086 square feet (or 13 percent of the total park square footage) of shadows are cast by these buildings onto the northwest corner of the park, shading a portion of the baseball field.[4]

As shown in **Figures IV.B-4 through IV.B-12**, Live Oak school's play area is shaded by the existing three- to four-story Live Oak School building during the morning hours throughout the entire year and the space is generally unshaded during the afternoon hours. The school building and adjacent existing two-story Live Oak School gymnasium building also cast shadows on this space in the afternoon hours during the winter months.

Regulatory Framework

Section 295, the Sunlight Ordinance, was adopted through voter approval of Proposition K in November 1994 to protect certain public open spaces from shadowing by new structures. Section 295 prohibits the issuance of building permits for structures or additions to structures greater than 40 feet in height that would shade property under the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission, during the period from one hour after sunrise to one hour before sunset, unless the Planning Commission, following review and comment by the general manager of the SFRPD, in consultation with the Recreation and Park Commission, determines that such shade would have an insignificant impact on the use of such property. Although Jackson Playground is

[4] 1717 17th Street Project, Final Mitigated Negative Declaration, April 5, 2010. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2004.0946E.

within the immediate vicinity of the project site and is under SFRPD jurisdiction; the proposed project is not subject to Section 295 because proposed building heights would not exceed 40 feet.

Impacts and Mitigation Measures

This section analyzes the impacts related to shadow that could result from implementation of the proposed project. The section begins with the significance criteria, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project. Project and cumulative impacts are considered, and mitigation measures are identified, as appropriate.

Significance Criterion

Implementation of the proposed project would have a significant effect related to shadow if it would:

- Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.

Approach to Analysis

The *Eastern Neighborhoods FEIR* evaluated potential shadow impacts to Jackson Playground (among other open spaces within the Eastern Neighborhoods) that could occur with implementation of the *Eastern Neighborhoods Plan*. The *Eastern Neighborhoods FEIR* found that under all three rezoning alternatives and the No Project Alternative, up to 25 percent of Jackson Playground could potentially be shaded during the early morning and late afternoon hours during the summer months, and up to 40 percent of the park could be shaded in the late afternoon hours during the winter. The *Eastern Neighborhoods FEIR* also found that these shadow impacts would occur with or without implementation of the *Eastern Neighborhoods Plan*. The *Eastern Neighborhoods FEIR* notes that Section 295 would limit potential new shadow impacts on Jackson Playground and that new shadow impacts would be evaluated on a project specific basis, but that without detailed development proposals, the potential for new shadow impacts could not be determined, and the *Eastern Neighborhoods FEIR* concluded that increasing building heights as part of the rezoning effort could result in significant impacts on Jackson Playground, requiring individual projects to undergo a detailed shadow analysis. The *Eastern*

Neighborhoods FEIR therefore identified potential shadow impacts to Jackson Playground as significant and unavoidable. No mitigation measures were identified in the FEIR.

As a preliminary study, the Planning Department prepared a "shadow fan" diagram to determine whether any properties under the jurisdiction of the Recreation and Park Commission could be affected by the proposed project's shadows. The shadow fan diagram plots the maximum potential reach of project shadow over the course of a year, from one hour after sunrise until one hour before sunset on each day of the year. The locations of nearby parks and open space facilities are also identified.

The shadow fan diagram, which does not take into account shadows cast by existing buildings, indicates that Jackson Playground is the only property under the jurisdiction of the Recreation and Park Commission that could be affected by the proposed project.[5]

After preparation of the shadow fan diagram and the provision of additional guidance by the City, the shadow consultant, Environmental Vision, conducted a shadow analysis for the project, using a 3D model of the project that included the following components:

- Identification of the physical and operational characteristics of Jackson Playground, and preparation of illustrative diagrams. A map showing the location of this space in relation to the proposed project is included as **Figure IV.B-1**.
- Preparation of shadow diagrams depicting existing and net new shadow created by the project on Jackson Playground for the following dates: June 21 (the summer solstice, when the sun is at its highest point in the sky); September 21 (the fall equinox, when day and night are of approximately equal length; shadows on this day also approximate shadows on March 21, the spring equinox); and December 21 (the winter solstice, when the sun is at its lowest point in the sky). Shadow diagrams were also prepared for October 21 and

[5] San Francisco Planning Department, *1601 Mariposa Street Preliminary Shadow Fan*, September 24, 2013. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

November 21 to supplement the "worst-case" December 21 shadow day, when the greatest level of net new project shadows are expected to be cast on Jackson Playground. Diagrams were prepared on an hourly basis, beginning one hour after sunrise and ending one hour before sunset. Cumulative development projects are included in the shadow diagrams.

Existing shadow patterns and shadow patterns associated with the proposed project for June 21, September 21, and December 21 are shown in **Figures IV.B-4** through **IV.B-12** for the morning, noon, and afternoon hours.[6] These diagrams provide representative snapshots of shadow patterns at the times of the day and seasons selected for the analysis. The technical memorandum prepared for the project shows hour-by-hour diagrams for these dates.[7]

In addition, existing shadow patterns and shadow patterns associated with the proposed project for the supplemental worst-case shadow days of October 21 and November 21 are depicted in **Figures IV.B 13 through IV.18**, for informational purposes only.[8] The supplemental October 21 and November 21 diagrams depict shadows at one month intervals between the September 21 and December 21 dates and, together with the December 21 diagrams, are intended to illustrate the

[6] Under existing conditions, the proposed courtyard that would be located at the interior of the East Building is occupied by the one-story 1601 Mariposa Street (MacKenzie Warehouse) building. Therefore, the shadow diagrams depict existing shadow in this location because it is not an existing open space area with sunlight. Similarly, a portion of the courtyard within the interior of the West Building that is covered by the existing one-story 485-497 Carolina Street commercial building is also shown with existing shadows. The shadow diagrams are intended to depict net new shadows cast by the proposed project on previously sunlit areas; therefore, these are accurate representations of the change in existing patterns that would occur with the proposed project. In addition, it should be noted that the net new shadows depicted in the diagrams represent a conservative representation, since areas that currently receive no sunlight within the project site would become sunlit with construction of the proposed project.

[7] Environmental Vision, *Shadow Technical Memorandum for Jackson Playground – 1601 Mariposa Street Project*, November 20, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

[8] Similar to the September 21 (fall equinox) and March 21 (spring equinox) dates, which represent days of equal length, the October 21 and November 21 dates represent shadow conditions that would occur on January 20 and February 20, respectively, and separate diagrams were not prepared for the January 20 and February 20 dates.

shadow patterns that would occur at Jackson Playground during the approximate 4-month period that net new shadow would primarily occur at the park (i.e., the winter months). The supplemental diagrams show representative morning, noon, and afternoon shadows for October 21 and November 21. It should be noted that unlike the June 21, September 21, and December 21 hour-by-hour shadow patterns that are provided in the technical memorandum, supplemental diagrams for October 21 and November 21 only depict the representative morning (9:00 a.m.), noon (12:00 p.m.), and afternoon (3:00 p.m.) hours, which do not necessarily correspond to the same timeframes as those depicted in the standard hour-by-hour June 21, September 21, December 21 diagrams. All diagrams are intended to depict shadow patterns during different periods of the day when the park is in use.

The analysis below focuses on public spaces within the vicinity of the site, particularly those under the jurisdiction of the SFRPD. Private recreational spaces that are not accessible to the public are also discussed for informational purposes only.

Impact Evaluation

The discussion below analyzes the impacts of the proposed project that are related to shadow.

Impact WS-1: The proposed project would not create new shadow that would substantially and adversely affect outdoor recreation facilities or other public areas within the project site vicinity. (Less than Significant)

The following discussion describes the potential shadow that would be created by the proposed project on Jackson Playground, which is an open space under the jurisdiction of the SFRPD, other public areas, as well as other recreational facilities that are for private use (for informational purposes only).

Jackson Playground. As shown in **Figures IV.B-4 through IV.B-9**, the proposed project would not cast net new shadow on Jackson Playground generally between early March and early October (i.e., during the spring, summer and fall months). As shown in **Figures IV.B-10 through IV.B-18**, the proposed project would only shade portions of Jackson Playground during the winter months, as described below.

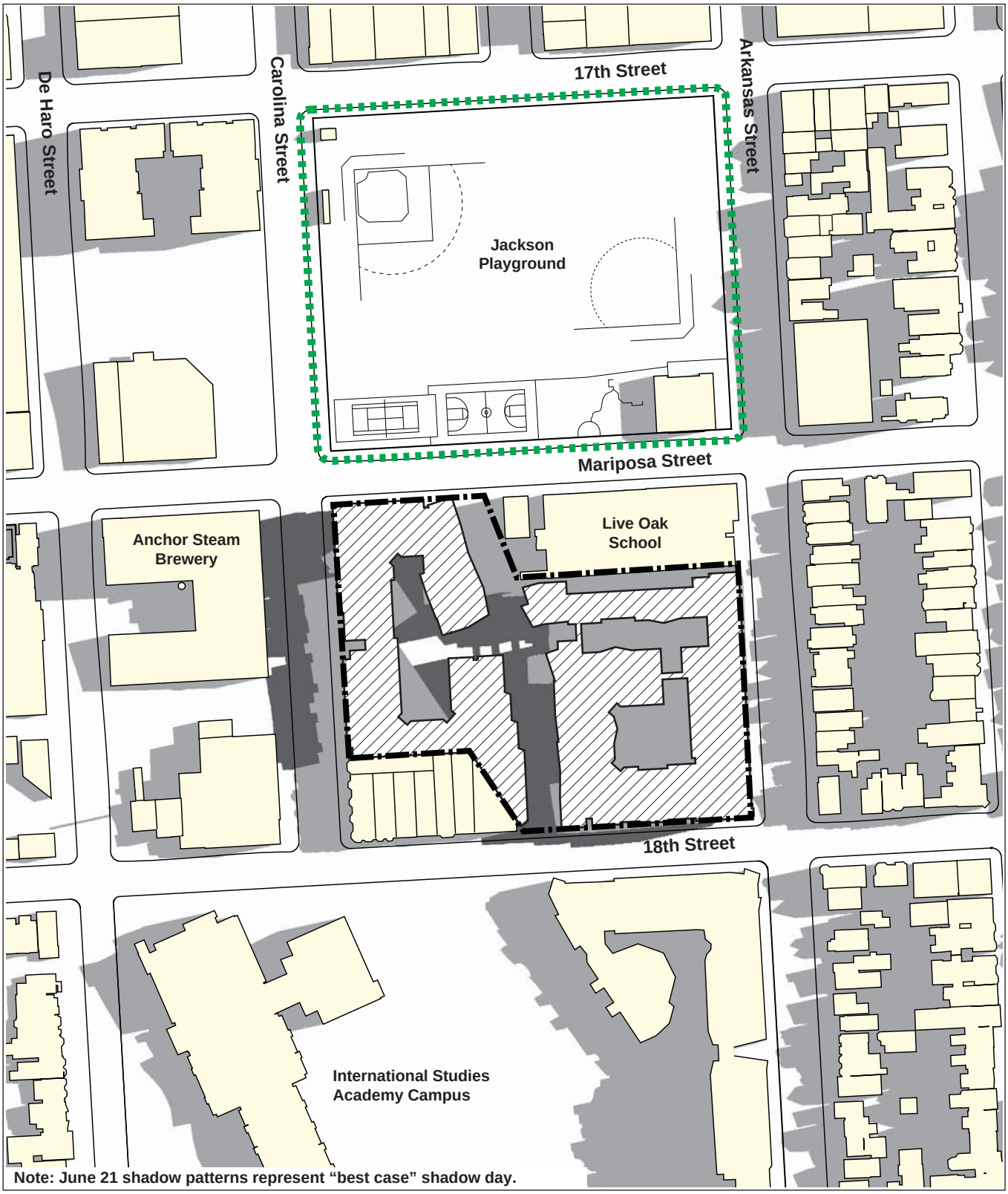
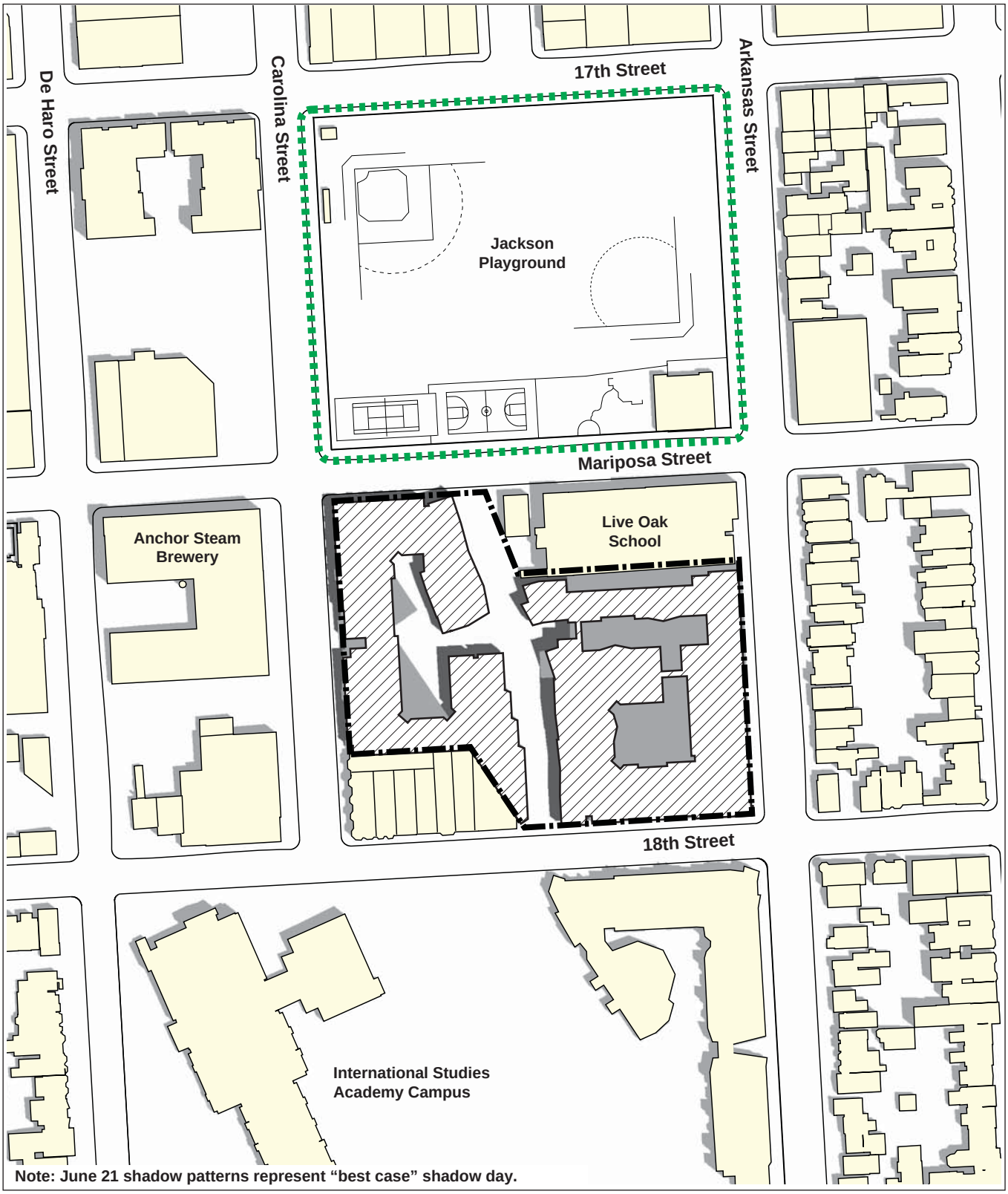


FIGURE IV.B-4

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - June 21, 8:00 a.m.



SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

FIGURE IV.B-5

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - June 21, 12:00 p.m.

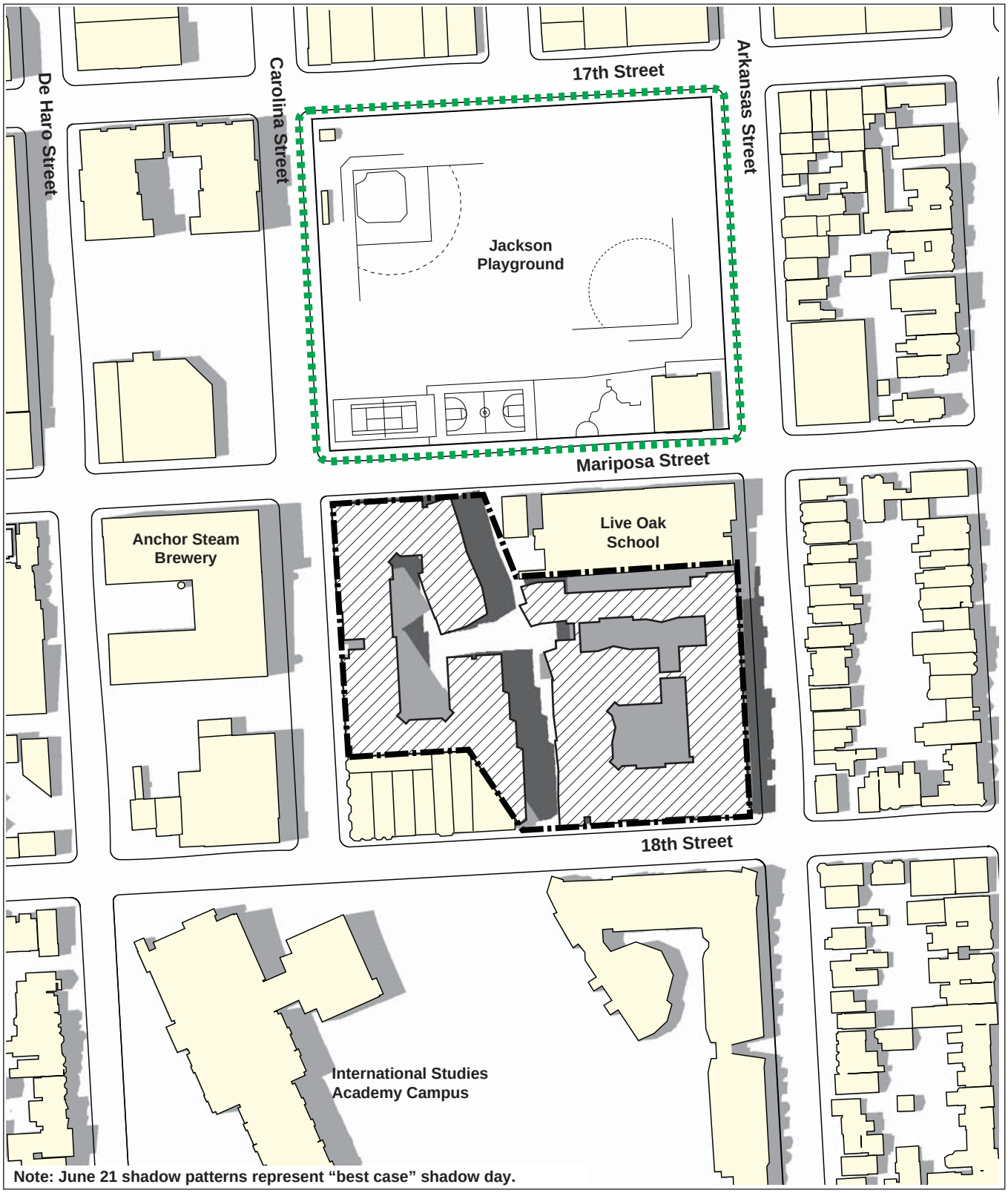


FIGURE IV.B-6

N

0 100 200
FEET

Project Buildings
Existing Shadow
Net New Project Shadow
Project Boundary
Open Space Boundary

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - June 21, 4:00 p.m.

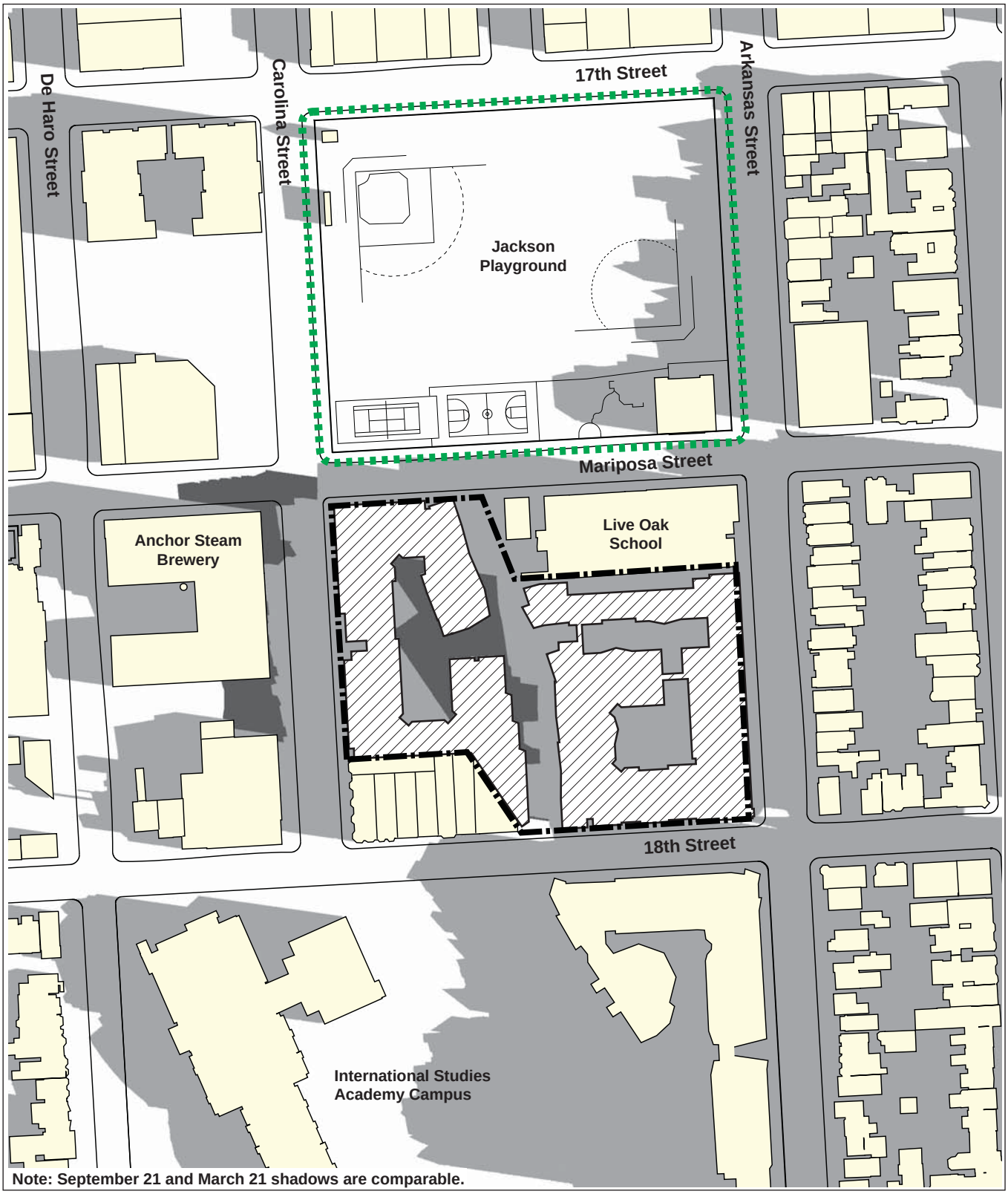


FIGURE IV.B-7

N

0 100 200
FEET

Project Buildings
Existing Shadow
Net New Project Shadow
Project Boundary
Open Space Boundary

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - September 21, 8:00 a.m.

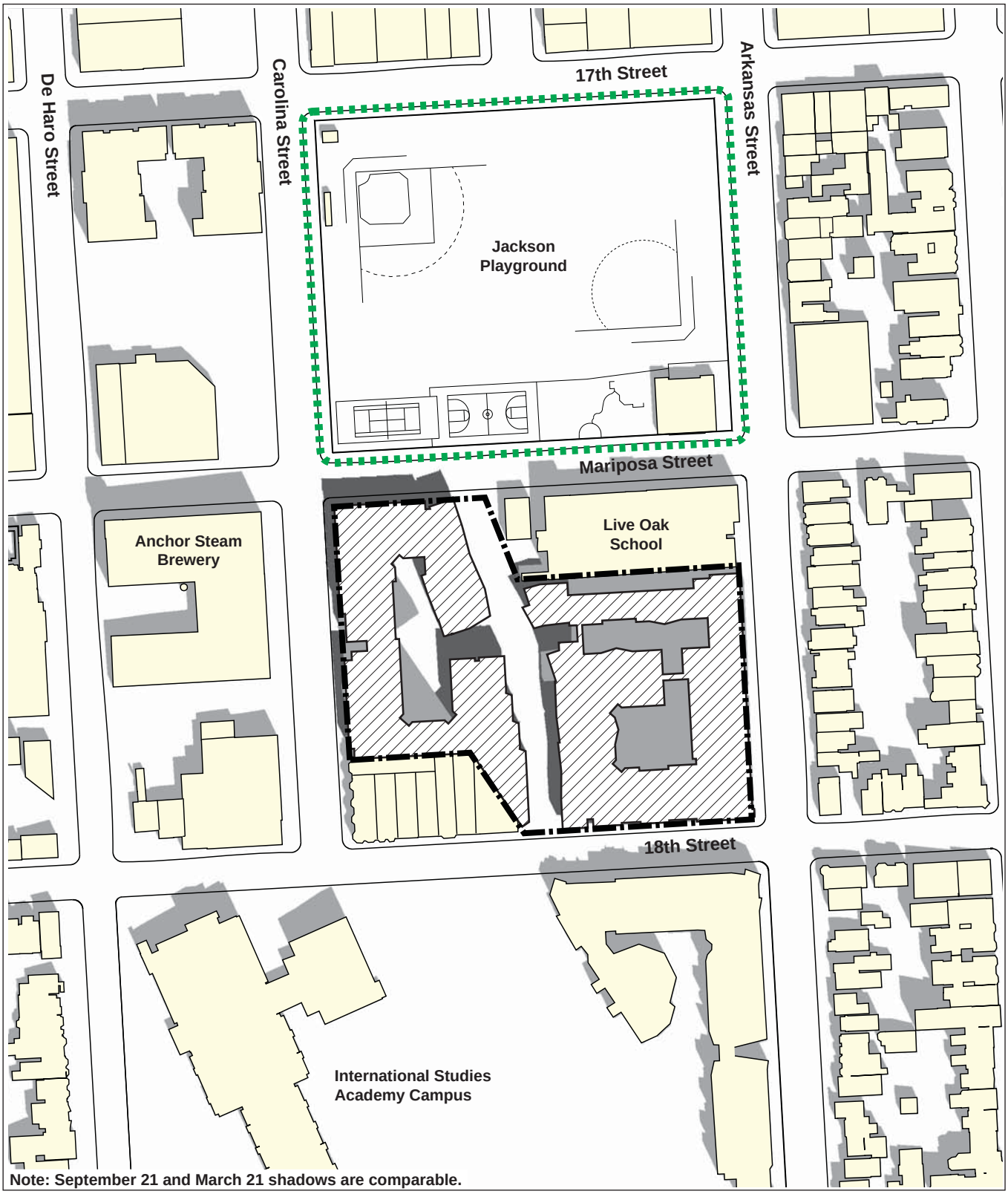
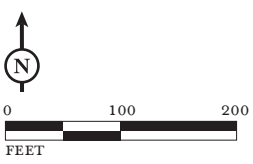


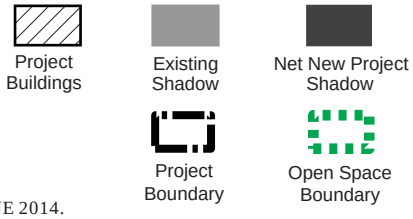
FIGURE IV.B-8

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - September 21, 12:00 p.m.

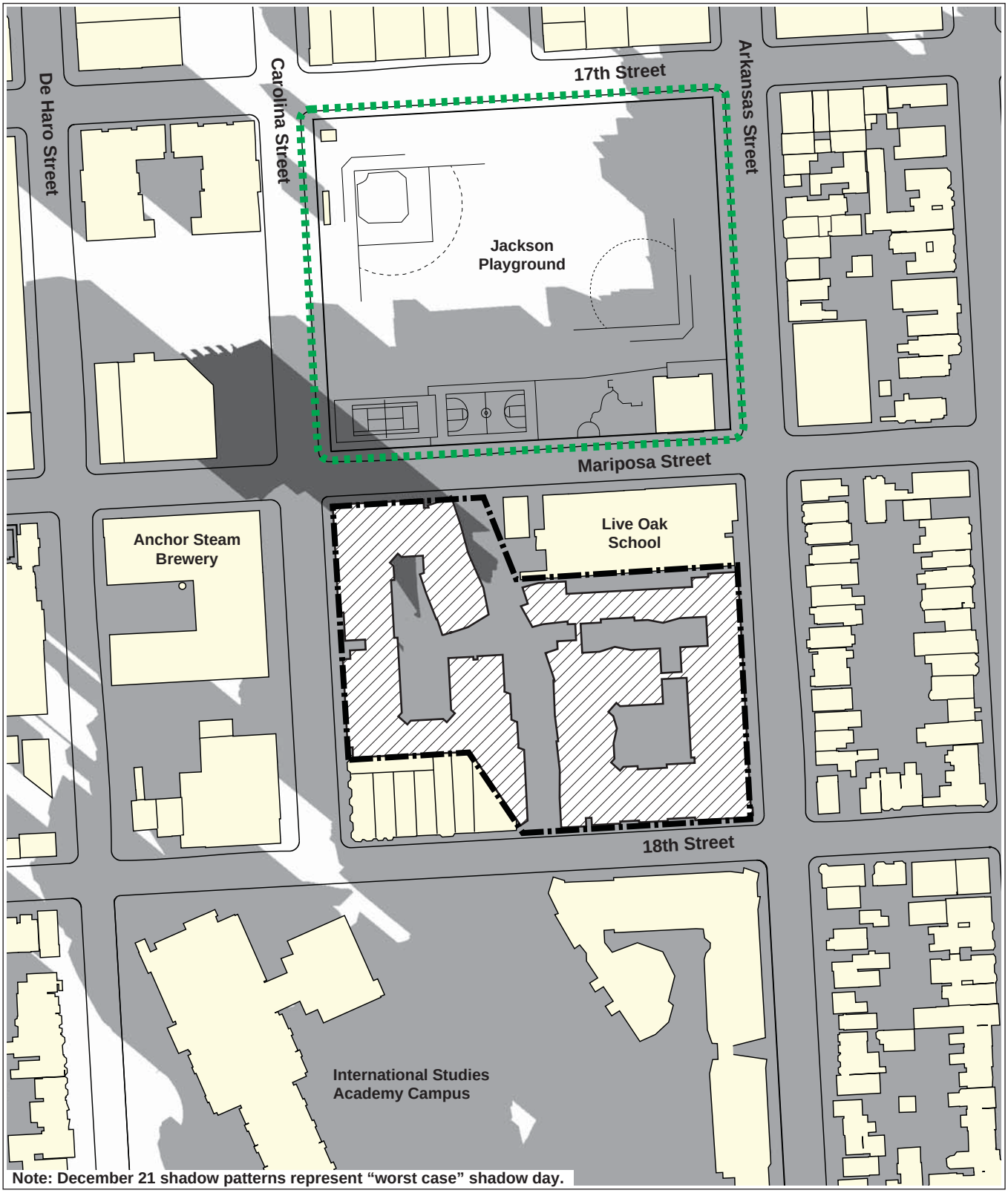
FIGURE IV.B-9





SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - September 21, 4:00 p.m.



SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

FIGURE IV.B-10

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern -
December 21, 8:22 a.m. (1 hour after sunrise)

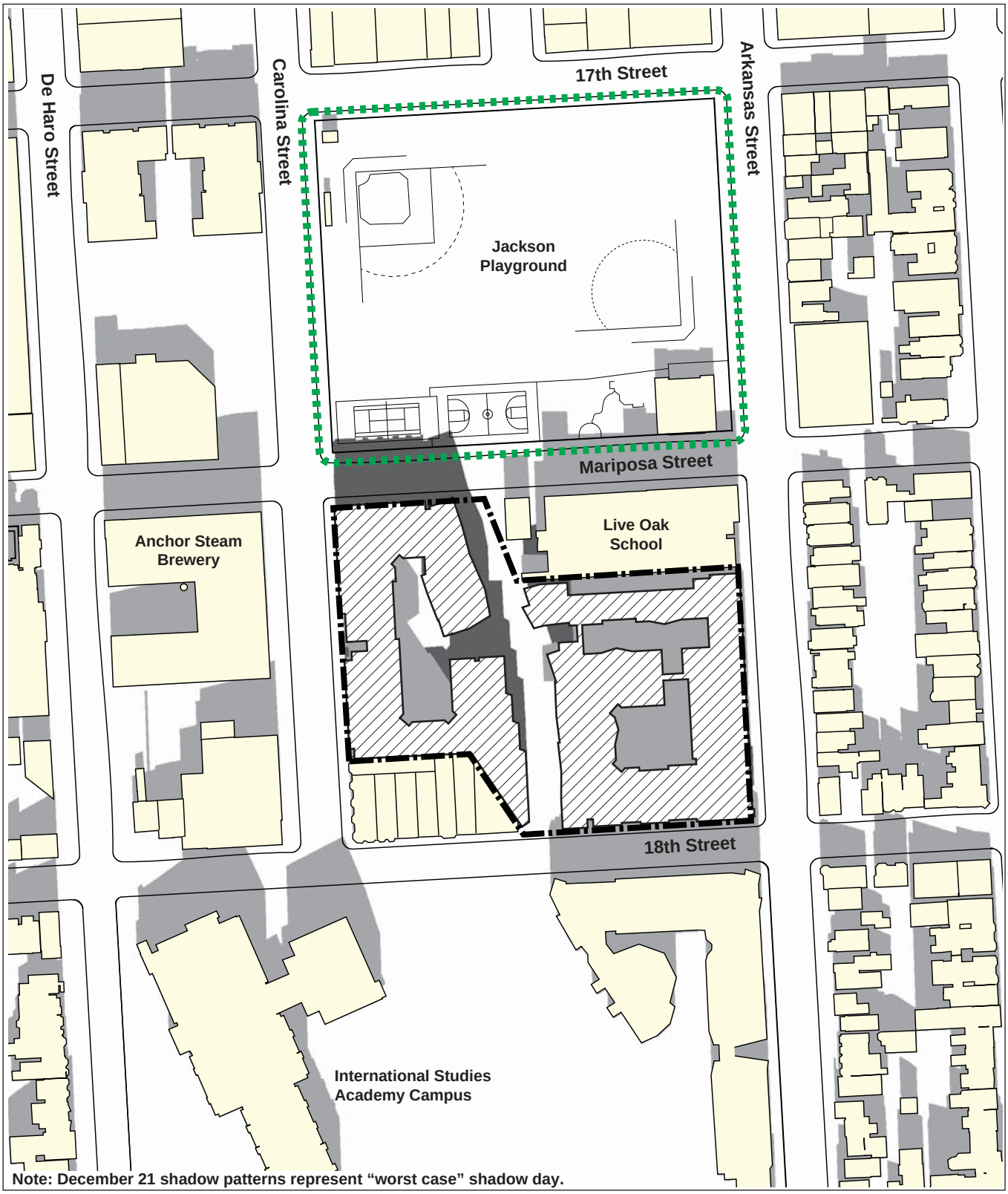
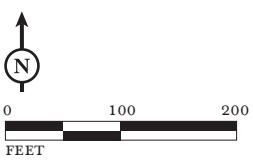
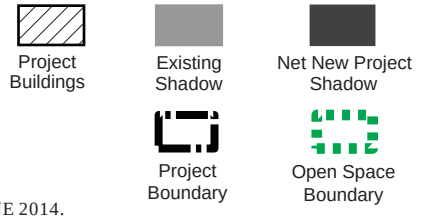


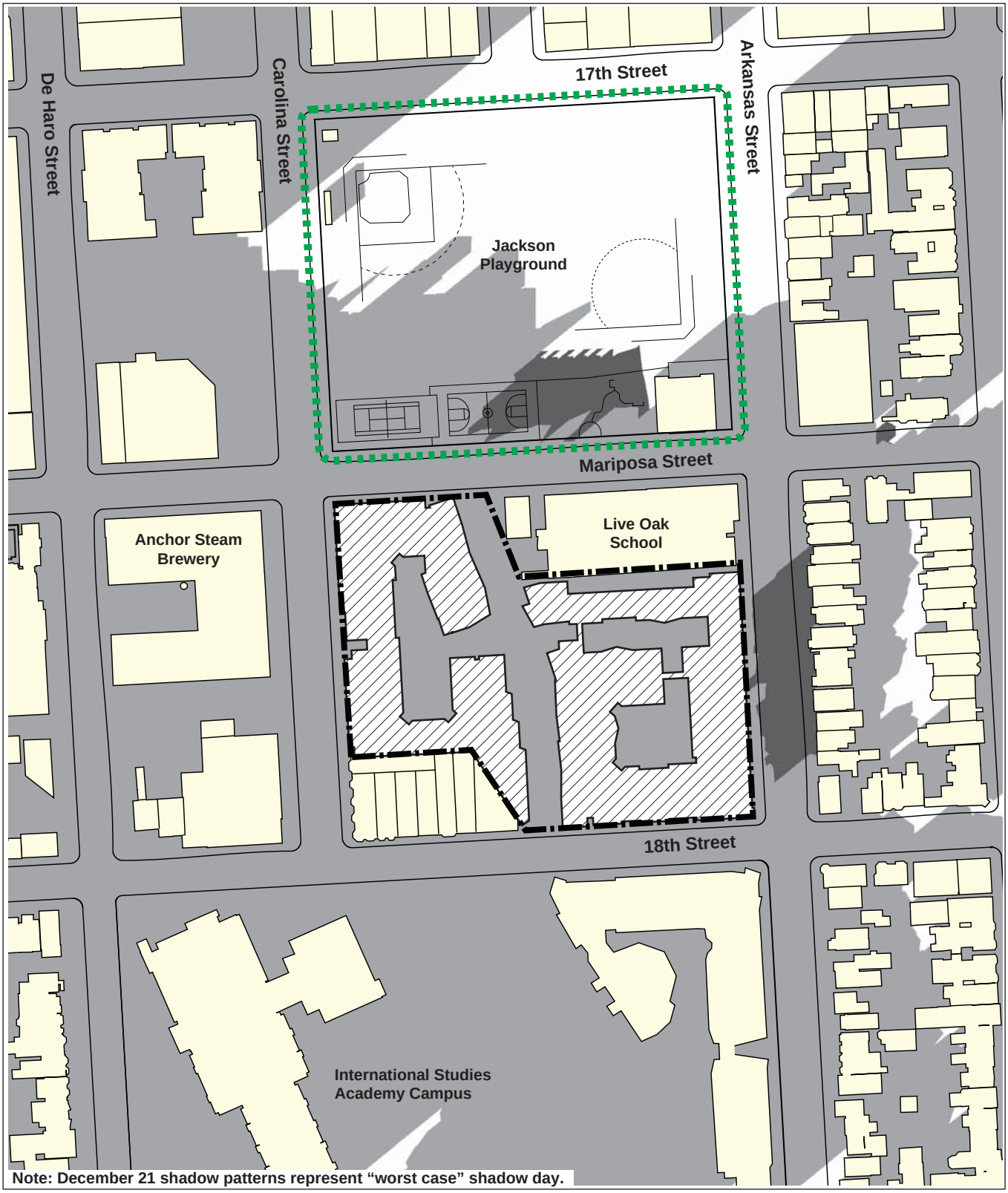
FIGURE IV.B-11





SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - December 21, 12:00 p.m.



SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

FIGURE IV.B-12

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern -
December 21, 3:55 p.m. (1 hour before sunset)

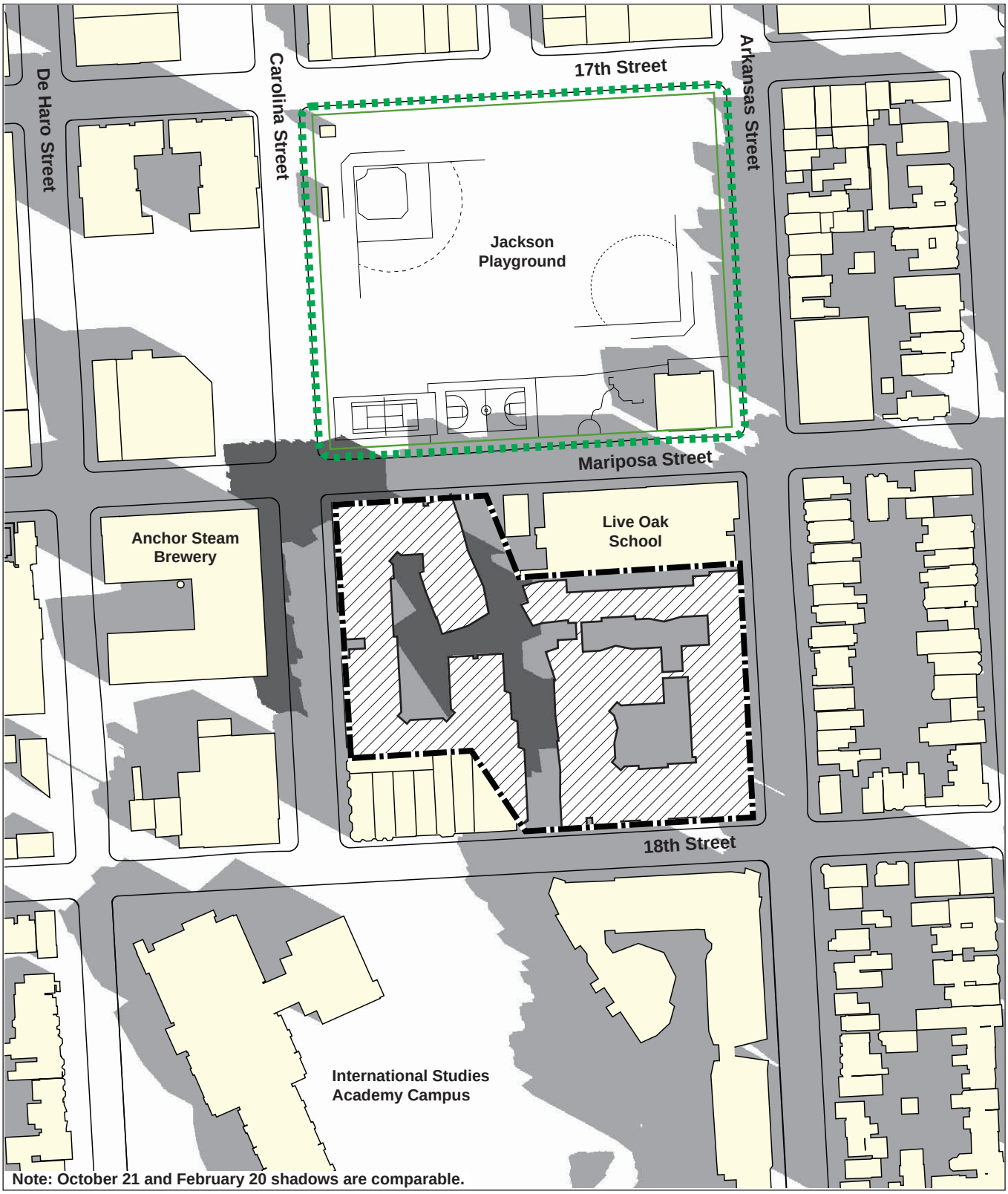
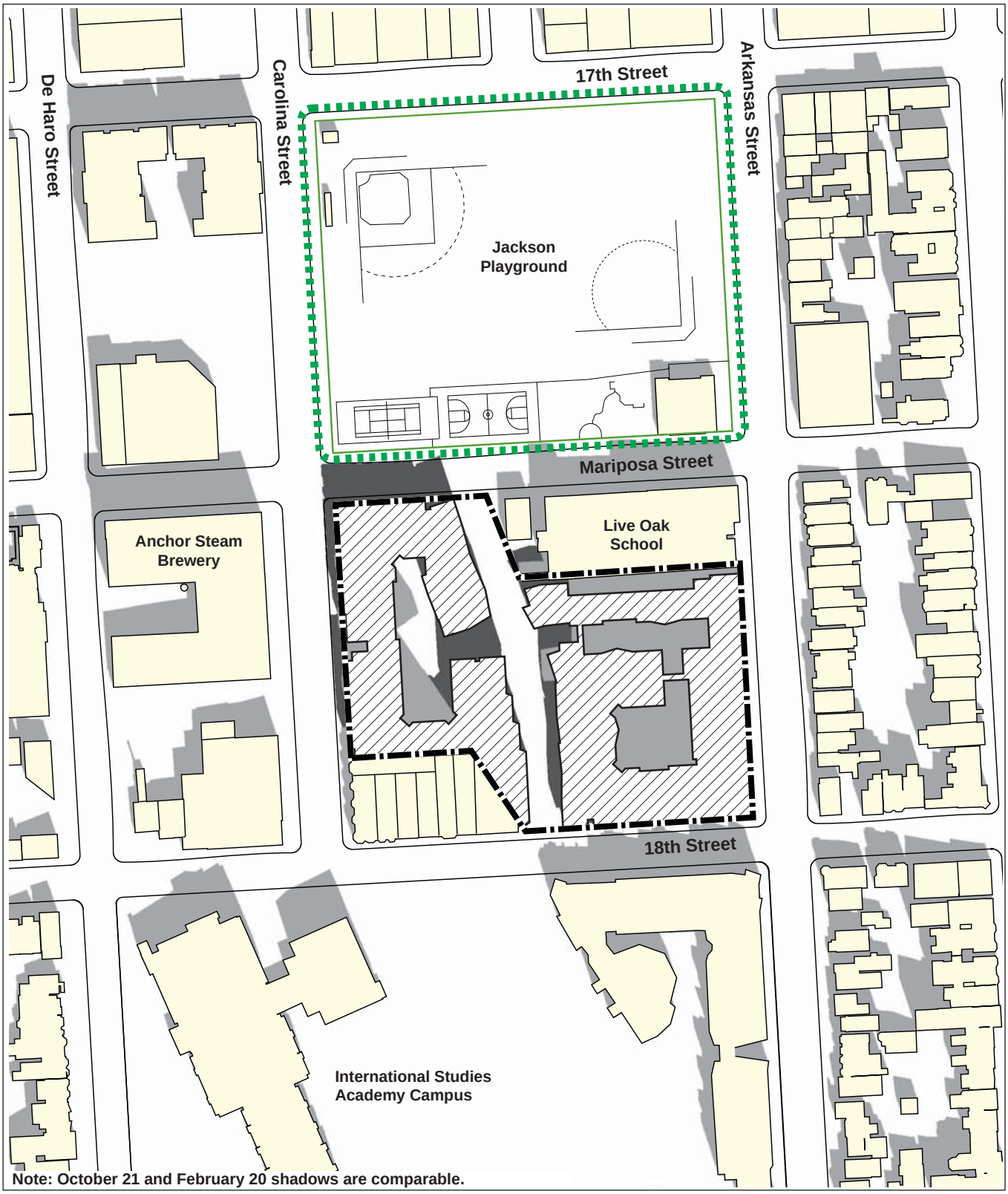


FIGURE IV.B-13

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - October 21, 9:00 a.m.

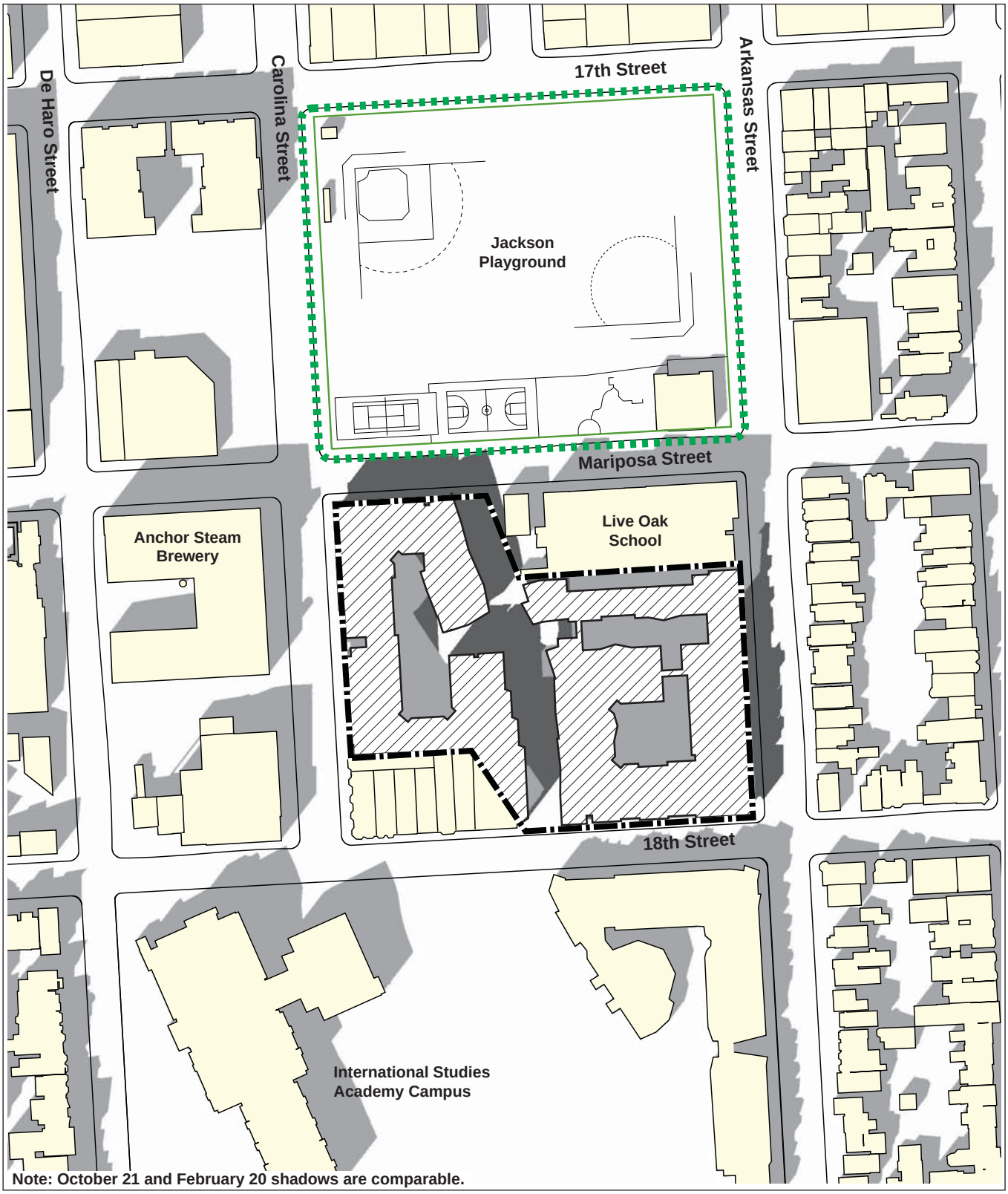
SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.



SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.

FIGURE IV.B-14

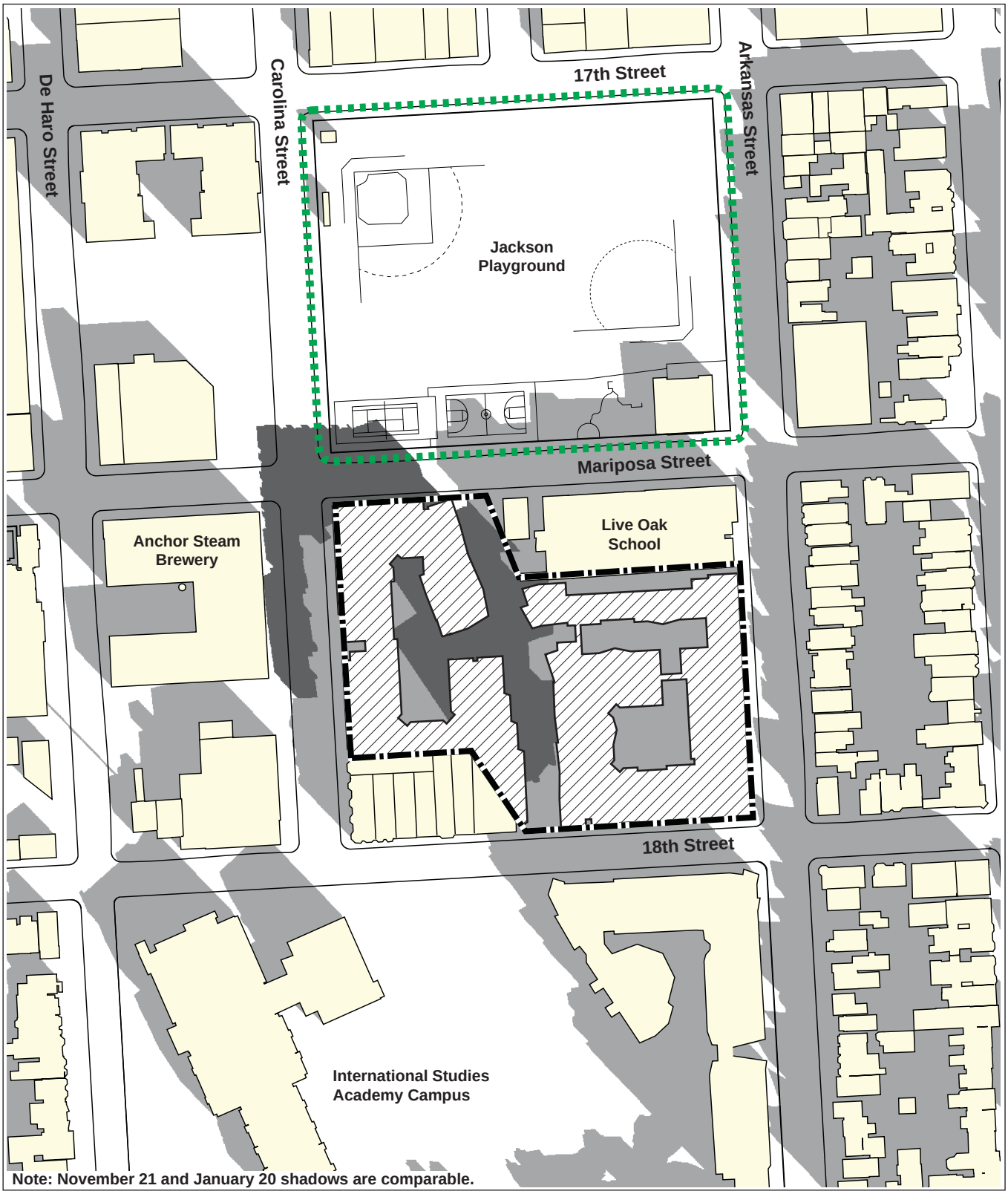
1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - October 21, 12:00 p.m.



SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.

FIGURE IV.B-15

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - October 21, 3:00 p.m.



SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

FIGURE IV.B-16

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - November 21, 9:00 a.m.

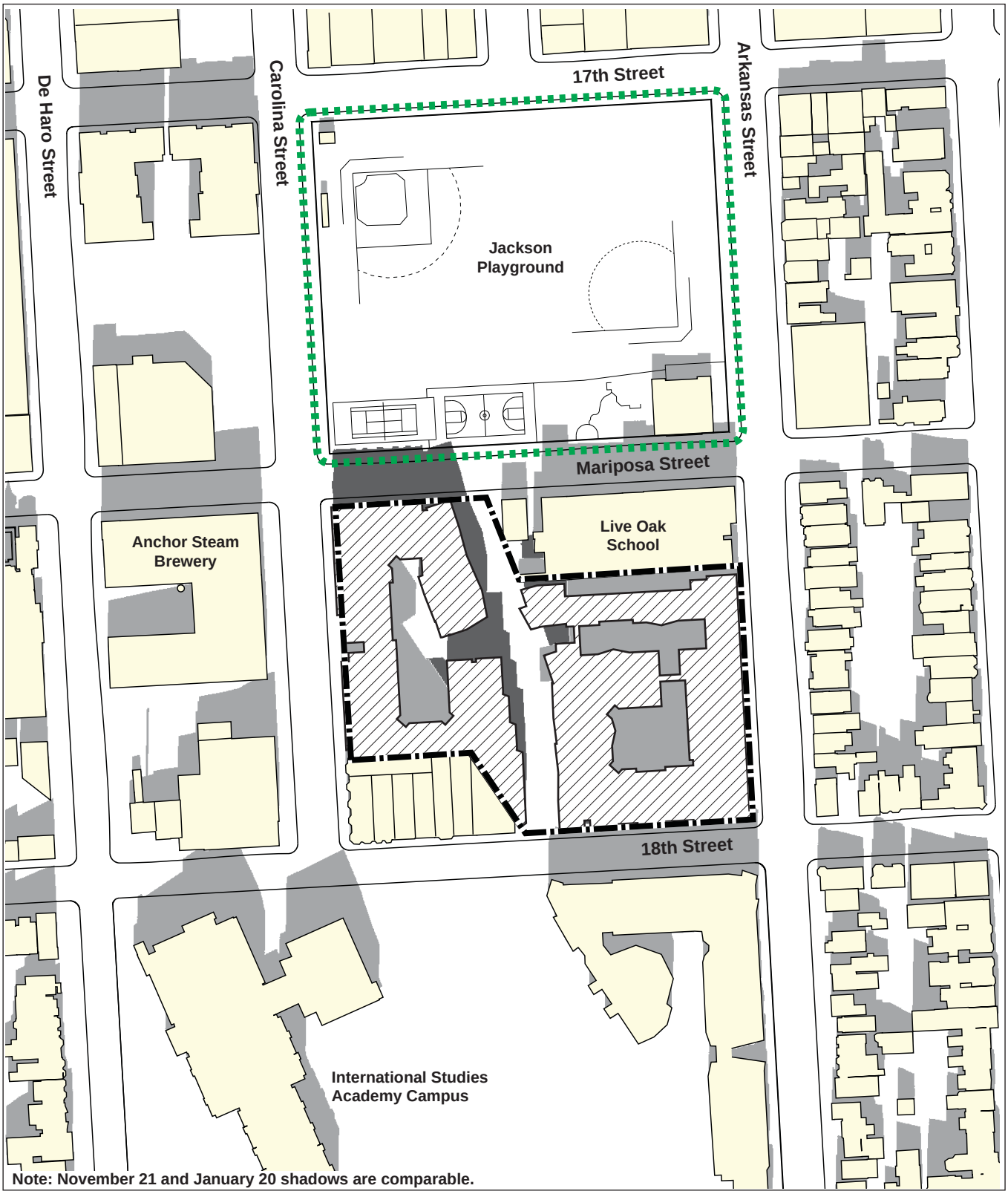


FIGURE IV.B-17

SOURCE: ENVIRONMENTAL VISION, JUNE 2014.

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - November 21, 12:00 p.m.

SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.

FIGURE IV.B-18

1601 Mariposa Street Mixed Use Project EIR
Project Shadow Pattern - November 21, 3:00 p.m.

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On December 21, the worst-case shadow day, the proposed project would cast net new shadows on the southernmost end of the park from one hour after sunrise (8:22 a.m.) until one hour before sunset (3:55 p.m.), a period of approximately 9.5 hours. On this day, net new shadow would be limited to areas along the southern edge of Jackson Playground. In the morning hours, from approximately one-hour after sunrise to 12:00 p.m., the project would shade the southwest corner of the park, including the tennis court and approximately half to nearly all of the community program garden (**Figure IV.D-10**).

Approximately 3,000 square feet of net new shadow would occur at 10:00 a.m., shading approximately 1.6 percent of the total park area. At 12:00 p.m. (noon), the project's net new shadow would continue to fall on most of the community program garden and the southern edge of the tennis court, but would begin shifting east towards the corner of the basketball court (**Figure IV.B-11**). Approximately 2,000 square feet of new shadow could occur at noon, which would represent shading of approximately one percent of the park area.

As shown **in Figure IV.B-12**, the greatest amount of net new shadow would occur in the hour before sunset on December 21, when the project would result in approximately 14,500 square feet of net new shadow (approximately 7.6 percent of the park area). At this time, net new shadow would fall primarily on the children's play area and the basketball court. On December 21, the average amount of net new shadow cast on Jackson Playground by the proposed project would be approximately 2.3 percent of the total park area, or 4,400 square feet. On this same day, the average amount of net new shadow cast on the community program garden by the proposed project would be approximately 58 percent of the total garden area, or 890 square feet. The greatest amount of net new shadow on the community program garden would occur also in the hour before sunset and would total approximately 1,200 square feet, or 78 percent of the garden area.

Based on San Francisco's historic weather patterns, spring through fall, with periods of the most sunshine and lowest level of rain and fog, are likely the times of year with the highest use of Jackson Playground. For the majority of the year the proposed project would not cast any net new shadow on the park; no new shadow would occur between early March and early October, including throughout

the summer months. Furthermore, throughout the year, the project would not cast any net new shadow on either of the two ball fields in the park.

Some net new project shadow on Jackson Playground may occur on up to 144 days of the year, beginning on or about October 10 and ending on approximately March 3. Because December 21 is the "worst case" shadow day (when up to 7.6 percent of the park could be shaded with net new shadow one hour before sunset, or an average of 2.3 percent for the whole day), the amount of net new shadow on any other day would be less, decreasing incrementally as dates are further from December 21, the winter solstice. Net new shadow generated by the proposed project would only shade a small area of the park including the community program garden and parts of the tennis and basketball courts throughout the day. Net new shadows would generally be cast on the park during a time of the year (winter) when park use tends to diminish. In addition, use of the tennis and basketball courts is not particularly sensitive to shading conditions and these facilities would only be partially shaded throughout the day. Therefore, the increased shadows cast by the project would not adversely affect the use of Jackson Playground.

Similar to the net new shadow cast on Jackson Playground as a whole, some net new shadow on the community program garden would occur on up to 144 days of the year, also beginning on or about October 10 and ending on approximately March 3. As discussed above, on December 21, up to 78 percent of the garden could be shaded by net new shadows one hour before sunset or 58 percent for the whole day. Although new shadows cast on the community program garden would be limited to the winter months, when the vegetable growing season is not at its peak, and when the variety of vegetables likely to be planted are more tolerant of lower light conditions, the project could adversely affect the productivity of the community program garden during this time period. While vegetables grown during the winter months may be more tolerant of lower light conditions, the added net new shadows would further reduce access to sunlight when access is already limited by shorter days and the position of the sun. Although new shadows could affect the overall productivity of the garden, the proposed project would not prohibit the continued use of this space as a garden. In addition, it should be noted that the proposed project would not completely eliminate exposure of the garden to

sunlight during these months. Further, no net new shadows would be cast on the garden during the most productive spring and summer months (generally between March and September).

As described above, the proposed project would cast minimal net new shadows onto existing open space areas within the vicinity of the site. Although the proposed project would contribute to the significant and unavoidable shadow impact identified in the *Eastern Neighborhoods FEIR*, the overall project contribution would not be substantial enough to adversely affect the use of these facilities and this impact would be less than significant.

Sidewalks. The proposed project would cast net new shadow on sidewalks in the vicinity of the project site, but this use is generally transitory in nature. Net new shadow coverage would not substantially affect the function of sidewalks (which – in the vicinity of the site – are used primarily as pedestrian walkways and not as places for extended periods of stationary activity). In addition, the proposed project building heights would be consistent with surrounding building heights, which currently cast similar shadows onto area sidewalks throughout various periods of the year.

Private Recreation Areas. Shadows cast on private open space are not regulated in the City of San Francisco and this discussion is provided for informational purposes only. Private recreational space located within the immediate vicinity of the site consists of the existing play area within Live Oak School, which is used during school recess periods. Under existing conditions, the school's play area is shaded by the existing three- to four-story Live Oak School building during the morning hours throughout the entire year and the space is generally unshaded during the afternoon hours. The school building and adjacent existing two-story Live Oak School gymnasium building also cast existing shadows on this space in the afternoon hours during the winter months.

As shown in **Figures IV.B-4 through IV.B-12**, the proposed project would cast net new shadows on this area during the evening hours, generally starting at 3:00 p.m. during the winter, 4:00 p.m. during the spring/fall, and 5:00 p.m. during the summer throughout the year, when school is not generally in session and the play area is not in use. Between approximately October 10 and March 3, the proposed project would cast net new shadows over some areas of the school's play space throughout the day,

with the worst-case shadow day occurring on December 21. These new shadows are not anticipated to substantially lessen the use or enjoyment of this area for school children since the net new shadows cast would not be substantially greater than existing shadows currently cast on the space.

Cumulative Impacts

This section discusses the cumulative impacts related to shadow that could result from the project in conjunction with past, present, and reasonably foreseeable future projects.

Impact C-WS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not create new shadow that could adversely affect the use of outdoor recreation facilities or other public areas within the project site vicinity. (Less than Significant)

As discussed above, the proposed project would not cast large amounts of net new shadows onto Jackson Playground or other open space areas, such that the use of these facilities would be substantially adversely affected. Nearby cumulative projects include one planned seven-story residential building at 1301 16th Street (Case No. 2013.0698E), approximately 0.2 miles north of the site. The proposed building at 1301 16th Street would not cast net new shadows onto Jackson Playground.[9] Shadows cast by these completed and under construction buildings would not combine with the proposed project's shadow to create a cumulatively considerable shadow impact related to the use of Jackson Playground. Furthermore, as discussed above, although the *Eastern Neighborhoods FEIR* found that up to 25 percent of Jackson Playground could potentially be shaded during the early morning and late afternoon hours during the summer months, and up to 40 percent of the park could be shaded in the late afternoon hours during the winter with or without implementation of the Plan, the project's contribution would be minimal and confined to the southwestern edge of the park

[9] San Francisco Planning Department, *1301 16th Street Preliminary Shadow Fan*, February 14, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2013.0698E.

during the winter months only (representing a total of 7.6 percent during the later afternoon and an average of 2.3 percent of the park on the worst-case shadow day). Therefore, past, present, and reasonably foreseeable future projects would not result in significant shading impacts to outdoor recreational facilities or other public areas within the vicinity of the project site and this impact would be less than significant.

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C. RECREATION

This section discusses the anticipated effects of the proposed project on parks and recreational facilities. As described in the Recreation section of the CPE Checklist (pages 60 through 61), the *Eastern Neighborhoods FEIR* found that implementation of the Area Plan would not result in substantial or accelerated deterioration of existing recreational resources; require construction or expansion of recreational facilities that may have an adverse effect on the environment; result in direct physical degradation of any existing recreational resources within the project area or Citywide; or result in any specific alterations to infrastructure, such as new park or recreational facility development. However, the Planning Department determined that the topic of recreation warrants further analysis; therefore, this section is included in the Draft EIR.

Environmental Setting

The following provides an overview of the existing parks and recreational facilities in the vicinity of the project site. Information in this section is based on the San Francisco Sustainable Communities Index,[1] the *General Plan* Open Space and Recreation Element,[2] and a review of the San Francisco Recreation and Parks Department (SFRPD) website.[3]

Citywide and Regional Facilities

Within San Francisco, the recreation and open space system includes a variety of types of spaces, including traditional spaces and facilities for recreation such as: recreation centers, which provide playground and sports opportunities, as well as programming for youth, adults, and seniors;

[1] San Francisco Sustainable Communities Index, *Distribution of Open Spaces and Natural Areas, Indicator En.2.b Open Space,* 2011. This document is available for review at www.sustainablecommunitiesindex.org/city_indicators/view/7 (accessed July 1, 2014).

[2] *Recreation and Open Space, An Element of the San Francisco General Plan.* City and County of San Francisco, March, 2014.

[3] San Francisco Recreation and Parks Department, Department Website, 2014. This document is available for review at: sfrecpark.org.

playgrounds; playing fields; unprogrammed or unstructured open space areas, which include grassy, landscaped, or paved open areas; trails and natural areas; cultural and recreation centers, which generally include space for community events and classes and programming related to the arts; and sports and sports and athletics facilities.[4]

The SFRPD owns and maintains approximately 3,395 acres of publically accessible recreation and open space in the City. Together with approximately 3,346 acres of open space properties owned and managed by other Cities, State agencies (255 acres includes Candlestick and Mount Sutro), and federal agencies (1,642 acres includes the Presidio, Ocean Beach, Fort Funston, Fort Mason, Lands End, Sutro Heights, and China Beach), a total of approximately 6,741 acres of parkland and open space cover the City.[5] These publically-owned open spaces make up approximately 23 percent of the City's total land area and include a variety of parks, walkways, landscaped areas, recreational facilities, and unmaintained open space. The City-owned park system includes more than 200 parks, playgrounds, and open spaces and recreational facilities and includes 25 multi-purpose recreation centers, nine swimming pools, and six golf courses, in addition to numerous tennis and basketball courts, baseball fields, athletic fields, and basketball courts.

Several larger open space areas, including Golden Gate Park (1,017 acres), the Lake Merced complex (700 acres) and John McLaren Park (317 acres) compose about one-half of the total City-owned acreage in recreational use. Unlike smaller facilities which are intended to serve nearby residents, these larger areas provide programs, activities or recreation opportunities that serve the City as a whole. These spaces, in addition to smaller areas with unique attributes such as water features or hilltop vista points, function as City-serving open spaces because they attract residents from the entire City. Based

[4] *Recreation and Open Space, An Element of the San Francisco General Plan.* City and County of San Francisco, March, 2014.

[5] San Francisco Planning Department, *Distribution of Open Spaces and Natural Areas,* 2012. This document is available for review at Planning Department in Case File No. 2011.0409E.

on San Francisco's estimated 2013 residential population of 825,111 persons,[6] the total 6,741 acres of parkland within the City translates to approximately 8.2 acres per 1,000 City residents.

City residents also benefit from the Bay Area regional open space system. Regional resources include public open spaces managed by the East Bay Regional Park District in Alameda and Contra Costa Counties; the National Park Service in Marin and San Mateo Counties; as well as State park and recreation areas throughout the area.

Nearby Recreational Facilities

The Eastern Neighborhoods are collectively served by about 50 acres of neighborhood parks and facilities (district-, neighborhood-, and sub-neighborhood-serving parks) and Potrero Hill is served by 21.33 acres of open space and recreational facilities. Public parks and recreational space in the vicinity of the project site include Jackson Playground, McKinley Square, Potrero Hill Playground and Recreation Center, and Franklin Square. These facilities are identified in **Figure IV.C-1** and are described in detail below. It should be noted that the description of parks and recreational facilities within the vicinity focuses on public spaces, and not private spaces that may include recreational space, such as the small play area within the Live Oak School property or the indoor private play area operated by Recess.

Jackson Playground. Jackson Playground is located immediately to the north of the project site's northwestern boundary and across Mariposa Street, as shown in **Figure IV.C-1**. The 4.41-acre park occupies two City blocks and is bounded by 17th Street to the north, Mariposa Street to the south, Carolina Street to the west, and Arkansas Street to the east. Jackson Playground is relatively flat and level, and is surrounded by a 6-foot high chain link fence on all sides. Access is available along

[6] California State Department of Finance, Demographic Research Unit, *Table 2: E-5 City/County Population and Housing Estimates,* January 1, 2013. Revised May 10. This document is available for review at the Planning Department in Case File No. 2011.0409E.

Arkansas Street near the southeast corner of the park, along Mariposa Street at two separate gates, and along 17th Street near the northwest corner of the park.

The park includes a children's play area, picnic tables, tennis and basketball courts, a small community garden, and two baseball fields that are equipped with bleachers, team benches, and two small storage buildings. Additionally, the park contains a one-story recreation center building, the Lou Spadia Clubhouse, which is located on the southeast corner and houses a wooden gym floor and public restrooms. Facilities within the park are further discussed and identified in Section IV.D, Shadow (pages 182 through 184).

Hours of operation of the Jackson Playground are 5:00 a.m. to 12:00 a.m. daily. The Lou Spadia Clubhouse is used for after school programs weekdays from 3:00 p.m. to 6:00 p.m. and is available for use on the weekends and at other times by special arrangement. Public restrooms are open during park hours. To facilitate nighttime use, the basketball court, tennis courts, and ball fields are lighted until 10:00 p.m. nightly. The baseball fields are available by reservation only through the SFRPD and the fields are consistently used throughout the week, including weekends.

Live Oak School utilizes the park for physical education programming during the school day via a permit with SFRPD, which imposes standard conditions on the school's use of the park. The conditions for using this facility are that the school must: 1) not interfere with maintenance; 2) accommodate any permitted users; 3) accommodate others who want to use the park; and 4) provide a certain number of community service hours in exchange. Live Oak School also partners with the SFRPD to operate the community garden under City guidance.

Many types of maintenance activities occur at San Francisco parks, including activities as diverse as opening and closing restrooms, quick litter clean-up, standard watering and mowing, deep cleaning or extensive gardening and weeding, and crew projects that draw staff from across the City. Some tasks are of short duration and are difficult to track. Some tasks occur irregularly or annually (such as tree trimming and annual bed renovation) and thus fall outside of a weekly routine.

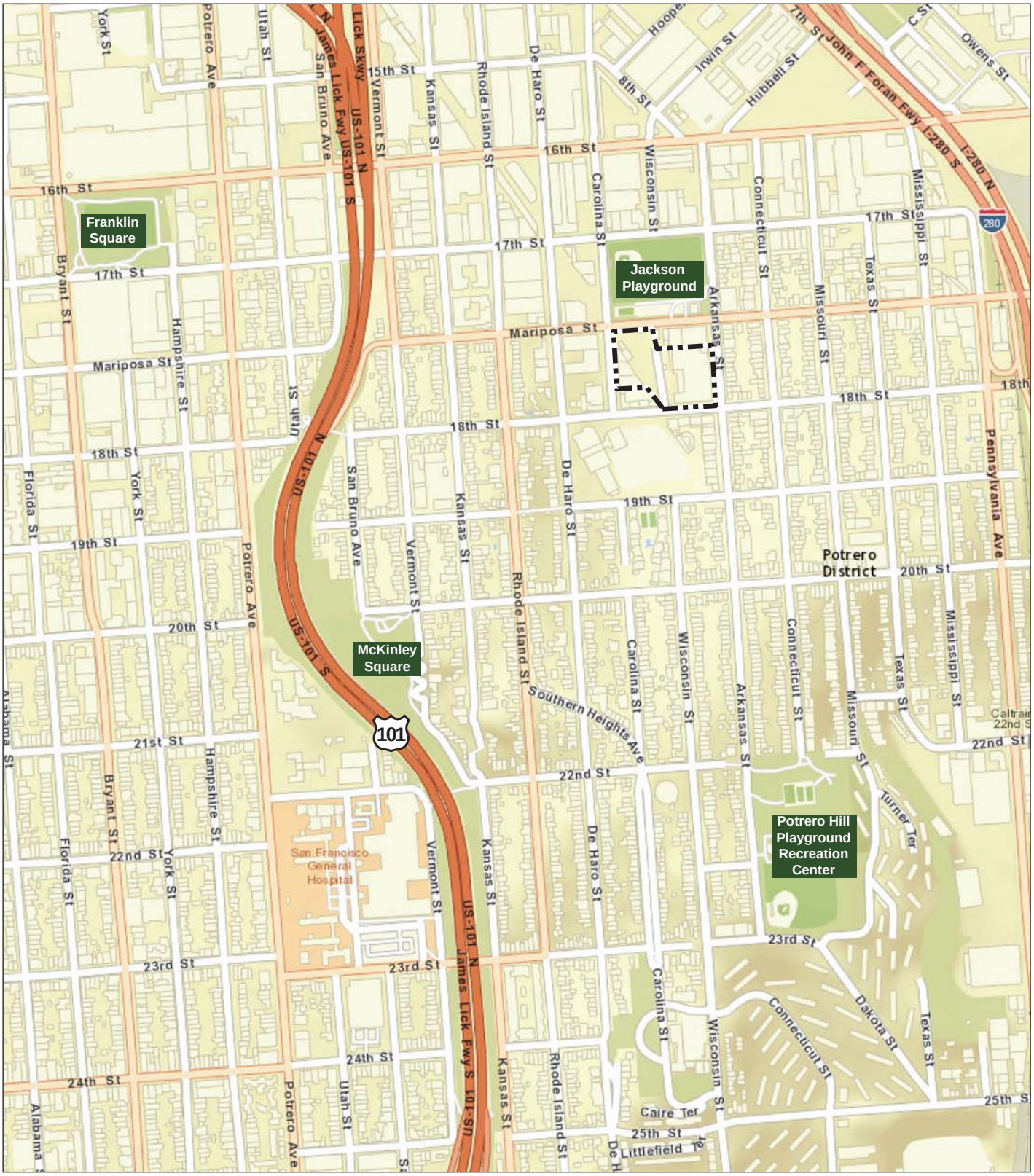

FIGURE IV.C-1

N

0 325 650
FEET

Project Boundary

1601 Mariposa Street Mixed Use Project EIR
Park and Recreation Facilities Within the Vicinity of the Project Site

SOURCES: ARC-GIS; LSA ASSOCIATES, INC., 2014.

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Jackson Playground is maintained by park staff at least twice a day. Custodial staff are assigned to remove trash, clean and sanitize restrooms and play areas, blow sand off of the basketball courts, clean up biohazards, clean the interior of the clubhouse, and sweep the sidewalk seven days a week. The park is mowed bi-monthly and a dedicated gardener performs horticultural tasks such as mowing, irrigation, baseball diamond maintenance and landscape clean-up five days a week. The Structural Maintenance Division attends to acute maintenance issues such as plumbing, electrical, asphalt repair, graffiti, and painting on an as-needed basis.[7]

SFRPD park maintenance is rated on a quarterly basis. All parks are evaluated each quarter by horticultural supervisors, structural maintenance supervisors, and administrative staff and managers. The rating system rates the condition of various facilities within each park or recreation area from 0 to 100 percent, with a 100 percent rating representing the best conditions. This rating focuses on the general appearance of park facilities, including overall cleanliness, presence of graffiti and weeds, the health and maintenance of ornamental vegetation, among other similar conditions that could be affected by inadequate maintenance or overuse. The average City-wide rating for all types of facilities is about 90 percent. In February 2014, the condition of Jackson Park's planting areas, turf areas, and hardscape areas was given an 83.7 percent rating.[8] The park's most recent cleanliness rating, which focuses on the cleanliness of various facilities including waste and recycling receptacles, restrooms, benches, grills, athletic courts, turf athletic fields, children's play area, and ornamental vegetation and hardscape areas was 100 percent.[9]

[7] Steven Cismowski, PSA 2 Manager, San Francisco Recreation and Parks Department, written communication with LSA Associates, Inc., September 11, 2014.

[8] San Francisco Recreation and Parks Department, *San Francisco Park Maintenance Standards: Park Evaluation Report*, Reporting Period from January 1, 2014 to March 31, 2014.

[9] San Francisco Recreation and Parks Department, *San Francisco Park Maintenance Standards: Park Evaluation Report*, Reporting Period from Cleanliness Performance by Park by Park Feature FY14Q4 (April through June).

McKinley Square. Located approximately 0.5 miles southwest of the project site, the 2.86-acre McKinley Square Park is within the Potrero Hill neighborhood and features a playground with a large sand pit; and a large grassy open area for soccer, football, or other active uses. There is also a community garden, and a walking trail with benches.

Potrero Hill Playground and Recreation Center. The approximately 10-acre Potrero Hill Playground and Recreation Center is located approximately 0.5 miles south of the project site and features a large children's play area with two play structures, picnic tables, a barbeque grill, two lighted tennis courts, one basketball court, a dog play area, a baseball field, and public restrooms. The Recreation Center offers many classes and programs and includes a gymnasium, stage and auditorium.

Franklin Square. The approximately 5.18-acre Franklin Square is located approximately 0.5 miles to the west of the project site. The newly renovated play area includes a lighted, artificial turf soccer field and separated play structures for older and younger children as well as picnic areas with benches.

Regulatory Framework

The provision of open space and recreation uses within the City are considered by several planning efforts. The Planning Department, in conjunction with the SFRPD, the Mayor's Office, and the Neighborhood Parks Council is currently evaluating the open space needs of the entire City over the next 100 years. As part of the Open Space 2100 project, a Draft Open Space Framework is being developed that includes two components: the draft Citywide Vision for Open Space, which provides a broad outline of the City's ideal open space network over the next 100 years, and the update of the Recreation and Open Space Element of the *General Plan*. The Recreation and Open Space Element Update[10] was recently adopted by the City. The following section describes applicable local policies and regulations that pertain to parks and recreational facilities.

[10] *Recreation and Open Space, An Element of the San Francisco General Plan*. City and County of San Francisco, March, 2014.

San Francisco General Plan

The *General Plan* Recreation and Open Space Element and the *Showplace Square/Potrero Area Plan's* Open Space section contain the following objectives and policies related to open space and recreational facilities in San Francisco that are relevant to the proposed project.

Recreation and Open Space Element

Objective 2: Increase recreation and open space to meet the long-term needs of the city and bay region.

- Policy 2.7: Assure that privately developed residential open spaces are usable, beautiful, and environmentally sustainable.
- Policy 2.12: Expand the Privately-Owned Public Open Spaces (POPOS) requirement to new mixed–use development areas and ensure that spaces are truly accessible, functional and activated.

Showplace Square/Potrero Area Plan Streets and Open Space Section

Objective 5.1: Provide public parks and open spaces that meet the needs of residents, employees, and visitors.

Objective 5.2: Ensure that new development includes high quality private open space.

Objective 5.5: Ensure that existing open space, recreation, and park facilities are well maintained.

San Francisco Planning Code

Section 135 of the City Planning Code specifies the amount of usable open space required to be supplied by new development in the Eastern Neighborhoods, including private open space, common open space, and privately-owned public open space. In Eastern Neighborhoods Mixed Use Zoning Districts, 80 square feet of usable open space per dwelling unit is required if all open space is to be private. If publicly accessible open space is provided, 54 square feet per dwelling unit is required

(Table 135B). Open space requirements for non-residential uses within the Eastern Neighborhoods are governed by Planning Code Section 135.3 (Table 135.3). For retail space, one square foot of usable open space per 250 feet of occupied floor area associated with new square footage is required.

Per Section 135.3, in the Eastern Neighborhoods Mixed Use Districts, the open space requirements may be fulfilled by providing privately-owned public open space, subject to the following: 1) the amount of open space required could be reduced by 33 percent if it is publicly accessible usable open space; 2) it meets the requirements specified in Section 135(h), Publicly-Accessible Open Space Standards; and 3) up to 50 percent of the publicly accessible open space may be provided off-site if it is within 800 feet of the project site. The proposed project would provide 39,195 gsf of open space.

Refer to Chapter III, Plans and Policies, for further discussion.

Proposition C and the Recreation and Park Acquisition Policy

In 2000, San Francisco voters approved Proposition C, extending the Open Space Fund that is used to finance acquisitions and capital improvements for the SFRPD. The legislation created an annual set-aside of two and one-half cents for each one hundred dollars assessed valuation from the property tax levy. The Open Space Fund is funded through Fiscal Year 2030-2031. The legislation stipulates that at least five percent of the revenue raised through the set-aside be allocated to new land acquisition. In 2006, the SFRPD, at the request of the Recreation and Park Commission, published the Recreation and Park Acquisition Policy to provide clear guidelines for the expenditure of acquisition funds under the Recreation and Park Commission's jurisdiction.

The first objective stated in this policy is to align SFRPD acquisition priorities with Map 9 of the *General Plan* Recreation and Open Space Element, which identifies high need areas based on population, density, age, and income. However, the SFRPD ultimately used a separate map modeled after Map 9 using updated demographic statistics (high residential, senior, and children densities per net acre, as well as and low household incomes relative to the City median household income) from Census 2000 data to determine high and highest priority need areas. In addition, using neighborhood

service areas, the SFRPD conducted a gap analysis for the Park Acquisition Policy report. Ultimately, the SFRPD produced Neighborhood Recreation and Open Space Improvement Priority Plan Maps showing the areas of highest need according to demographic statistics and areas that are also underserved in terms of existing recreational resources.

Impacts and Mitigation Measures

This section analyzes the impacts related to recreation that could result from implementation of the proposed project. The section begins with the significance criteria, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the proposed project. Project and cumulative impacts are considered, and mitigation measures are identified, as appropriate.

Significance Criteria

Implementation of the proposed project would have a significant effect on recreation if it would:

- Result in a substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for parks services;
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment; or
- Physically degrade existing recreational resources.

Approach to Analysis

The following analysis considers the increase in demand for park and recreational services that would occur with implementation of the proposed project and whether or not significant adverse

physical impacts would result with the increased demand. The analysis below partially relies on the findings of the *Eastern Neighborhoods FEIR*, in combination with existing conditions affecting park and recreational facilities that would serve the proposed project. As described in the Recreation section of the CPE Checklist (pages 60 through 61), the *Eastern Neighborhoods FEIR* found that implementation of the Area Plan would not result in substantial or accelerated deterioration of existing recreational resources; require construction or expansion of recreational facilities that may have an adverse effect on the environment; result in direct physical degradation of any existing recreational resources within the project area or Citywide; or result in any specific alterations to infrastructure, such as new park or recreational facility development. No Mitigation Measures related to recreational resources were identified in the *Eastern Neighborhoods FEIR*.

Impact Evaluation

The discussion below analyzes the impacts of the proposed project that are related to open space and recreational facilities.

Impact RE-1: The construction of the open space and recreational facilities proposed as part of the project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR and construction of the project would not otherwise result in the degradation of existing open space resources within the vicinity of the site. (Less than Significant)

Development of the proposed project would result in the construction of 39,195 gsf of open space within the project site. The potential construction-related impacts of development of the proposed project, including the proposed open space, are discussed in the appropriate topical sections of this EIR or within the CPE Checklist in Appendix A (e.g., EIR Section, IV.D, Hazards and Hazardous Materials; CPE Checklist Noise and Air Quality discussions) as part of the assessment of overall project impacts.

Additionally, during the construction period, there may be times that park users or Live Oak School officials determine that construction noise interfere with use of the park facilities at Jackson Playground or the adjacent (private) play area within the Live Oak School property. It is not anticipated that substantial amounts of construction dust would interfere with the use of these areas with implementation of the Dust Control Plan required to be implemented by the project (refer to page 53 of the CPE Checklist). In addition, noise barriers that would be placed along the property line between the project site and the school's play area would reduce construction noise and air quality impacts at the site (refer to page 43 of the CPE Checklist, Mitigation Measure 2). While project construction is estimated to take two years, construction activities would not occur immediately adjacent to Jackson Park, which is separated from the project site by Mariposa Street at a distance of approximately 50 feet; therefore, significant noise and air quality impacts associated with construction are not anticipated at Jackson Playground. In addition, activities occurring immediately adjacent to or near the outdoor play area would not occur at all times for the duration of two years. Mitigation Measure 2, Construction Noise, is required to ensure that noise generated by construction activities would be less than significant. Therefore, construction activities that may limit the use of these facilities would be temporary and intermittent. In and of itself, the construction and operation of open space uses on the site would not result in a significant impact on the environment, and this impact would be less than significant.

Impact RE-2: The proposed project would not increase the use of existing neighborhood parks or other recreational facilities, such that substantial physical deterioration of existing facilities would occur or be accelerated, or such that the construction of new facilities would be required. (Less than Significant)

The proposed project would result in the construction of a total of 320 residential units and approximately 10,000 gsf of ground-floor commercial space, increasing the number of new residents and employees on the project site. Private and publicly accessible open space would be provided throughout the project site for use by project residents, employees, and the public. Additionally, employees and residents may choose to use off-site parks and recreation services, increasing the use of these facilities. The discussion below evaluates the project's demand for open space and recreational

services, beginning with a description of the project's compliance with Planning Code requirements governing the provision of on-site open space, followed by an evaluation of the project's potential to increase demand at off-site open space and recreational facilities.

The proposed project would include 39,195 gsf of open space on the project site, 21,505 gsf of which would consist of publicly accessible open space for use by project residents, employees, and the public. This amount would exceed the open space requirements of the Planning Code. The remaining 17,690 gsf would be for use by residents only. The proposed project would also provide indoor recreational space, including a fitness gym, yoga studio, and a flexible activity space.

An approximately 21,505 gsf, 40- to 70-foot-wide publicly accessible mid-block pedestrian pathway would be located between the two buildings on the project site. The public pathway would provide access to pedestrians and bicyclists between Mariposa Street and 18th Streets and the 70-foot wide plaza near the center of the pathway would provide outdoor recreational space. Ground-floor units with patios would open onto the mid-block pathway. The 17,690 gsf of open space areas accessible only to residents would include an internal podium-level courtyard and roof deck at the East Building and smaller courtyards and greenways at the northern portion of the East Building. A light court near the northern property line adjacent to Live Oak School would also be provided for restricted use by residents. An internal on-grade courtyard would be provided at the West Building.

The proposed project exceeds the required open space provision and provides on-site open space that would be available for public use, as well as indoor recreational space. As such, the proposed project would meet the on-site demand for parks, open space and recreational services generated by new residents and employees at the project site as defined by the Planning Code.

As previously described, there are over 50 acres of neighborhood parks and other recreational facilities within the Eastern Neighborhoods and about 21.33 acres of park space within the Potrero Hill neighborhood; the area is well served by existing recreational facilities. At least four of these public parks and open spaces are within less than 0.5 miles of the project site. Nearby public parks and open spaces include Jackson Playground, McKinley Square, Potrero Hill Playground and

Recreation Center, and Franklin Park; together these facilities provide 22.45 acres of open space. The distance of recreation and open space facilities from potential users is generally defined as the service area for the facility or open space and is dictated by the type of park (i.e., neighborhood serving or district serving). The distance is also indicative of how far a particular type of user would walk (i.e., a family with children will not walk as far as an adult).

Project residents and, to a lesser extent, project employees would utilize nearby open space facilities, particularly Jackson Playground, which is immediately across Mariposa Street from the project site. These facilities are designed to serve the dense population and variety of users found in this area of the City. Furthermore, these facilities all receive regular upkeep and maintenance according to individual needs. The proposed project is consistent with the growth projections considered in the *Eastern Neighborhoods FEIR*, which did not identify significant impacts associated with increased use of park, recreation, or open space facilities within the area. In addition to off-site open space areas, residents and employees would use the private and shared on-site open spaces that would be provided by the project. It is therefore anticipated that the increased usage of area parks, recreational facilities, and open spaces and resulting physical deterioration of these facilities associated with the increased population would be minimal.

In addition, the proposed project would be required to contribute to the Eastern Neighborhoods Public Benefits Program ($9.25 dollars per gsf of new residential use and $6.93 per gsf of non-residential use, or about $3,813,004), which contributes to the acquisition and development of new parkland in the City. Daggett Park (located approximately 0.4 mile northeast from the project site) was chosen as the first Showplace Square/Potrero Subarea priority open space project for the Eastern Neighborhoods funds; it is projected to be completed in 2016. The approximately 0.9-acre site will include a large lawn, seating and play areas, a fenced-off dog run, and public art installations.

The proposed project is consistent with the type of development anticipated under the *Showplace Square/Potrero Area Plan* (a subarea plan of the *Eastern Neighborhoods Plan*), it would provide the required square footage of open space on the site, and given the scale of the proposed development relative to the existing park and open space resources in the City it is not expected that residents of

the project would use existing facilities to such a degree that substantial overuse, causing physical deterioration, would result. Therefore, the proposed project would not increase the use of adjacent or nearby recreational facilities such that substantial physical deterioration of existing facilities would occur or be accelerated. In addition, the proposed project would not result in the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for the provision of park services (refer to Impact RE-1 for an evaluation of construction impacts associated with on-site open space facilities). Implementation of the proposed project would result in a less-than-significant impact to parks and recreation facilities.

Cumulative Impacts

This section discusses the cumulative impacts to parks and recreational facilities that could result from the project in conjunction with past, present, and reasonably foreseeable future projects.

Impact C-RE-1: The proposed project, combined with past, present, and reasonable foreseeable future projects, would not contribute to cumulative effects related to recreational resources. (Less than Significant)

The proposed project would add to the demand for parks and open space services within the vicinity, but the cumulative contribution of the proposed project's impact with the reasonably foreseeable development projects would not be considerable, as described below.

Current planning efforts for the provision of parks and open space, including Open Space 2100, will consider the City's need for parks and open space over the next 100 years and projected population growth would be factored into the planning framework. Anticipated growth in the City-wide network of parks and open space has occurred as a result of the passage of the $185 million 2008 Clean and Safe Neighborhood Parks General Obligation Bond, which focused on the development of new parks in the eastern portions of the City. To continue improvements to the City's parks and open space system, the City's 2012-2021 Capital Plan proposed a $185 million Neighborhood Parks and Open Space General

Obligation Bond, which was approved by voters in November 2012. Overall, the City's Capital Plan proposes $323 million in investment primarily for neighborhood parks. Development of new and upgraded parks and open space acreage as a result of these bond measures would improve the delivery of recreation programs, facilities, and services to a growing population in the City.

In addition, as identified in the *Eastern Neighborhoods FEIR*, park and open space acreage in this area of the City is proposed to be augmented with the acquisition and redevelopment of one of several large lots in the northern half of the neighborhood, including Daggett Park, and the completion of several additional parks in Mission Bay. Two intersections, Townsend Circle (the intersection of Townsend, Division and Eighth Streets) and Eighth and 16th Streets are targeted for reconfiguration and installation of new urban plazas. Additional sites are identified in the *General Plan* for acquisition and development of parks and recreation opportunities within the *Eastern Neighborhoods Plan*.

The proposed project, like all other development projects within the City, is responsible for providing a sufficient amount of on-site open space per the Planning Code. As discussed above, the proposed project would exceed the open space requirements of the Planning Code. Cumulative recreation demand would be met by existing adjacent parks and recreational facilities provided in nearby City-owned parks and open spaces including Jackson Playground, McKinley Square, Potrero Hill Playground and Recreation Center, and Franklin Square. Additional recreational and park improvements planned as part of the *Eastern Neighborhoods Plan* and other City-wide planning efforts would further expand the park and recreational opportunities that would be available to serve the proposed project and other cumulative development. The increase in residents as a result of the proposed project and reasonably foreseeable projects would not be beyond levels anticipated and planned for by the SFRPD. For these reasons, the proposed project's contribution to cumulative demand on park services City-wide would not be cumulatively considerable.

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D. HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing setting and impacts of the proposed 1601 Mariposa Street project for the topic of hazards and hazardous materials, which could pose a significant threat to human health and/or the environment. The environmental setting subsection discusses the basic concepts and terms used in the analysis of hazardous materials impacts and describes existing conditions at the project site and vicinity. Pertinent federal, State, and local agency regulations related to hazards and hazardous materials are discussed in the regulatory framework subsection. The impacts and mitigation measures subsection defines the significance criteria and identifies potential impacts and mitigation measures related to the topic of hazards and hazardous materials for the project.

Environmental Setting

The discussion below begins with a description of the basic concepts and terms used in the analysis of hazardous materials impacts, followed by a discussion of the existing conditions at the project site and vicinity.

Some of the key terms used in the management of hazardous materials and the context within which they apply to sites where contaminants have been identified in soil or groundwater are presented below.

- A *hazardous material* is any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment (California Health and Safety Code, Section 25501).
- A *hazardous materials release site* refers to any area, location, or facility where a hazardous material has been released or threatens to be released to the environment.

- *Remedial action* or *remediation* refers to actions required by federal, State, or local laws, ordinances, or regulations necessary to prevent, minimize, or mitigate damage that may result from the release or threatened release of a hazardous material. These actions include site cleanup, monitoring, testing, and analysis of site conditions, site operation and maintenance, and placing conditions or restrictions on the land use of the site upon completion of remedial actions. In the case of the project site, a *Response Plan* has been prepared to describe the proposed remedial actions at the site.

The risk to human health and the environment is determined by the probability of exposure to hazardous material(s) and the severity of harm such exposure would pose. That is to say, the likelihood and means of exposure, in addition to the inherent toxicity of a material, are used to determine the degree of risk to human health or the ecological environment. For example, a high probability of exposure to a low toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very high toxicity chemical might pose such a risk. Methodologies have been established by the US Environmental Protection Agency (US EPA), which are also used at the State level, to quantify that risk. The quantified risk levels are one of several elements used in the decision-making process to determine how that risk should be managed.

The project site consists of an approximately 3.36-acre area comprised of six contiguous parcels with three separate addresses: 1601 Mariposa Street, 1677 Mariposa Street, and 485-497 Carolina Street. Information regarding the hazardous materials setting for the site is from Revised Draft Response Plan prepared for the project site,[1] unless otherwise indicated. The Revised Draft Response Plan, prepared under the oversight of the State Department of Toxic Substances Control (DTSC), includes a

[1] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

description of the site history, environmental investigations conducted at the project site from 1986 through 2013, and a description of the remedial action proposed for the project site.

Historical Land Uses

Prior to any development, the project site was underlain with fill using materials of unknown origin. In San Francisco, fill materials commonly used in the project vicinity include dune sands, quarried rock (including serpentinite bedrock), industrial refuse, and building debris that was generated following the 1906 earthquake. Hazardous materials, including metals and polynuclear aromatic hydrocarbons (PAHs), were common contaminants of the earthquake building debris.

The 1601 Mariposa Street property was operated from the 1940s to the 1960s as Safeway Stores, Inc., which included a butter and cream plant on the northwestern portion of the site. This property also included a railroad spur and a small structure for truck maintenance. A meat distribution plant operated on the southeastern portion of the property between 1940 and 1975. By 1974, the butter and cream plant was demolished and that area was used for parking. Between 1977 and the late 1980s, Safeway operated a coffee depot and offices, which was subsequently taken over by Hills Bros Coffee (and later owned by Nestle). From at least 1942 through 1986, petroleum underground storage tanks (USTs) were operated at the site; the USTs were closed in-place in 1986 under the supervision of the San Francisco Department of Public Health. Since 1997, the 1601 Mariposa Street property has been owned and occupied by an automotive parts store.

The 1677 Mariposa Street property is a former railroad right-of-way. Railroad tracks were present at 1677 Mariposa from the early 1900s to the mid-1980s. After the tracks were removed, the property was redeveloped and is currently occupied by a charter bus facility (Coach 21).

The 485-497 Carolina Street property was developed by 1900 with residences, which were presumably damaged by the 1906 earthquake and removed by 1914. Between 1935 and 1962, a concrete mixing plant operated at this property, including sand and gravel bins, a concrete mixer, and an inclined conveyer. The current building on-site was constructed in 1978. Uses of the current building have

included optical cable storage, a dry cleaner, a door repair shop, furniture storage and warehousing, a yoga studio, furniture restoration, and an office space. The dry cleaner, which operated in Suite 485B from the 1980s to early 1990s, was reportedly cited by the San Francisco Fire Department (SFFD) for dumping dry cleaning chemicals into the City sewer system, though no evidence of this violation or other regulatory action was identified in regulatory agency files.

Previous Environmental Investigations

The following environmental investigations have previously been conducted at the project site.

Tank Closure Investigation. In 1986, prior to abandoning the 1601 Mariposa Street USTs in-place, soil and groundwater samples were collected from three locations near the USTs. The soil and water samples were found to contain low concentrations of petroleum hydrocarbons. Based on this data, the San Francisco Department of Public Health (SFDPH) approved the request to close the USTs in-place. The contents of the USTs were removed and the USTs were filled with a concrete-sand slurry. A sump used for truck washing was also closed in-place around this time.

Phase II Investigations. In October 1994, an additional subsurface investigation was performed on behalf of a prospective purchaser of the 1601 Mariposa Street property.[2]The investigation included collection of soil and groundwater samples from eight locations near the closed-in-place USTs and sump. Soil samples near the USTs and groundwater directly downgradient from the USTs contained elevated concentrations of petroleum-related contaminants. As groundwater upgradient from the USTs did not contain contaminants, the data suggested that the USTs were the source of the contaminants. Seven groundwater monitoring wells were installed at 1601 Mariposa Street in 1994 and 1995. Groundwater samples from the well immediately downgradient of the former USTs and a

[2] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

well further downgradient consistently contained elevated concentrations of petroleum compounds, while the other five wells at the site contained either significantly lower or no contaminants.

In 1997, a Risk Based Corrective Action Analysis was performed for the site, which evaluated the potential health risks from contamination at the site under proposed land uses.[3] This evaluation concluded that the residual petroleum contamination did not pose a health risk to the existing commercial-industrial land uses. In 1998, the SFDPH issued a Remedial Action Completion Certificate for the UST site.[4] The closure stated that if the zoning of the project site were changed from commercial to residential or mixed residential-commercial use, an updated risk analysis must be submitted to SFDPH for review and approval.

Recent Site Investigations. From 2011 to 2013, six additional subsurface investigations were performed on behalf of the Related/Mariposa Development Co., LLC (the project sponsor) as a prospective purchaser of the project site properties. These investigations included the previously investigated 1601 Mariposa Street property as well as the adjoining 1677 Mariposa Street and 485-497 Carolina Street properties.

The investigations included collection and analysis of soil samples from 54 locations on-site, soil gas samples from 38 locations on-site, and groundwater from four locations, as well as the installation and sampling of five new groundwater monitoring wells.[5] Sample locations were chosen to provide an updated assessment of the magnitude and extent of contamination from the closed in-place USTs

[3] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

[4] San Francisco Department of Public Health, *Remedial Action Completion Certificate, Former Nestle Beverage, 1501 Mariposa Street, San Francisco, LOP Site 10361*, October 21, 1998. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

[5] Iris Environmental, *Revised Report of Subsurface Investigation, 1601 and 1677 Mariposa Street, San Francisco, California*, June 2013. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

as well as a more comprehensive assessment of other site conditions, including subsurface soil and groundwater quality on the 1677 and 485-497 Carolina Street properties.

Soil and soil gas data from the investigation were screened against the California Human Health Screening Levels (CHHSLs) for residential land uses. CHHSLs are conservative risk-based screening criteria developed by the State Office of Environmental Health Hazard Assessment (OEHHA) based on a one in one million (1×10^{-6}) excess cancer risk and a non-cancer hazard quotient of 1.0. For cancer risks, a 1×10^{-6} excess cancer risk indicates that if one million residents were exposed to the concentrations of contaminants, one additional cancer death would be predicted. As the total lifetime risk from cancer is often estimated as one in three,[6] the addition of a risk of less than one in one million is generally considered low risk by regulatory agencies. For non-cancer risks, a hazard quotient below 1 indicates that the contaminant concentrations would not be not expected to create any adverse effects on persons exposed to them. Groundwater data were screened against Maximum Contaminant Levels (MCLs), which are drinking water standards. Soils, soil gases, and groundwater containing contaminant concentrations below CHHSLs and MCLs would be considered to present no significant human health risks.

The investigation identified several soil, soil gas, and groundwater contamination issues at the project site, as summarized in **Table IV.D-1** and discussed below.

[6] Sasieni, P.D. et al, "What is the lifetime risk of developing cancer?", *British Journal of Cancer*, July 26, 2011. Available online at www.ncbi.nlm.nih.gov/pmc/articles/PMC3172907 (accessed Sept 10, 2014).

Table IV.D-1: Contaminants in Soil, Groundwater, and Soil Gas above Risk-Based Screening Levels at the Project Site

Contaminant	Screening Level	Maximum Concentration Reported at Site	Location and Anticipated Extent at the Project Site
SOIL			
Arsenic	0.070 mg/kg	310 mg/kg	In shallow fill throughout site.
Lead	80 mg/kg	1,700 mg/kg	In shallow fill throughout site.
Nickel	1,600 mg/kg	2,900 mg/kg	In shallow fill throughout site.
Petroleum hydrocarbons (as gasoline, as diesel, as motor oil)	100 mg/kg	1,700 mg/kg (TPH-g); 1,900 mg/kg (TPH-d); 1,200 mg/kg (TPH-mo)	Heavier hydrocarbons identified in shallow soils. Lighter and heavier hydrocarbons in deeper soils near the former UST location (Figure IV.D.1)
Asbestos	0.001%	>1 % (positive)	In shallow fill containing serpentine soils throughout site.
GROUNDWATER			
Benzene	1 µg/L	700 µg/L	Surrounding former UST location (Figure IV.D-1)
Toluene	150 µg/L	200 µg/L	Surrounding former UST location (Figure IV.D-1)
Metals			Only one grab groundwater sample tested for metals (extent unknown)
Arsenic	10 µg/L	16 µg/L	
Barium	1,000 µg/L	1,100 µg/L	
Total Chromium	50 µg/L	1,400 µg/L	
Lead	15 µg/L	33 µg/L	
Nickel	100 µg/L	2,900 µg/L	
SOIL GAS			
Benzene	85 µg/m^3	8,400 µg/m^3	Surrounding former UST location (Figure IV.D-1)
Butadiene, 1,3-	8.9µg/m^3	12 µg/m^3	Surrounding former UST location (Figure IV.D-1)
Dichloroethane, 1,2-	110 µg/m^3	2,100 µg/m^3	Surrounding former UST location (Figure IV.D-1)
Hexane	490,000 µg/m^3	540,000 µg/m^3	Surrounding former UST location (Figure IV.D-1)
Naphthalene	93 µg/m^3	2,000 µg/m^3	Surrounding former UST location (Figure IV.D-1)
Vinyl Chloride	28 µg/m^3	7,500 µg/m^3	Surrounding former UST location (Figure IV.D-1)

Notes:
mg/kg = milligrams per kilogram (equivalent to parts per million)
µg/L = micrograms per liter (approximately equivalent to parts per billion)
µg/m^3 = micrograms per cubic meter (conversion to parts per billion depends on the molecular weight of the gas)
TPH-g = Total petroleum hydrocarbons as gasoline (lighter-weight hydrocarbons)
TPH-d = Total petroleum hydrocarbons as diesel (medium-weight hydrocarbons)
TPH-mo = Total petroleum hydrocarbons as diesel (heavier-weight hydrocarbons)

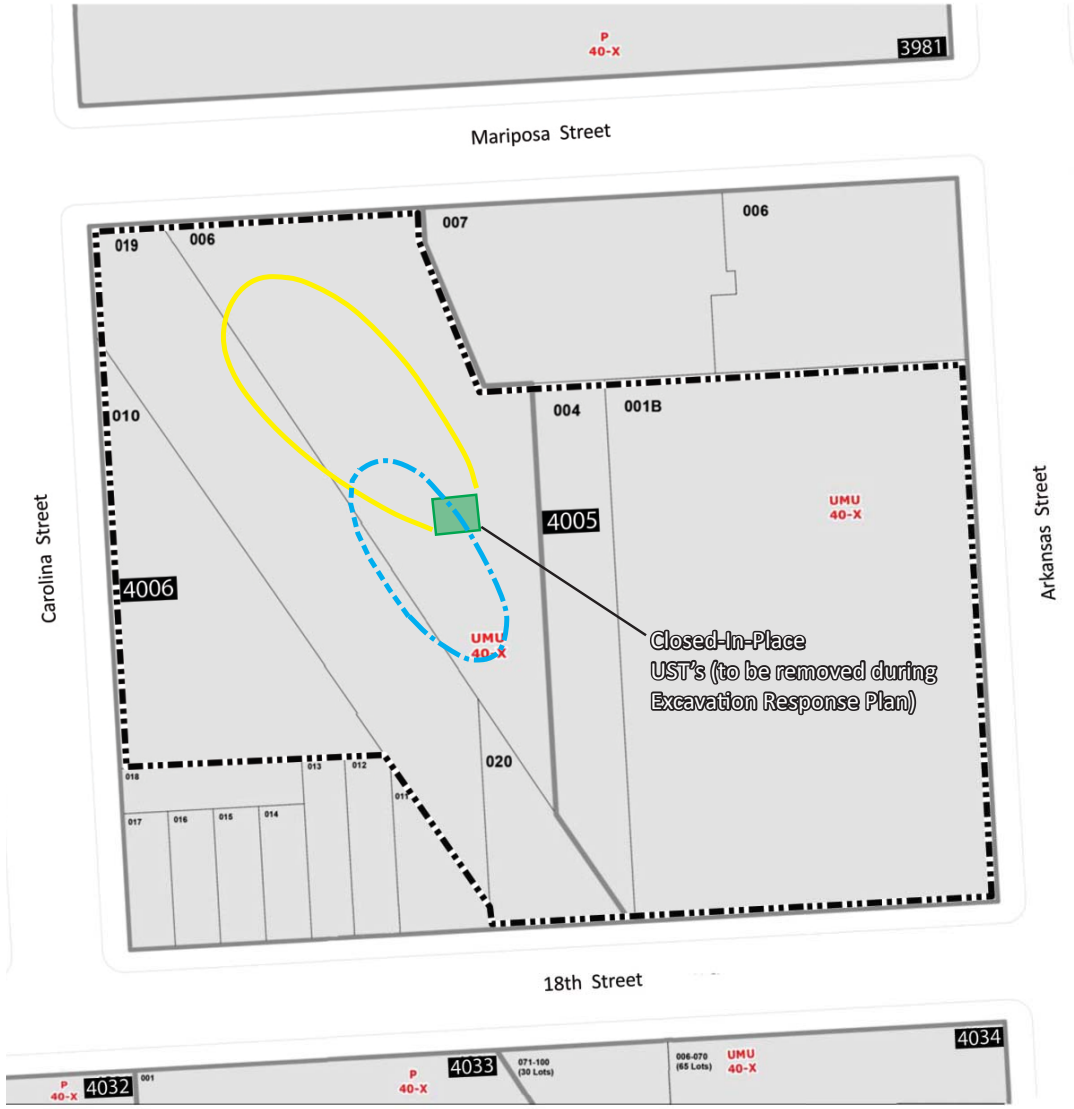
Source: Revised Draft Response Plan, IRIS Environmental, March 2014.

Organic contaminants. Elevated concentrations of total petroleum hydrocarbons as gasoline (TPH-g), as diesel (TPH-d), and as motor oil (TPH-mo) were identified in shallow and deeper soils in four locations near the closed in-place USTs at 1601 Mariposa Street. Elevated concentrations of the heavier petroleum compounds (TPH-d and TPH-mo) were also identified in shallow soils in the southwest part of 1601 Mariposa Street, near a former bus parking area at 1677 Mariposa Street, and at the north end of 1677 Mariposa Street. No elevated petroleum contamination was identified in soils from the 485-497 Carolina Street property.

Benzene, a volatile organic compound (VOC) associated with gasoline, was detected in soil gas above screening levels at five locations in the center of the project site, near the closed-in-place USTs, with a maximum concentration of 700 μg/L (see **Table IV.D-1**). Several other VOCs were identified in this general area: hexane was detected above indoor air screening levels at two locations, and naphthalene, vinyl chloride, 1,2-dichloroethane (1,2-DCA), and 1-3-Butadiene were identified above screening levels at one location each (see **Table IV.D-1**). Vinyl chloride and 1,2- Dichloroethane were not detected in a subsequent soil gas sample from the same approximate location. No elevated levels of VOCs in soil gas were identified above screening levels on the 485-497 Carolina Street property or appeared to extend off the 1601 and 1677 Mariposa Street properties.

Soil gases immediately become dispersed and diluted after percolating through soil to outdoor air. Therefore, the concentrations of VOCs in the soil gases detected in project site investigations would not pose a health risk to persons at or near the project site who may be exposed to them through outdoor air. However, contaminants in the soil gases have the potential to accumulate in the indoor air of buildings, where they could pose a health risk to future workers and residents. The extent of the area that VOCs in soil gas are above the indoor air screening criteria is shown on **Figure IV.D-1**.

Petroleum hydrocarbons in groundwater have been identified at and downgradient of the closed-in-place USTs, with the highest concentrations in a downgradient well about 75 feet northwest of the USTs. Benzene and toluene, both VOCs associated with gasoline, were detected in groundwater above drinking water standards from the well with the highest petroleum concentrations. The extent of groundwater containing VOCs above drinking water standards is shown on **Figure IV.D-1**.



Contaminant Plumes[1]

Soil Gas

Groundwater

[1] Area where benzene and other volatile, organic compounds, exceed screening levels. Contaminants in shallow fill (including lead, arsenic, nickel, and asbestos) are present throughout the site.

FIGURE IV.D-1

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SOURCE: IRIS ENVIRONMENTAL, 2014.

1601 Mariposa Street Mixed Use Project EIR
Soil Gas and Groundwater
Contamination Plumes

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Shallow soil contamination was presumed due to current and historical bus and truck maintenance at the project site, while areas of soil gas, groundwater, and deeper soil contamination was consistent with information from previous investigation regarding the closed-in-place USTs. In general, concentrations of petroleum-related contaminants in groundwater have been stable or decreasing since the Phase II investigations conducted between 1994 and 1997.[7]

Metals. Arsenic was identified at levels above risk screening levels at 31 locations, lead was identified above screening levels at 19 locations, and nickel was identified above screening levels at 14 locations. One grab groundwater sample was analyzed for metals; the groundwater exceeded drinking water standards for arsenic, barium, total chromium, lead, and nickel (see **Table IV.D-1**). The arsenic concentrations were determined to be consistent with naturally-occurring levels of arsenic in the Bay Area. As the elevated lead and nickel concentrations in soil were distributed across the project site, with no obvious source area, and there were no identified historical land uses associated with metals contamination, the metals are presumed to be associated with fill of unknown origin placed at the project site during the original site development.

Asbestos. Asbestos fibers were detected above the laboratory quantitation limit of 1 percent in one of the six soil samples submitted for asbestos analysis. As serpentinite has been identified in site soils during subsurface investigations, it is presumed that the asbestos reflects naturally-occurring asbestos in fill of unknown origin placed at the project site during its original development.

Response Plan

A Response Plan was prepared to address the contaminants and exposure pathways determined to be of potential concern at the project site. The Response Plan is available for review at the Planning Department as part of Case File No. 2012.1398E and is evaluated in this section.

[7] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

The objective of the response action is to minimize or eliminate exposures of construction workers, site residents and adjacent members of the public to chemicals present in site soils, soil gas, and groundwater. Three Response Plan alternatives were evaluated: (1) no action; (2) soil excavation and groundwater treatment; and (3) limited soil excavation, vapor intrusion mitigation systems, soil cover, and institutional controls. The evaluation criteria included effectiveness, ability to implement, and cost.

The no action alternative, although the lowest cost, was judged to be ineffective; it did not meet the objective of protecting human health. Alternatives (2) and (3) were judged to meet this objective, but with significant differences in the ability to implement and cost.

Alternative (2) would include excavation of all soils at the project site to a depth of nine feet, totaling 49,000 cubic yards (approximately 74,000 tons), and replacement of that soil with clean backfill. This would require numerous truck trips and could result in significant dust emissions over an extended period of time. Prior to this excavation and soil removal action, a groundwater treatment system would be installed and operated to reduce contaminants from the closed-in-place USTs to below drinking water standards. The effectiveness of groundwater treatment systems varies greatly from site to site, but the Revised Draft Response Plan estimates the treatment system would require months to years to achieve remedial goals at the project site.[8] This could cause Alternative (2) to take several years to complete, as the groundwater remediation should be completed prior to the start of the soil excavation and backfill to avoid contamination of the new clean backfill. This alternative was judged to have the greatest impact on nearby residents and businesses due to the duration of soil handling activities, greater potential for dust emissions, and large number of truck trips to haul soil to and from the site. This alternative was also judged to have a high cost and low ability to

[8] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

implement, due to length of time required for groundwater remediation prior to soil excavation and soil removal.

Alternative (3) would include excavation and removal of the closed-in-place USTs and surrounding soils, totaling 730 cubic yards (approximately 1,100 tons) and replacement of that soil with clean backfill, the placement of oxygen-releasing compound (ORC) into the excavation to accelerate natural bioremediation of residual petroleum contamination, the installation and operation of a vapor intrusion mitigation system (VIMS) to prevent soil gases from entering building indoor air, and the establishment of institutional controls, including the prohibition of groundwater extraction and use. This alternative was judged to have a moderate cost, to have a lower volume of soil affected and a reduced number truck trips to transport it, and have a high ability to implement, as the limited soil excavation would require only a few days and no groundwater treatment would be required. This alternative was selected as the preferred and recommended response action alternative for the site.[9]

The Response Plan provides information regarding the preferred and recommended response action, or Alternative (3). More detailed information will be provided in two Remedial Design and Implementation Plans (RDIP) which will be reviewed and approved by DTSC prior to implementation of the response action. One RDIP will be prepared for the soil excavation and tank removal component (excavation RDIP) and one RDIP will be prepared for non-excavation components, including the VIMS and site cover (VIMS RDIP).

Public comments would be considered by DTSC prior to deciding whether to approve the Final Response Plan.

[9] Iris Environmental, *Revised Draft Response Plan, 1601 and 1677 Mariposa Street, 485-497 Carolina Street, San Francisco, California*, March 14, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

Current Regulatory Status

The project sponsor, as a prospective purchaser, entered into a Voluntary Cleanup Agreement (VCA) with DTSC on August 10, 2012 for the 1601 Mariposa Street property. The VCA was amended on March 25, 2013 to expand the site to the adjacent 1677 Mariposa Street and 485-497 Carolina Street properties. On June 7, 2014, the project applicant prepared a California Land Reuse and Revitalization Act (CLRRA) application with DTSC to provide oversight for remedial activities at the project site.

The first step of the CLRRA process is to prepare a Draft Response Plan. The Draft Response Plan has been prepared and approved by DTSC. In accordance with DTSC requirements, the Response Plan includes a public participation process to ensure full participation of the affected community. As part of this process a Community Survey was mailed to members of the community on March 19, 2014. The Public Participation Plan includes the notification of appropriate governmental entities and local agencies, the placement of notices in a local newspaper, and posting notification of the 30-day public comment period for the Response Plan at the project site. To proceed with the project, DTSC must approve the Final Response Plan after consideration of the public comments and any revisions made to the Draft Response Plan in response to those comments.

After approval of the Final Response Plan, each step of the remedial process requires approval and oversight by DTSC. The following steps and timelines would take place after approval of the Final Response Plan for the proposed project:

- Submittal of Excavation RDIP to DTSC (July 2015)
- Approval of Excavation RDIP by DTSC (August 2015)
- Implementation of limited soil excavation (September 2015)
- Submittal of Response Action Completion Report (October 2015)
- Submittal of VIMS and site cover RDIP to DTSC (September 2015)
- Submittal of Operations and Maintenance Plan and Agreement to DTSC (September 2015)
- Submittal of Land Use Covenant to DTSC (September 2015)

- Implementation of soil cover and vapor barriers (October 2015-July 2017)
- Submittal of VIMS Response Action Completion Report (August 2017)
- DTSC Approval of Report and No Further Action Determination (September 2017)

On January 21, 2014, the project applicant submitted a Maher Ordinance application to the SFDPH,[10] in compliance with Article 22A of the San Francisco Public Health Code. Additional information regarding the Maher Ordinance is contained in the Regulatory Framework subsection, below.

Sensitive Receptors

Some populations, such as children, the elderly, and the infirm, are more susceptible to health effects of hazardous materials than the general population. Hazardous materials use near residences, schools, day care centers, senior housing, residences, and hospitals must consider potential health effects to these populations, often referred to as "sensitive receptors." Construction or redevelopment on contaminated properties that could potentially generate vapors or fugitive dust containing contaminants may potentially pose a health risk to these populations.

The project site is located adjacent to Live Oak School and Jackson Playground and less than 500 feet from other sensitive receptors, including the International Studies Academy to the south, across 18th Street, and residences to the east and south, along Arkansas Street and 18th Street.

Regulatory Framework

The use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater, is regulated by numerous local, State, and federal laws and regulations. The U.S. Environmental Protection Agency (USEPA) is the federal agency that administers hazardous materials and hazardous waste regulations. State and local agencies include the California EPA (Cal/EPA), the

[10] Iris Environmental, *Maher Ordinance Application, 1601 Mariposa Street, 1677 Mariposa Street, and 485-497 Carolina Street, San Francisco, California*, January 21, 2014.

California Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (State Water Board), the California Air Resources Board (CARB), the San Francisco Bay Regional Water Quality Control Board (Regional Water Board), the Bay Area Air Quality Management District (BAAQMD), SFDPH, and SFFD. A brief description of each federal, State, and regional/local agency's jurisdiction and involvement in the management of hazardous materials and wastes is provided below.

Federal

The USEPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). The legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA), the Superfund Amendments and Reauthorization Acts of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The USEPA provides oversight for site investigation and remediation projects, and has developed protocols for sampling, testing, and evaluation of solid wastes.[11]

State

Three State agencies, described below, regulate hazardous materials and waste that may occur on or around the project site.

Department of Toxic Substances Control. In California, DTSC is authorized by the USEPA to enforce and implement federal hazardous materials laws and regulations. California regulations pertaining to hazardous materials are equal to or exceed the federal regulation requirements. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR). DTSC

[11] U.S. Environmental Protection Agency, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846,* February 28, 2014. Available online at www.epa.gov/epaoswer/hazwaste/test/main.htm.

generally acts as the lead agency for soil and groundwater cleanup projects that affect public health, and establishes cleanup levels for subsurface contamination that are equal to, or more restrictive than, federal levels. DTSC administers a number of programs designed to aid prospective developers by streamlining the investigation and remediation of former industrial sites (known as "brownfields") such as the California's Land Reuse and Revitalization Act of 2004 (AB 389). DTSC is authorized to enter into CLRRA agreements and oversee related remedial actions under California Health and Safety Code Sections 25395.9-25395.109.

State Water Resources Control Board. The State Water Board enforces, among other regulations, those regulations pertaining to implementation of UST programs. It also allocates monies to eligible parties who request reimbursement of State funds to clean up soil and groundwater pollution from UST leaks. The State Water Board also enforces the Porter-Cologne Water Quality Act of 1969 through its nine regional boards, including the Regional Water Board, described below.

California Air Resources Board. This agency is responsible for coordination and oversight of State and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. CARB has developed State air quality standards, and is responsible for monitoring air quality in conjunction with the local air districts.

Regional and Local Agencies

The following regional and local agencies have regulatory authority over the proposed project.

San Francisco Bay Regional Water Quality Control Board. The Regional Water Board can act as a responsible agency to provide oversight of sites where the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions. Although the Regional Water Board and DTSC both have the authority to provide oversight, in this case DTSC is the lead responsible agency for site remediation of the proposed project.

Bay Area Air Quality Management District. The BAAQMD has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of USEPA and CARB). BAAQMD is responsible for preparing attainment plans for non-attainment criteria pollutants, control of stationary air pollutant sources, management of VOC-containing soils (District Rule 8-40) and the issuance of permits for activities including asbestos demolition and renovation activities (District Rule 11-2).

San Francisco Department of Public Health. SFDPH is the Certified Unified Program Agency (CUPA) for San Francisco and enforces State and local regulations pertaining to hazardous waste generators and risk management prevention programs. SFDPH issues permits for USTs, and oversees UST removals. In addition, the SFDPH Local Oversight Program (LOP) may act as lead agency to ensure proper remediation of leaking underground tank sites and other contaminated sites. The SFDPH Site Assessment and Mitigation Program administers the Maher Ordinance Program, in compliance with Article 22A of the Health Code. The Maher Ordinance Program covers sites with current or historical industrial uses, within 100 feet of current or historical USTs or filled former Bay or creek areas, and areas within 150 feet of a current or former elevated highway. The project site is located within the Expanded Maher Area[12] and the site is enrolled in the Maher Program.

San Francisco Fire Department. The San Francisco Fire Department (SFFD) provides inspectors for UST closures, inspects hazardous materials storage areas for compliance with the Fire and Building Codes, and provides first response capabilities, if needed, for hazardous materials emergencies in San Francisco.

San Francisco General Plan, Community Safety Element. The following policies of the Community Safety Element would apply to the project:

[12] City and County of San Francisco Planning Department, *Expanded Maher Area Map*, February 2014. Available online at www.sf-planning.org/ftp/files/publications_reports/library_of_cartography/Maher%20Map.pdf (accessed September 10, 2014). This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

- Policy 2.12: Enforce State and local codes that regulate the use, storage and transportation of hazardous materials in order to prevent, contain and effectively respond to accidental releases.
- Policy 3.4: Maintain a comprehensive, current Emergency Operations Plan, in compliance with applicable State and federal regulations, to guide the response to disasters. Conduct periodic exercises of the EOP.
- Policy 3.7: Establish a system of emergency access routes for both emergency operations and evacuation.

Impacts and Mitigation Measures

This section analyzes impacts related to hazards and hazardous materials that could result from implementation of the proposed project. The section begins with the criteria of significance, which establishes the threshold for determining whether an impact is significant. The latter part of the section presents the hazards and hazardous materials impacts that could result from development of the proposed project. Mitigation measures are identified to avoid, minimize or mitigate such impacts.

Significance Criteria

The proposed project would result in a significant impact related to hazards/hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving fires;

Approach to Analysis

The *Eastern Neighborhoods FEIR* determined that there is a high potential to encounter hazardous materials during construction activities in many parts of the Plan area because of the presence of 1906 earthquake fill, previous and current land uses associated with the use of hazardous materials, and known or suspected hazardous materials cleanup cases. The *Eastern Neighborhoods FEIR* found that existing regulations for facility closure, UST closure, and investigation and cleanup of soil and groundwater would ensure implementation of measures to protect workers and the community from exposure to hazardous materials during construction.

The *Eastern Neighborhoods FEIR* determined that future development in the Plan area may involve demolition or renovation of existing structures containing hazardous building materials. Some building materials commonly used in older buildings could present a public health risk if disturbed during an accident or during demolition or renovation of an existing building. Hazardous building materials addressed in the *FEIR* include asbestos, electrical equipment such as transformers and fluorescent light ballasts that contain PCBs or di (2 ethylhexyl) phthalate (DEHP), fluorescent lights containing mercury vapors, and lead-based paints. Asbestos and lead based paint may also present a

health risk to existing building occupants if they are in a deteriorated condition. If removed during demolition of a building, these materials would also require special disposal procedures. The *Eastern Neighborhoods FEIR* identified a significant impact associated with hazardous building materials including polychlorinated biphenyls (PCBs), DEHP, and mercury and determined that Mitigation Measure L-1: Hazardous Building Materials, which is incorporated as Mitigation Measure HZ-2b in this document (see below, under Impact HZ-2), would reduce effects to a less-than-significant level.

The *Eastern Neighborhoods FEIR* determined that with mitigation, impacts related to hazards and hazardous materials would be less than significant; however, site-specific analyses were not completed as part of that program-level EIR. The *FEIR* determined that site-specific analyses, beginning with Phase I investigations and subsequent investigations as necessary, along with implementation of any recommended remediation measures, would ensure that hazardous materials impacts associated with individual projects would be fully addressed and mitigated to the extent feasible.

Impact Evaluation

This section discusses the hazards/hazardous materials impacts associated with implementation of the proposed project.

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 involves a mixed-use development that includes multi-family residences, retail/commercial spaces, and associated residential amenities. These types of land uses typically do not involve transport, use, or disposal of significant quantities of hazardous materials. Generally, small quantities of hazardous materials, such as paints, cleaning chemicals, and fertilizers, would be used for routine maintenance and landscaping. Existing hazardous materials programs overseen by SFDPH would apply to any significant transport, use, or disposal of hazardous materials. These

existing programs would ensure protection of human health and the environment during project operations.

During the excavation and project construction, hazardous materials associated with typical construction activities such as fuel, lubricants, paint, sealants, and adhesives would be transported and used at the project site. As the project site is greater than one acre in area, management of these materials at the project site during construction would be subject to the requirements of the Construction General Stormwater Permit (CGP) in accordance with the National Pollutant Discharge Elimination System (NPDES). Compliance with the CGP would require preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) designed to reduce the risk of spills or leaks from the reaching the environment. The SWPPP would also include a Spill Response Plan to address minor spills of hazardous materials. The SWPPP program in San Francisco is implemented and enforced through the Department of Public Works permitting process.

The excavation area for the remedial action is less than one acre in area and would therefore not be subject to the CGP. However, similar requirements for hazardous materials management and contingency plans would be required for the excavation RDIP, which would be reviewed and approved by DTSC prior to the remedial action.

Compliance with applicable regulations would ensure that potential significant hazards associated with routine transport, use, or disposal of hazardous materials during and after construction would be less than significant. No mitigation measures are required.

Impact HZ-2a: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during demolition of existing site buildings. (Less than Significant with Mitigation)

Development of the proposed project would involve three stages: the demolition of existing buildings, implementation of the excavation RDIP, and construction of the proposed buildings (which includes implementation of the VIMS RDIP). During the demolition of existing buildings phase, lead, asbestos, and other hazardous materials could be released. The existing one-story warehouse and office building at 1601 Mariposa Street and the one-story commercial building at 485-497 Carolina Street on the project site were built prior to 1980, and therefore may contain lead-based-paint, asbestos-containing materials, and/or other hazardous materials. Although these hazardous materials do not pose a significant threat to public health or the environment in their intact condition, demolition has the potential to break up and release these materials to the air, where they can pose a potential hazard, which would be a potentially significant impact.

Any construction that could disturb lead-based paint is subject to requirements in Section 3407 of the San Francisco Building Code, which requires notification and work standards, and prohibits work methods that do not properly capture and dispose of lead-based paint dust. These requirements apply to all buildings constructed prior to 1979, including those at the project site.

Any construction that could disturb asbestos is subject to BAAQMD Rule 11-2, Asbestos Demolition, Renovation, and Manufacturing. Section 303.8 of the rule requires a survey of structures for asbestos-containing materials prior to demolition or renovation activities. Section 401 requires BAAQMD notification 10 days prior to demolition where a significant quantity of asbestos may be removed. All abatement is subject to State regulations in Title 8 California Code of Regulations, Sections 341.6-341.14 and 1529.

Mitigation Measure L-1 of the *Eastern Neighborhoods FEIR*, which applies to the project, requires that project sponsors ensure that equipment containing PCBs and other hazardous materials, such as fluorescent light ballasts and tubes, are removed and properly disposed of. In addition to requirements in Mitigation Measure L-1 (included in this document as Mitigation Measure HZ-2a, below), any building materials containing hazardous materials are subject to State and federal laws and regulations requiring safe management and disposal of hazardous wastes. Implementation of

Mitigation Measure HZ-2a and compliance with federal, State, and local laws would reduce potential impacts related to releases of hazardous materials during demolition to a less-than-significant level.

> Mitigation Measure M-HZ-2a: *Eastern Neighborhoods FEIR Mitigation Measure L-1*. The City shall condition future development approvals to require that the subsequent project sponsors ensure that any equipment containing PCBs or DEPH, such as fluorescent light ballasts, are removed and properly disposed of according to applicable federal, State, and local laws prior to the start of renovation, and that any fluorescent light tubes, which could contain mercury, are similarly removed and properly disposed of. Any other hazardous materials identified, either before or during work, shall be abated according to applicable federal, State, and local laws.

Impact HZ-2b: The proposed project could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during remedial excavation activities. (Less than Significant with Mitigation)

After building demolition takes place, the remedial excavation action of hazardous materials would occur, resulting in the removal of three slurry-filled USTs, approximately 730 cubic yards of petroleum-affected soils surrounding the USTs, and the placement of ORC and clean fill in the excavation. The Revised Draft Response Plan anticipates that the soil excavation and UST removal activities would take two to three days to complete and backfill would be completed within one day. After excavation, contaminated soils would be temporarily stockpiled on-site in accordance with BAAQMD Rule 8-40, which requires covering the excavated soils to prevent volatile chemical emissions. After soil profiling and landfill acceptance, two additional days would be required to load the excavated soil on to trucks and for final site cleanup. These activities could pose a health risk to construction workers, who could come into direct contact with contaminated soils and groundwater during this time, as well as the nearby sensitive receptors, who could be affected by contaminants in fugitive dust from the remedial excavation area or stockpiled soils. This would be a potentially significant impact of the proposed project.

The Response Plan specifies a number of measures that would be undertaken during remediation and construction activities to protect nearby sensitive receptors, including air quality monitoring, dust emission controls, and development of contingency plans. Additional details will be provided in the VIMS RDIPs for the project that will be prepared under DTSC oversight, as well as a description of these activities below.

The soil excavation and tank removal component of the Response Plan would be subject to requirements of the grading permit, and the SFDPH UST Closure Application permit. The UST removals would be subject to SFFD oversight. The UST location and adjoining excavation and staging areas are anticipated to cover approximately 0.5 acre of the project site (**Figure IV.D-2**), and excavation activities are anticipated to take approximately two days. Soil excavation activities would be subject to the requirements of BAAQMD Rule 8-40 for VOC-contaminated soils and are required to be profiled to ensure that soils are disposed of in accordance with hazardous waste laws and regulations.

The Response Plan specifies a number of measures to minimize hazardous materials exposures to workers and the nearby public during the soil excavation and tank removal component of the response action. A site-specific Health and Safety Plan would be prepared to identify potential health and safety hazards and would identify appropriate personal protective equipment, monitoring procedures, and response actions. A number of dust emission controls would be implemented during excavation, including limiting construction vehicle speed, wetting excavation areas and soil stockpiles, and washing down vehicles before exiting the construction area. These measures would incorporate the requirements of a Site-Specific Dust Control Plan for all projects exceeding half an acre in size and that are within 1,000 feet of a sensitive receptor, regardless of potential hazardous materials concerns. In addition, the Response Plan adds perimeter air monitoring to detect potential emission of hazardous materials that could affect Live Oak School or other sensitive receptors near the site.

The goal of these emission controls would be to prevent any visible emissions of dust from crossing the property line, where they could potentially affect nearby members of the public. Air monitoring would be performed on the perimeter of the work areas, including monitoring near Live Oak School, immediately northeast of the site. Prevailing wind conditions place the school at a location that is cross-wind to the remedial excavation, but monitoring would be designed to protect the school in the event that wind patterns are different during excavation. In accordance with DTSC requirements, a contingency plan would be in place to provide procedures in the event that previously undetected hazardous materials with the potential to affect human health and safety or the environment are encountered during the response action or subsequent development activities.

Implementation of Mitigation Measure HZ-2b, below, and other existing regulations and laws would reduce potential impacts related to releases of hazardous materials during the remedial excavation action to a less-than-significant level.

> Mitigation Measure M-HZ-2b: Prior to issuance of grading permits for the remedial action for the project site, the project sponsor shall submit an excavation Remedial Design and Implementation Plan (RDIP) to the San Francisco Department of Building Inspection (DBI), San Francisco Department of Public Health (SFDPH), and the Department of Toxic Substances Control (DTSC), that includes a site-specific health and safety plan, emissions control plan, soil management plan, and an air monitoring plan protective of construction workers, the nearby public, and the environment. In accordance with California Health and Safety Code 25395.96(a)(4), this plan must include a description of measures that will be implemented "to control any endangerment that may occur during the response action at the site."

Additional construction requirements related to the Asbestos Air Toxics Control Measure (ATCM) that would apply to the project are described under Impact HZ-2d, below.

Impact HZ-2c: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction. (Less than Significant with Mitigation)

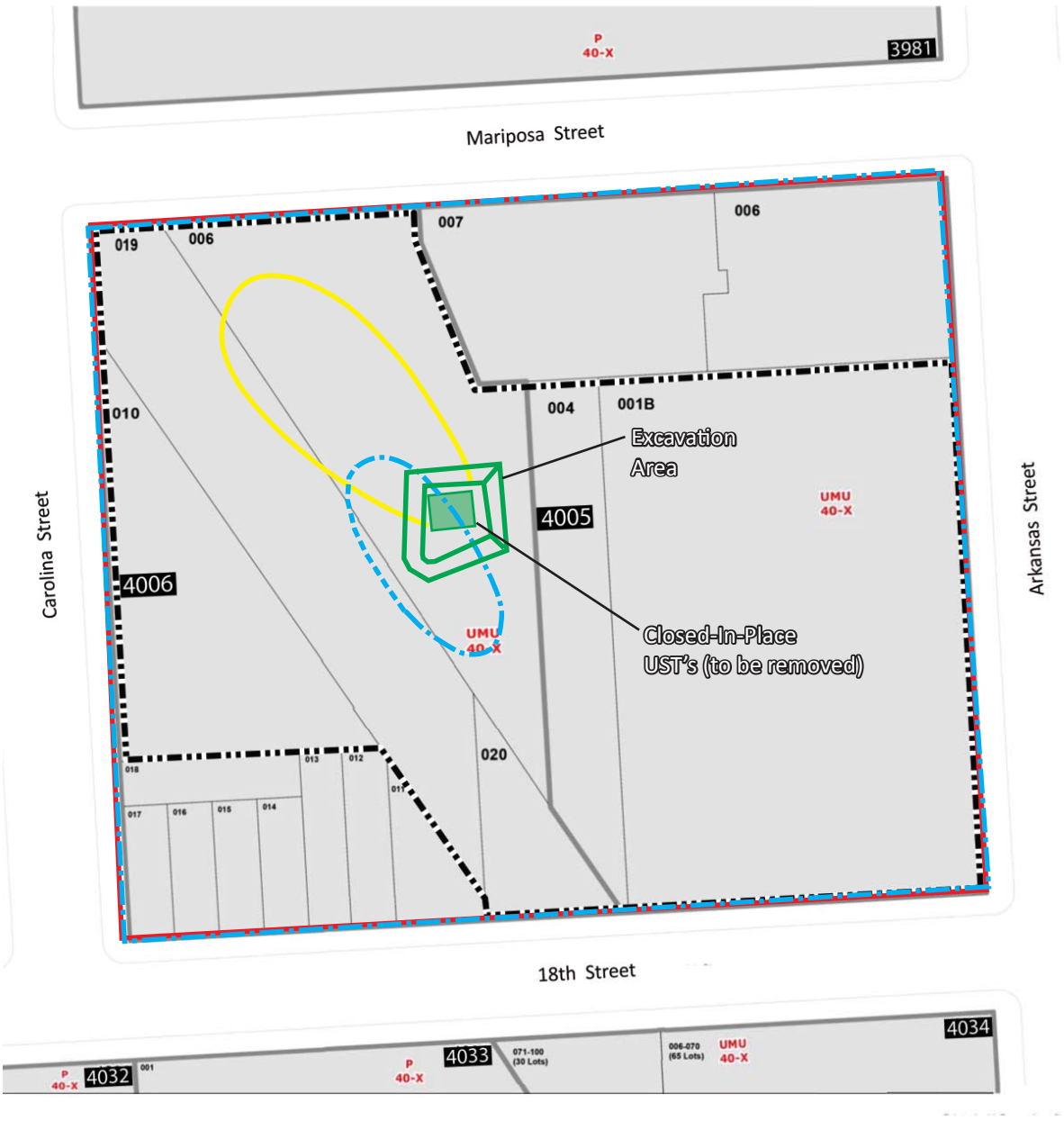

FIGURE IV.D-2

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SOURCES: DAVID BAKER ARCHITECTS; RELATED; IRIS ENVIRONMENTAL, 2014.

1601 Mariposa Street Mixed Use Project EIR
Proposed Excavation and Soil Removal
Remedial Response Plan Locations

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Construction of the proposed project would take place after the completion of remedial action activity including closed-in-place USTs and surrounding petroleum-affected soils have been removed and clean back-fill put back in place. However, soils and groundwater containing petroleum compounds, VOCs, metals, and naturally-occurring asbestos would remain at the site during construction. These hazardous materials could pose a health risk to construction workers, who would potentially come into direct contact with these materials, and nearby sensitive receptors, who could be affected by contaminants in fugitive dust.

The VIMS RDIP, which would be prepared and approved by DTSC prior to the removal action activities, would be implemented during project construction. It would address hazardous materials risks from the site potentially remaining after the UST removal and soil excavation and would include a site-specific health and safety plan, emissions control plan, soil management plan, and an air monitoring plan to address these potential impacts. In contrast to the excavation RDIP, which removes contaminated materials from the project site, the VIMS RDIP does not involve removal or treatment of contamination. The VIMS RDIP protects human health through engineering and institutional controls to prevent human exposure to contaminants in soils, groundwater, and soil vapor remaining at the site after the excavation RDIP is completed.

Implementation of the VIMS RDIP through Mitigation Measure HZ-2c, below, would reduce potential impacts related to releases of hazardous materials during project construction to a less-than-significant level.

> Mitigation Measure M-HZ-2c: Prior to issuance of grading or building permits for construction of project site improvements, the project sponsor shall provide a VIMS RDIP to the DBI and SFDPH, reviewed and approved by DTSC, that includes a site-specific health and safety plan, emissions control plan, soil management plan, and an air monitoring plan protective of construction workers, the nearby public, and the environment. In accordance with California Health and Safety Code Section 25395.96(a)(4), this plan must include a description of measures that will be implemented "to control any endangerment that may occur during the response action at the site."

Impact HZ-2d: The proposed project would not create a significant hazard to the public or the environment through the release of asbestos during earthmoving activities. (Less than Significant)

During implementation of the excavation RDIP and construction at the project site, remedial and construction workers may come into contact with naturally-occurring asbestos in the soil. As serpentinite has been identified in site soils during subsurface investigations, it is presumed that the soils contain naturally-occurring asbestos (NOA) in fill of unknown origin were placed at the project site during its original development. Of the six soil samples analyzed for asbestos, one contained asbestos fibers above the laboratory reporting limit of one percent.

In the absence of proper controls, NOA could become airborne during excavation and handling of excavated materials. This condition could occur during the one to two weeks required for completion of the excavation RDIP as well as during the estimated 22 months required for project construction and implementation of the VIMS RDIP. On-site workers and the public could be exposed to airborne asbestos unless appropriate control measures are implemented. Exposure to asbestos can result in health ailments such as lung cancer, mesothelioma (cancer of the lungs and abdomen), and asbestosis (scarring of lung tissues that results in constricted breathing). The risk of disease depends upon the intensity and duration of exposure; health risk from NOA exposure is proportional to the cumulative inhaled dose (quantity of fibers) and increases with the time since first exposure. A number of factors influence the disease-causing potency of any given asbestos (such as fiber length and width, fiber type, and fiber chemistry); however, all forms are carcinogens. Although the California Air Resources Board (ARB) has not identified a safe exposure level for asbestos in residential areas, exposure to low levels of asbestos for short periods of time poses minimal risk.

To address health concerns from exposure to NOA, ARB enacted an Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations in July 2001, which became effective for projects located within the San Francisco Bay Area Air Basin (SFBAAB) on November 19, 2002. The requirements established by the Asbestos ATCM are contained in California Code of Regulations (CCR) Title 17, Section 93105, and are enforced by the BAAQMD.

The Asbestos ATCM requires construction activities in areas where NOA is likely to be found to employ best available dust control measures. Before the start of construction activities the project sponsor would be required to submit the necessary documentation to BAAQMD to ensure compliance with the Asbestos ATCM. The Asbestos ATCM would require the project sponsor to prepare and obtain BAAQMD approval of an asbestos dust mitigation plan. The Planning Department sent a notification letter informing the BAAQMD of proposed construction activities and the required asbestos mitigation plan on November 19, 2014.[13] The project sponsor would be required to ensure that construction contractors comply with the Asbestos ATCM requirements to prevent airborne (fugitive) dust containing asbestos from migrating beyond property boundaries during excavation and handling of excavated materials. The measures implemented as part of asbestos dust mitigation plan would protect workers and the public and would include, but are not limited to, the following requirements:

- Construction vehicle speed at the work site must be limited to 15 miles per hour or less;
- Prior to any ground disturbance, sufficient water must be applied to the area disturbed to prevent visible emissions from crossing the property line;
- Areas to be graded or excavated must be kept adequately wetted to prevent visible emissions from crossing the property line;
- Storage piles must be kept adequately wetted, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile;
- Equipment must be washed down before moving from the property onto a paved public road; and
- Visible track-out on the paved public road must be cleaned using wet sweep or a HEPA filter equipped vacuum device within twenty-four (24) hours.

[13] San Francisco Planning Department, *Notice of Compliance with CCR, Title 17, Section 93105, 1601 Mariposa Street Mixed-Use Project, Case No. 2012.1398E*, November 19, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

In addition, the BAAQMD may require the project sponsor or a qualified third party consultant to conduct air monitoring for off-site and on-site migration of asbestos dust during construction activities and to modify the dust mitigation plan on the basis of the air monitoring results if necessary.

Furthermore, the proposed project would be required to prepare a dust control plan in compliance with Article 22B, Construction Dust Control Ordinance, of the San Francisco Health Code, as described on pages 52 through 55 of the CPE Checklist in Section 7, Air Quality. The measures required pursuant to the Dust Control Plan would also control fugitive dust that may contain asbestos. Dust suppression activities required by the Construction Dust Control Ordinance include: watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible. Contractors shall provide as much water as necessary to control dust (without creating run-off in any area of land clearing, and/or earth movement). 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 of excavated materials, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 mil (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques.

Compliance with the California Code of Regulations, Title 17, Section 93105 and Article 22B would ensure that the proposed project does not result in a significant hazard to the public or environment from exposure to NOA and the proposed project would result in a less than significant impact.

Impact HZ-2e: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation. (Less than Significant with Mitigation)

Following the remedial excavation action and construction, there would be little potential for human contact with original site soils. The entire project site would be covered with buildings, pavement, or landscaped areas containing a barrier and two feet of clean fill. Therefore, no potential risks from site soils would be anticipated during the operational phase of the project. Data from project site investigations indicate that contaminants in soil gases would not have the potential to significantly affect outdoor air quality at or near the project site. However, some buildings that would be constructed over the area of highest concentrations of soil gas (as shown in **Figure IV.D-3**) could result in contaminants in indoor air above risk-based screening levels. In addition, an area of groundwater at the project site contains contaminants in excess of drinking water standards (**Figure IV.D-3**). Use of that groundwater could pose a health risk to future residents. This would be a potentially significant impact of the proposed project.

The following actions for operation of the proposed project would be taken under the VIMS RDIP:

- Install VIMS system. The VIMS system installed under the VIMS RDIP would consist of a sub-slab depressurization/venting system and a sub-slab vapor membrane barrier for buildings near the center of the project site (see **Figure IV.D-3**). The depressurization and venting system would direct the potentially contaminated soil gases beneath the building foundations to the outside air, and the vapor barrier would serve as a physical barrier to the soil gases. This barrier would prevent the soil gases from collecting and concentrating in indoor air, and potentially reaching hazardous concentrations. In outdoor air, the concentrations of contaminants in soil gas at the project site would be immediately diluted by the atmosphere and would not have the potential to concentrate to potentially harmful levels. Therefore, no potential health risks to nearby receptors would result from the venting of the soil gases to outdoor air.

  The VIMS system would be implemented in buildings at the project site that are located within 100 feet of the soil gas plume and do not have ground-level parking (**Figure IV.D-3**). Ground-level parking would disrupt the vapor intrusion pathway and residents above ground-level parking would not be affected by soil vapor migrating to indoor air. The

effectiveness of the VIMS system would be evaluated as part of an Operation and Maintenance Plan which would be developed under DTSC oversight.

- Soil Cover. Following project construction, the entire project site would be covered with buildings, pavement, and landscaping, which would prevent physical contact with site soils. In landscaped areas, a marker fabric and at least two feet of clean fill would be placed on top of site soils.
- Institutional Controls.The site cover would be inspected and maintained as part of the site Operation and Maintenance Plan. A Land Use Covenant would be recorded for the project site, prohibiting the extraction and use of site groundwater.

Implementation of the VIMS RDIP and other documents required by DTSC would address these potential impacts. Installation of the VIMS in areas within 100 feet of the soil gas plume (**Figure IV.D-3**) would prevent contaminants from migrating from soil gas to indoor air. A Covenant to Restrict Use of Property, which would prohibit groundwater extraction and use, would prevent human exposure to contaminated groundwater. The required Operations and Maintenance Plan would ensure that the VIMS is maintained throughout the life of the project development and that the site is regularly inspected to ensure that the soil cover is intact and no groundwater wells have been installed.

Implementation of Mitigation Measure HZ-2e, below, would reduce potential impacts related to releases of hazardous materials during project operations to a less-than-significant level.

Mitigation Measure M-HZ-2e: Prior to issuance of a certificate of occupancy for the project site buildings, the project sponsor shall provide a Response Plan Certification for the project site, a Covenant to Restrict Use of Property prohibiting groundwater extraction and use, an Operations and Maintenance Agreement, and an Operations and Maintenance Plan. All documents require approval by DTSC prior to submittal to the DBI and SFDPH.

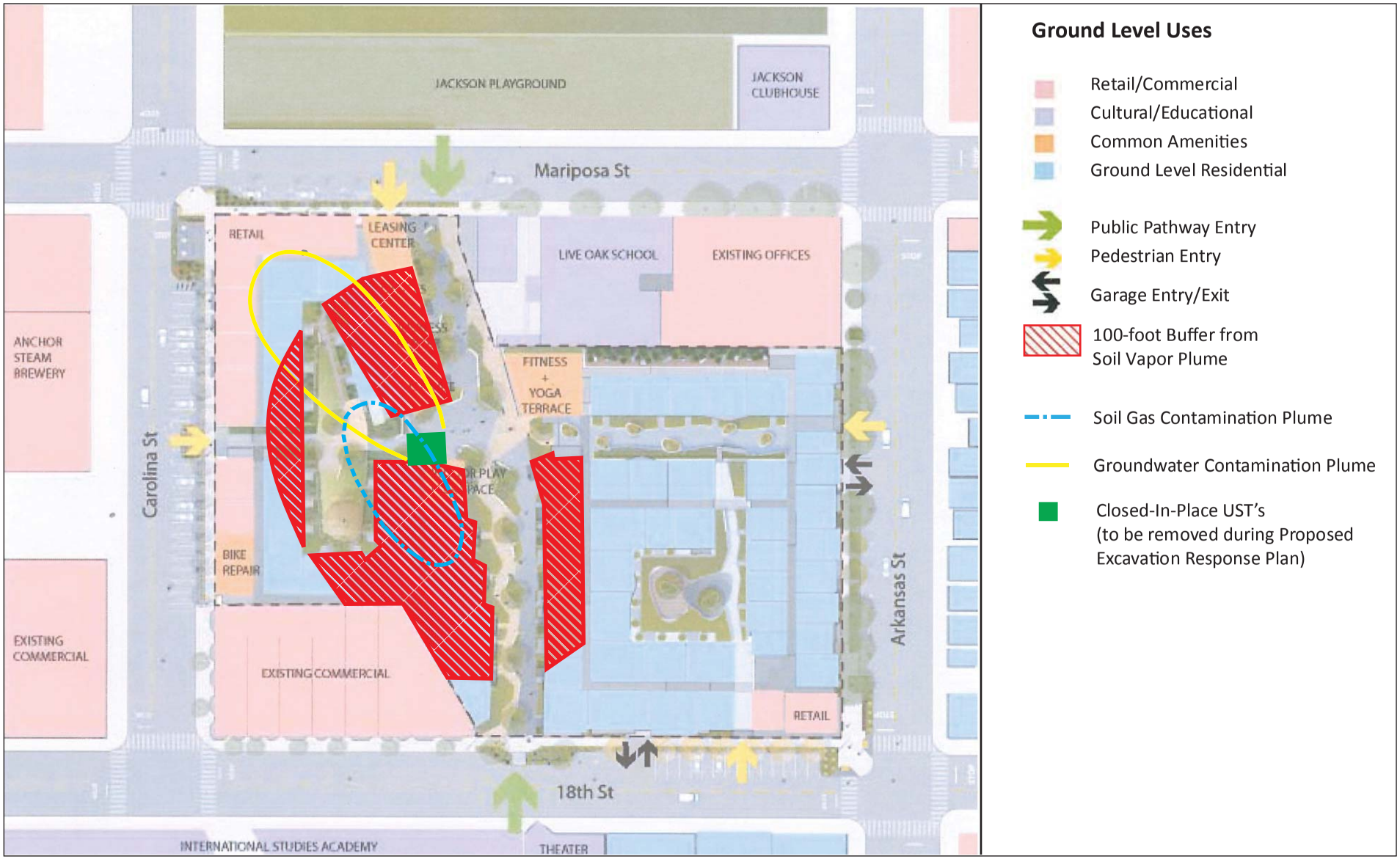

FIGURE IV.D-3

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SOURCES: DAVID BAKER ARCHITECTS; RELATED, DECEMBER 2013.

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Impact HZ-3: The project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant with Mitigation)

The project site is located adjacent to Live Oak School and within one-quarter mile of other schools and locations where school children would be expected, including the International Studies Academy and Jackson Playground. Should hazardous material be released to the air, which could occur if fugitive dust were emitted during the remedial excavation action, children attending these schools could be affected, which would be a potentially significant impact of the proposed project. Schools are a particular concern because children and other populations such as the elderly and the infirm are often more susceptible to health effects of hazardous materials than the general population. Hazardous materials emissions near schools, day care centers, senior housing, and hospitals must consider potential health effects to these populations, often referred to as "sensitive receptors."

Implementation of Mitigation Measures HZ-2a, HZ-2b, and HZ-2c would require emissions controls and air monitoring to prevent potential impacts to nearby sensitive receptors during development of the project. The area of highest soil gas contaminant concentrations on the project site is located more than 100 feet from Live Oak School or other sensitive receptors, with implementation of Mitigation Measures HZ-2a, HZ-2b, HZ-2c, and HZ-2d, the proposed project would result in a less than significant impact to the school from soil gases or other emissions of contaminants during remedial activities, construction, or following development of the project . No additional mitigation is required.

Impact HZ-4: The proposed project would not create a significant hazard to the public or the environment due to the site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. (Less than Significant)

The 1601 Mariposa Street site address is listed on the DTSC Envirostor system,[14] which is one of the lists compiled pursuant to Government Code Section 65962.5. The address is listed due to the Voluntary Cleanup Agreement between DTSC and the project sponsor. DTSC's active oversight of the investigation and remediation of the project site does not create a significant hazard to the public or environment. As described under Impacts HZ-2b through 2e, existing DTSC, City, and other requirements for site remediation are designed to prevent hazardous conditions from occurring. Therefore, this impact is less than significant and no mitigation is required.

Impact HZ-5: The proposed project would not result in a safety hazard for people residing or working in the project area because it is not located within an airport land use plan or within two miles of a public airport or public use airport. (No Impact)

The project site is located approximately 8.75 miles north of the nearest public use airport, San Francisco International Airport (SFIA). The project site is not located in a mapped safety compatibility zone for SFIA.[15] Therefore no impacts related to airport operations would be anticipated and no mitigation is required.

Impact HZ-6: The project would not result in a safety hazard for people residing or working in the project area because it is not located within the vicinity of a private airstrip. (No Impact)

No private airstrips are located in the project vicinity. Therefore no impacts related to airstrip operations would be anticipated and no mitigation is required.

[14] Department of Toxic Substance Control, Envirostor hazardous materials database, 2014. Website: www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60001763 (accessed April 14, 2014).

[15] Airport Land Use Commission for San Mateo County, *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. October 2012.

Impact HZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

Although the project would not result in any direct physical changes to the City street grid or impair vehicular or pedestrian traffic, the development would result in an increased number of residents and employees at the project site, which could result in increased congestion during an emergency evacuation. San Francisco Fire Department Fire Station 29, which provides emergency fire and medical response services to the vicinity, is located at 299 Vermont Street, approximately 0.4 miles northwest of the project site. As noted in the *Eastern Neighborhoods FEIR*, the existing street grid provides ample access for emergency responders and egress for residents and workers, and the project would not directly or indirectly affect this situation to any substantial degree. In addition, the Fire Department reviews building permits for multi-story structures, and in accordance with the San Francisco Building Code and Fire Code, would likely require development of an emergency procedure manual and an exit drill plan. Adherence to these existing requirements would reduce potential impacts to emergency response or evacuation plans to a less-than-significant level.

Impact HZ-8: The project would not expose people or structures to a significant risk of loss, injury or death involving fires. (Less than Significant)

The project would not introduce any new sources of potential fire hazard to the project vicinity, and adjoining areas do not contain wildlands or other open space with potential wildfire hazards. As noted in the *Eastern Neighborhoods FEIR*, San Francisco ensures fire safety primarily through provisions of the San Francisco Building Code and Fire Code. Existing buildings are required to meet standards contained in these codes. The project would be required to meet standards for emergency access, sprinkler and other water systems, and other requirements specified in the San Francisco Fire Code. Plan review for compliance with San Francisco Fire Code requirements, required by the San Francisco Department of Building Inspection (DBI) and the San Francisco Fire Department (SFFD), would ensure these standards were implemented during final project design. Therefore, potential impacts related to fire hazards would be less than significant.

Cumulative Impacts

Cumulative impacts occur when impacts from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. The geographic context for cumulative hazards and hazardous materials impacts is the project site and adjoining areas that could be affected by releases of hazardous material that could migrate across property lines, such as fugitive dust generated during construction activities.

Impact C-HZ-1: The proposed project, in combination with other past, present, or reasonably foreseeable future projects, would not result in a considerable contribution to a significant impact on hazards and hazardous materials. (Less than Significant)

There are no other projects in the vicinity of the proposed project that would combine with the proposed project to create cumulative hazards effects. During project construction, multiple construction activities occurring in the same general location would all be subject to the requirements of Rule 8-40, and the Maher Ordinance and other measures designed to prevent fugitive dust with contaminants from escaping construction sites. Implementation of Mitigation Measures HZ-2b through HZ-2e would further reduce any potential hazards and hazardous materials impacts related to contaminated material during the remedial excavation action and project construction from affecting adjoining areas. Operation of the project would not result in any significant impacts related to hazards and hazardous materials because no use of hazardous materials (beyond minor quantities of maintenance and cleaning compounds) would occur during the operational phase of the project.

There were no impacts identified that would be compounded by additional development because, with the exception of migration of hazardous materials via groundwater or fugitive dust, hazards and hazardous materials impacts are generally limited to the immediate vicinity of the use, storage, disposal, or release of the hazardous materials. Although the development of other projects in San Francisco could result in similar hazardous materials impacts, those impacts would not intensify the potential impacts of the proposed project, and the proposed project would not intensify hazardous materials impacts at other locations in the project vicinity. Therefore, implementation of the proposed

project would not result in a cumulatively considerable contribution to cumulative impacts regarding hazards and hazardous materials, and the cumulative impact would be less than significant.

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V. OTHER CEQA ISSUES

This chapter discusses the following topics in relation to the proposed project: growth inducement; significant environmental effects that cannot be avoided if the proposed project is implemented; significant irreversible environmental changes that would result if the proposed project is implemented; and areas of controversy and issues to be resolved.

GROWTH INDUCEMENT

A project is considered growth inducing if it would directly or indirectly foster substantial economic or population growth, or the construction of substantial amounts of additional housing. Examples of projects likely to result in significant adverse growth inducement include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions in areas that are sparsely developed or undeveloped. The project would be located on an infill site, surrounded on all sides by urban uses, and would not result in the extension of infrastructure into undeveloped areas or the construction of a residential project in an area that is undeveloped or lightly developed. Population growth that would result from the proposed project would be limited to the project site itself and the project would not directly or indirectly induce growth beyond the project site.

In addition, as discussed in Section 3, Population and Housing in the CPE Checklist, page 37 (see Appendix A), the *Eastern Neighborhoods FEIR* found that an increase of approximately 7,400 to 10,000 households, and 14,477 to 20,488 people by the year 2025 would be expected to occur as a secondary effect of implementation of the Eastern Neighborhoods Plan. The *Eastern Neighborhoods FEIR* also determined that the Plan would serve to advance some key City policy objectives including: provision of housing, especially permanently affordable housing; conversion of underutilized industrial lands to housing; and new opportunities for housing near downtown. In addition, the *Eastern Neighborhoods FEIR* found that the Plan would not create a substantial demand for additional

housing in San Francisco. However, the *Eastern Neighborhoods FEIR* determined that the entire Eastern Neighborhoods Plan is itself potentially growth-inducing, in that it would remove barriers to housing and population growth throughout wide areas of the study area and would result in secondary, and cumulative effects due to that growth. These indirect and cumulative effects are fully analyzed in the *Eastern Neighborhoods FEIR*. The proposed project is within the development projected to occur under the Area Plan, and therefore there would be no additional impacts related to growth inducing effects beyond those analyzed in the *FEIR*.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD RESULT IF THE PROPOSED PROJECT IS IMPLEMENTED

In accordance with Sections 15126.2(c) and 15127 of the *CEQA Guidelines*, an EIR must identify any significant irreversible environmental changes that could result from implementation of the proposed project. Such significant irreversible environmental changes may include current or future uses of non-renewable resources, secondary or growth-inducing impacts that commit future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. According to the *CEQA Guidelines*, irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. In general, such irreversible commitments include the uses of resources such as energy and materials used to construct a proposed project, as well as the energy and natural resources (including water) that would be required to sustain a project and its inhabitants or occupants over the usable life of the project.

The project site is located within a densely populated area of San Francisco and within the City's Potrero Hill neighborhood. The site is surrounded by commercial, residential, institutional, and recreational uses. The approximately 3.36-acre site is almost entirely covered by buildings or surface pavement. Development associated with the proposed project would occur on a site that has been developed with urban uses for over 100 years. While the proposed project would result in an increase in the density of development at the project site through the introduction of new residential dwelling units, commercial space, and open space, it would be compatible with the existing uses around the site and within this area of the City.

No significant environmental damage, such as accidental spills or explosion of a hazardous material, is anticipated with implementation of the proposed project. Compliance with federal, State and local regulations, and implementation of Mitigation Measures HZ-2a through 2d and HZ-3, which would ensure that remediation, construction and operation activities at the project site would not result in the release of hazardous materials into the environment and that associated impacts would be less than significant. As such, no irreversible changes – such as those that might result from construction of a large-scale mining project, a hydroelectric dam project, or other industrial project – would result from development of the proposed project.

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands, and lost access to mining reserves. As discussed in the CPE Checklist, the State Department of Conservation designates the site as "Urban and Built-Up Land," and the site is located in an urbanized area of San Francisco. Therefore, no existing agricultural lands would be converted to non-agricultural uses. In addition, the project site does not contain known mineral resources and does not serve as a mining reserve; thus, development of the proposed project would not result in the loss of access to mining reserves. Please refer to pages 74 to 75 of the CPE Checklist included in Appendix A for a more detailed discussion of impacts related to agricultural and mining resources.

Construction of the proposed project would require the use of energy, including energy produced from non-renewable resources. Energy consumption would also occur during the operational period of the proposed project. The proposed project would be required to incorporate green building features consistent with the City's Green Building Ordinance that are anticipated to result in additional reductions in greenhouse gas (GHG) emissions. As discussed in the Greenhouse Gas Emissions Section of the CPE Checklist (page 58), the proposed project would not result in any significant impacts associated with an increase in greenhouse gas emissions or conflict with measures adopted for the purpose of reducing such emissions because the project would be compliant with the City's Greenhouse Gas Reduction Strategy. Additionally, the proposed project would not require the construction of major new lines to deliver energy or natural gas as these services are already

provided in the area. Therefore, the proposed project would not result in a significant impact associated with the consumption of nonrenewable resources.

SIGNIFICANT AND UNAVOIDABLE ENVIRONMENTAL IMPACTS

As discussed in Chapter IV of this EIR, the proposed project would result in significant and unavoidable impacts related to transportation and circulation. Under Existing Plus Project conditions, one study intersection –Mariposa Street and Mississippi Street (Intersection 5) – currently operates at an unacceptable level (LOS F) during the PM peak hour. The proposed project's contribution to existing unacceptable operating conditions at this intersection would be five percent or more and would therefore be a significant impact. No feasible mitigation measures have been identified to reduce this impact to a less-than-significant level.

In addition, the proposed project, combined with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative traffic impacts at two of the study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5) – each of which would operate at LOS F under the 2025 Cumulative conditions. The proposed project's contribution to unacceptable operating conditions at these intersections would be five percent or more and would therefore be a significant impact. No feasible mitigation measures have been identified to reduce these impacts to a less-than-significant level.

AREAS OF KNOWN CONTROVERSY AND ISSUES TO BE RESOLVED

Publication of the NOP and CPE Checklist initiated a 30-day public review and comment period that began on May 14, 2014 and ended on June 13, 2014. A public scoping meeting was also held on June 4, 2014. During the review and comment period, a total of 121 letters, emails, and comment cards were submitted to the Planning Department by interested parties in addition to oral comments provided at the scoping meeting. The comment letters, emails, and comment cards received in response to the NOP and CPE Checklist and a transcript of comments made at the June 4, 2014 public scoping meeting are available for review as part of Case File No. 2012.1398E. The Planning Department has considered the comments made by the public in preparation of the Draft EIR for the

proposed project. Comments on the NOP and CPE Checklist that relate to environmental issues are summarized below and are addressed in the NOP and CPE Checklist or in this EIR, as noted. Comments generally related to several categories and issue topics, and the discussion below is organized into comments that related to: project description, use of the Eastern Neighborhoods FEIR and cumulative analysis; land use and planning; aesthetics; population, employment, and housing; transportation, circulation, transit, and parking; noise; air quality; shadow; solar access; wind; recreation and open space; utilities and infrastructure; biological resources; hydrology and water quality; hazards and hazardous materials; and alternatives.

COMMENTS ON THE NOTICE OF PREPARATION

Project Description

Comments that relate to the project described and analyzed throughout this EIR generally addressed: the location of proposed buildings in relation to adjacent uses and lack of screening or barriers between uses; Planning Code exceptions sought by the project sponsor; building heights; density; need for increased setbacks; and location and use of public easements. Most of these comments are addressed in Chapter II, Project Description of the EIR; these and other more general comments are addressed below.

Description of Existing Uses and Conditions

One comment notes that Figure 3 on page 12 of the CPE checklist, which shows existing uses in the vicinity of the site, incorrectly identifies Live Oak School as a four-story structure, when it is three- to four-stories. This comment also notes that a commercial spice company is located at the corner of Mariposa and Arkansas Streets and that St. Gregory's Church and food pantry is located on De Haro Street, west of the site. Comments also noted that entrances to Jackson Park via Mariposa Street as well as the Lou Spadia Clubhouse within Jackson Park are not identified. Figure II-3 on page 17 of this EIR is revised accordingly.

One comment also notes that Figure 3 does not adequately address the presence of children and vulnerable elderly populations within the vicinity and also notes the presence of Recess, a business dedicated to providing play space for young children. Figure 3 is not intended to comprehensively identify every business located within the vicinity of the site; existing uses within the vicinity of the site are described on pages 22 through 24 of Chapter II, Project Description. Additionally, for environmental review purposes, the presence of sensitive receptors was addressed in the appropriate topical sections of the CPE Checklist and the EIR (i.e., Sections 6, Noise and 7, Air Quality in the CPE Checklist and Chapter IV.D, Hazards in the EIR).

One comment noted that the proposed project would make it difficult for Live Oak School to locate a nearby site for development of a full-sized gymnasium to serve existing students. Although this issue does not relate to an environmental concern, it should be noted that the proposed project would not restrict the school from identifying a site for developing a gymnasium, as the proposed project is confined to the project boundaries and development of a gym could occur in other locations in the project vicinity.

Setbacks

A few comments expressed concern related to the proximity of the proposed buildings to Live Oak School, and suggested that project residents would be able to see into Live Oak School classrooms or play areas and also that Live Oak School students would be able to see into residential units. Perspective drawings to show the view from the proposed building into the Live Oak School property were also requested. Several comments asked for a greater setback between the school and the project buildings or elimination of units in this area for this and other reasons (related primarily to shadows cast by the proposed buildings or noise generated by project residents, discussed later in this subsection). This issue is addressed in Chapter II, Project Description (pages 25 through 26) and Chapter VI, Alternatives (pages 310 through 311).

One comment requested that a 3-story barrier be placed along the site's western property line where the mid-block pedestrian crossing is adjacent to Live Oak School. A similar comment stated that pedestrian access should not be permitted through the proposed light court unless a security wall is installed. This issue is addressed in Chapter II, Project Description on page 36.

Provision of Open Space

A few comments requested that a second mid-block pedestrian pathway be added between Arkansas Street and Carolina Street. This issue is addressed on page 36 in Chapter II, Project Description.

Utilities and Easements

One comment questioned how the sewer and storm water easement over the existing property would be affected by the project. Another comment also stated that an existing railroad easement across the project site could be affected. Existing easements across the project site are addressed in Chapter II, Project Description, pages 19 and 53.

A few comments stated that natural gas fire places would be included in the residential units and that natural gas connections would be required. No natural gas fire places are proposed to be included in the residential units. Connections to existing utility services are addressed on pages 61 through 62 of the CPE Checklist and page 53 in Chapter II, Project Description.

Requested Project Approvals

Several comments requested clarification regarding the proposed exceptions to the Planning Code that are requested for the proposed project and stated that no exceptions should be allowed as the exceptions would not provide a benefit to the community. Several comments expressed concern that the project sponsor is requesting an exception to the 40-foot height limit. The four modifications/ waivers/exceptions to the Planning Code requested by the project are listed and described in Chapter II, Project Description (pages 54 through 55). Also refer to Chapter III, Plans and Policies, pages 57 through 80, which discusses compliance with existing City regulations.

Comments on EIR Analysis of the Eastern Neighborhoods FEIR

Several comments suggested that the *Eastern Neighborhoods FEIR* should not be relied upon for environmental review of the proposed project because of the statement that this programmatic EIR is outdated. A number of comments suggested the growth projections assumed in *Eastern Neighborhoods Plan* have already been exceeded within the Plan area. One comment noted that an environmental document that is over 5 years old (such as the *Eastern Neighborhoods FEIR*) is generally "stale." In addition, some comments suggested that the overall composition of the Potrero Hill neighborhood has dramatically changed and does not match the assumptions made in the *Eastern Neighborhoods FEIR* due to development of several large projects and the hi-tech uses in the area.

Many comments provided varying numbers for new housing developed since Plan approval both within the Eastern Neighborhoods as a whole and within the Showplace Square/Potrero Subarea. Specifically, some comments stated that about 1,400 housing units would be built between 2009 and 2014 and an additional 6,300 units to be built between 2015 and 2019 within the Eastern Neighborhoods. This issue is addressed on pages 86 through 87, in Chapter IV, Environmental Setting and Impacts and pages 60 through 62 in Chapter III, Plans and Policies.

A few comments also suggested that the existing zoning for the site is inappropriate. As noted on page 4 of the CPE Checklist, the proposed project would be consistent with the existing zoning for the site and no changes to the existing zoning are proposed.

One comment also suggested that the environmental analysis for the proposed project should not rely on the analysis in the *Eastern Neighborhoods FEIR* because new laws have been enacted since 2008 that are applicable to the Eastern Neighborhoods. Comments stated that these laws to reduce significant effects were not considered in the *Eastern Neighborhoods FEIR* and the mitigation measures recommended in the FEIR are likely outdated. Current laws and regulations that are applicable to 1601 Mariposa Street project that have been enacted since certification of the *Eastern Neighborhoods FEIR* have been considered in this project's CPE Checklist and Draft EIR. All applicable laws and regulations that are relevant to the proposed project's environmental analysis are identified and

discussed in the appropriate topical sections of Chapter IV, Environmental Setting and Impacts, pages 81 through 274 in this Draft EIR or in the CPE Checklist, pages 33 through 75. *Eastern Neighborhoods FEIR* mitigation measures that are applicable to the proposed project are identified on pages 77 through 83 of the CPE Checklist and in the Approach to Analysis subsections of each environmental issue topic addressed in Chapter IV. These measures are amended as necessary to address any changes made to existing laws and regulations since certification of the *Eastern Neighborhoods FEIR.*

Cumulative Analysis

Several comments questioned the methodology to be used in the proposed project's cumulative analysis in this EIR. Comments noted that the *Eastern Neighborhoods Plan* rezoned a long section of 16th Street from Harrison Street to the Bay for high-rise and mid-rise infill residential and mixed-uses. This comment specifically noted that traffic in the area would increase due to development occurring under the Plan. Cumulative assumptions for the transportation analysis are addressed on pages 86 through 87 in Chapter IV, Environmental Setting and Impacts, and pages 130 through 133 in Section IV.A, Transportation and Circulation.

A few comments also noted that the cumulative analysis for this project should consider expansion and increased enrollment at Live Oak School and International Studies Academy. Specifically, Live Oak School's Strategic Plan calls for expansion into the adjacent 4-story building that is currently occupied by office uses. The expansion, when completed, is anticipated to allow for an increased enrollment of up to 410 students.[1] The comment suggests that this would result in increased congestion in the project area during school drop-off and pick-up periods. This issue is addressed on page 156 in Chapter IV.A, Transportation and Circulation. Also refer to pages 86 through 87 for a description of the cumulative assumptions and how the approach to cumulative analysis was

[1] Plans for expansion are detailed on the school's website: www.liveoaksf.org/schoollife/expansion.html (accessed September 10, 2014).

developed. Also refer to page 23 in Chapter II, Project Description, regarding Live Oak School's plans for expansion.

Other general comments relating to the impacts identified in the *Eastern Neighborhoods FEIR* and cumulative development are regarding budget shortfalls for planned transit and infrastructure improvements in the Eastern Neighborhoods. Several comments expressed concern that the City is experiencing a $280 million budget shortfall and that due to these budget constraints, growth is outpacing planned infrastructure improvements that are intended to accommodate and serve the new growth within the Eastern Neighborhoods. As noted on pages 125 through 126 in Section IV.A, Transportation and Circulation, the *Eastern Neighborhoods FEIR* determined that impacts to transit services would be significant and unavoidable and new funding sources would need to be sought.

Transit and other infrastructure improvements within the Eastern Neighborhoods and throughout the City are prioritized and funded by the San Francisco Municipal Transit Agency (SFMTA) as growth occurs and new funding sources would need to be identified to provide adequate transit services. Therefore, the analysis provided in the CPE Checklist and this Draft EIR does not identify any specific infrastructure improvements that would be required to be implemented to serve the proposed project. Transit improvements expected to be implemented in the future under cumulative conditions are identified on pages 131 through 133 in Section IV.A, Transportation and Circulation. In addition, infrastructure improvements are generally not planned on a project-by-project basis rather, they are planned by taking into account area-wide growth projections.

Land Use and Planning

Several comments expressed concern that the density and scale of the proposed project would be incompatible with existing surrounding uses and the existing narrow street grid. Therefore, conflicts between the proposed residential uses on the project site and adjacent school and commercial uses could result. Other comments suggested that the proposed project would not comply with existing zoning applicable to the site, which is within the UMU District and the 40-X Height and Bulk District. These issues are addressed on pages 66 through 72 in Chapter III, Plans and Policies and pages 33

through 35 of the CPE Checklist. In addition, conflicts between adjacent uses, such as housing near commercial uses that produce odors and school uses that generate noise and conflicts with potential future residents are further addressed in this chapter, on pages 298 through 299 and 295 through 297.

Comments also expressed concern that the proposed residential units would not accommodate families due to predominately small unit size and would not be compatible with nearby single-family uses. As noted on page 66 in Chapter III, Plans and Policies, within the UMU District, at least 40 percent of units are required to be family-sized dwelling units (Planning Code Section 843.25). The project includes two- and three-bedroom units to meet this requirement.

A few comments suggested that the proposed project should be fully evaluated against existing General Plan and Showplace Square/Potrero Area Plan objectives and policies. This issue is addressed on pages 58 through 65 in Chapter III, Plans and Policies.

One comment suggested that the loss of production, distribution and repair (PDR) space was not adequately addressed in the *Eastern Neighborhoods FEIR*. Loss of PDR space within the Eastern Neighborhood, including the Showplace Square/Potrero subarea, was evaluated in the *Eastern Neighborhoods FEIR* and the significant impacts associated with the loss of PDR space were disclosed in the EIR (which were determined to be significant and unavoidable). The loss of PDR space on the project site, in the context of overall loss of PDR space within this area of the City, is discussed on pages 34 through 35 of the CPE Checklist.

Aesthetics

Several comments requested that the topic of aesthetics be evaluated in the EIR. Comments related to aesthetics generally addressed consideration of impacts to visual resources, including loss of scenic and private views and project height, scale, and architectural compatibility with the existing visual character of the site's surroundings, as described below.

California Public Resources Code 21099

As stated on pages S-2 through S-3, Summary, the proposed project is subject to California Public Resources Code 21099, which eliminates aesthetics as an impact that can be considered in determining the significance of physical environmental effects under CEQA for projects meeting certain criteria. Accordingly, this EIR does not contain a separate discussion of the topic of aesthetics. The EIR nonetheless provides an overview of the existing and proposed visual character of the site and surroundings for informational purposes as part of Chapter II, Project Description (pages 43 through 52). It should be noted that California Public Resources Code 21099 does not preclude a Lead Agency from evaluating aesthetics for informational purposes, and therefore this EIR provides visual simulations (see pages 45 through 50 in Chapter II, Project Description).

Visual Character

Several comments requested that the EIR include an evaluation of the change to neighborhood character that could result from the project and the project's potential to degrade the visual character and quality of its surroundings due to the height and mass of the proposed structures. Some commenters noted that the proposed project would be out of scale with existing surrounding development and that the compatibility of the proposed project's architecture with surrounding older buildings was also a concern. An overview of the existing and proposed visual character of the site and surroundings is provided as part of Chapter II, Project Description (pages 43 through 52) for informational purposes. In addition, historic resources are evaluated on pages 38 through 39 of the CPE Checklist.

Scenic Vistas

Some comments expressed concern with the potential loss of private views of downtown for nearby residents (and resulting impact to property value). It should be noted that loss of private views is generally not considered to be a significant environmental impact as defined by CEQA, as the evaluation of impacts to scenic views is typically focused on effects on public views, and not individual private views. However, as stated above, because the project is subject to California

Public Resources Code 21099, the analysis of changes to public views is only provided for informational purposes.

Potential loss of scenic vistas currently available from Jackson Playground is also a concern. As shown in the visual simulations provided in pages 45 through 50 of Chapter II, Project Description, the proposed project would not block scenic views of hillside areas as seen from the park.

Population and Employment

Several comments requested that the topic of population and housing be considered in the Draft EIR. These comments are appear to be based on the assumption that growth within the Eastern Neighborhoods has exceeded the population and housing growth projections in the *Eastern Neighborhoods FEIR*. This issue topic is analyzed on page 37 of the CPE Checklist and is further addressed on page 87 in Chapter IV, Environmental Setting and Impacts of this Draft EIR.

Some comments expressed concern that the project would not provide needed affordable housing for low- and middle-income residents in the City. This issue is addressed on page 35 in Chapter II, Project Description and in Chapter III, Plans and Policies (pages 65 through 66).

Some comments also expressed concern related to the loss of jobs and businesses at the project site. The proposed project would result in the demolition of existing on-site commercial, office, warehouse, and automotive-related businesses on the site, which currently employ approximately 96 workers.[2] These businesses would likely relocate to other areas of the City and possibly to surrounding cities and communities, where adequate supplies of commercial space are available. There would be new employment opportunities at the site in the proposed retail space and for management and maintenance of the residential development.

[2] Related California, written communication with LSA Associates, Inc., April, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

One comment suggested that Live Oak School should be considered as part of the "knowledge sector," which are businesses that should be maintained per the City's General Plan (Objective 1.4 of the Showplace Square/Potrero Area Plan). The proposed project would not affect operations at the school over the long term, as described throughout the Draft EIR and CPE Checklist (pages 89 through 274 in the EIR and pages 33 through 75 in the CPE Checklist). Refer to page 157 in Chapter IV.A, Transportation and Circulation, in particular.

Transportation, Circulation and Parking

A number of comments expressed concerns related to increases in traffic on area roadways; increased demand for transit; pedestrian safety; bicycle safety; loading impacts; inadequate parking; construction-related transportation impacts; and evaluation of cumulative traffic conditions. Comments requested that a complete traffic study be prepared that evaluates trip generation, distribution, and assignment and that AM and PM intersection counts should be taken when schools are in session. Existing and Cumulative level of service scenarios should be addressed and illustrated. State highway facilities should also be considered and the percentage of project traffic that would affect these facilities should be identified.

A complete Traffic Impact Study was prepared and is available for review at the City Planning Department as part of Case File No. 2012.1398E. Section IV.A, Transportation and Circulation on pages 89 through 180 presents the results of the traffic analysis and identifies the methodology and assumptions used in the analysis. Specific transportation and circulation-related comments are identified and discussed below.

Traffic Impacts

Some comments noted that intersection turning movement volumes should be collected when schools are in session. The methodology for collecting turning movement counts is discussed on page 99. Existing Plus Project and 2025 Cumulative roadway conditions are discussed in Section IV.A, Transportation and Circulation (pages 141 through 152 and pages 168 through 174).

Circulation issues associated with drop-off and pick-up times and associated congestion within the vicinity of Live Oak School and the project's impact on those conditions are also a concern expressed in the comments. Circulation issues associated with drop-off and pick-up activities at the school are discussed on page 156. Additional comments state that the garage may need a system to prevent the build-up of cars (queuing) to ensure that adjacent streets are not blocked. This issue is addressed on pages 149 through 150 in Section IV.A, Transportation and Circulation.

A few comments stated that traffic conditions should be studied during the morning rush hour and at 5:00 p.m. on a Friday when there are major events occurring within the vicinity (such as Giants games). The analysis focuses on the PM peak period, as explained on page 99. The analysis is intended to identify peak period conditions. In addition, analysis of the AM drop-off conditions at Live Oak School and at International Studies Academy was conducted (see pages 104 through 105).

Transit Impacts

Several comments expressed concern that transit services within the vicinity of the project site are inadequate or are already at or over capacity. Impacts of cumulative development and the increased demand on transit services were also a concern, particularly because increases in transit services are not placed on the developer but instead are the responsibility of SFMTA. Impacts to transit that were identified in the *Eastern Neighborhoods FEIR* are addressed on pages 125 through 126. Improvements related to transit services are discussed on pages 131 through 133 of Section IV.A, Transportation and Circulation. These improvements are considered in the cumulative analysis. Impacts to transit services under Existing Plus Project and 2025 Cumulative conditions are discussed on pages 141 through 152 and 168 through 174, respectively.

Pedestrian Impacts

Several comments expressed concerns related to pedestrian safety and circulation within the immediate vicinity of the project site, particularly associated with children walking to and from Live Oak School. Several comments stated that increased traffic congestion, inadequate parking, location of loading and unloading zones, garage access points, and area topography all create conditions that

affect pedestrian safety, and that pedestrian conditions in the area should be quantitatively assessed. Comments also requested that drop-off and pick-up conditions at Live Oak School be considered in the analysis. Some comments also suggested that traffic calming measures in the form of more stops signs, better crosswalks, and better enforcement of the 15 mile per hour (mph) speed limit within the vicinity of Live Oak School should be considered to increase pedestrian safety. A qualitative analysis of pedestrian circulation conditions is provided on pages 154 through 157, including a discussion of drop-off and pick-up conditions at the school (also see page 150).

One comment suggested that laws enacted since 2008, specifically recommendation of the Safe Routes to Schools program, should be considered in the Draft EIR with respect to pedestrian and bicycle safety. Regarding the Safe Routes to Schools program, this legislation includes recommendations for communities to improve safety conditions around schools; however, these are not requirements and, to date, the City does not have a policy to implement such a requirement. Please see Section IV.A, Transportation and Circulation (pages 112 through 114 and 154 through 157), regarding pedestrian facilities in the area.

Bicycle Impacts

A few comments expressed concern related to bicycle access and circulation within the vicinity of the site. In particular, congested roadways and potential conflicts between bicyclists and vehicles are a concern. The existing bicycle network and the proposed project's impacts to bicycle circulation are addressed on pages 115 through 116 and 157 through 159. One comment also noted that the project should provide a space for the City bike share rack. The project sponsor may consider including this space within the site, although it is not a requirement.

Loading Impacts

A few comments expressed concern related to loading conditions in and around the Live Oak School and potential conflicts with the proposed project. Some comments requested that a designated loading area should be allocated to the school given that traffic congestion on adjacent roadways would worsen, fewer parking spaces would be available, and there is no immediately adjacent transit

stop near the site. These comments are addressed on pages 160 through 161 in Section IV.A, Transportation and Circulation. One comment also requested that additional curb space be allocated only during peak drop-off and pick-up periods at Live Oak School. This comment is addressed on page 42, in Chapter II, Project Description.

Other comments stated that off-street loading spaces should be required for the project, particularly given that moving and delivery trucks could create traffic congestion on roadways adjacent to the site and create conflicts with bicyclists and use of public sidewalks. In addition, the comment that the *Eastern Neighborhoods FEIR* could not have adequately considered internet delivery services, such as Amazon Fresh, and the potential increase in deliveries to residential units that could result from the availability of such services, is noted. These comments are addressed on page 42, in Chapter II, Project Description and pages 160 through 161 in Section IV.A, Transportation and Circulation.

Emergency Access

A few comments noted that the San Francisco Police Department's Special Operations Facility recently relocated to 1700 De Haro Street, approximately 0.2 miles northwest of the site. Commenters expressed concern that emergency access to and from this facility could be adversely affected by the proposed project. Traffic impacts to study area intersections and impacts to emergency responders are addressed on pages 141 through 152 and pages 168 through 174 in Section IV.A, Transportation and Circulation, and page 273 in Section IV.D, Hazards and Hazardous Materials.

Construction Impacts

A few comments expressed concerns related to circulation impacts during the project construction period, particularly pedestrian safety. Comments also requested that the schedule for any sidewalk closures be provided to the community in advance of any closures. Some comments expressed concerns related to construction-worker parking. This issue is addressed on pages 162 through 164 in Section IV.A, Transportation and Circulation.

Parking

Several comments expressed concerns that existing parking facilities within the project area are insufficient to support existing parking demand and that the proposed project would exacerbate these conditions. In particular, some comments stated that the proposed project would not provide enough on-site parking spaces to serve the projected demand for the proposed residential uses. Comments stated that parking spaces for the commercial uses and bicycle parking spaces within the proposed garage would take up room in the garage that could be used for residential parking instead and bicycle parking spaces should be located within the residential units. The EIR's evaluation of parking supply and demand is addressed on pages S-2 through S-3, Summary. An evaluation of existing parking conditions within the vicinity of the project site is provided on pages 119 through 120 in Section IV.A, Transportation and Circulation for informational purposes. An evaluation of the project's effects on parking supplies related to project-generated demand is provided on pages 165 through 168 in Section IV.A, Transportation and Circulation.

In addition, some comments expressed concern that the loss of six existing Zipcar (car share) spaces located on the site as well as the removal of approximately 33 monthly rental spaces would contribute to the parking deficit in the project area. Another comment suggested that existing 90-degree parking on Carolina and 18th Streets could be converted to parallel spaces with project development, resulting in the loss of spaces. A few comments expressed concern that proposed on-street loading areas or bulb-outs would reduce available on-street parking spaces. The project does not propose to alter the configuration or angle of existing on-street parking spaces on surrounding roadways. Parking and loading spaces are addressed on page 42 in Chapter II, Project Description, Provision of car share spaces is also addressed on see page 42, Chapter II, Project Description.

Other comments suggested that on-street parking facilities should be provided for electric vehicle use and that residential permit parking should apply to streets surrounding the site. Additional comments suggested that dedicated parking spaces should be provided for Live Oak School teachers and visitors. Parking spaces dedicated to off-site workers or residents are not a permitted use in the UMU zoning district in which the project is located.

Cumulative Impacts

Comments related to cumulative transportation impacts included requests to include removal of the elevated Interstate 280 (I-280) freeway and development associated with UCSF in the cumulative analysis for the proposed project. One comment also questioned the assumptions in the EIR for the cumulative transportation analysis and asked if maximum development allowed under the *Eastern Neighborhoods Plan* is considered in the analysis. The approach to the cumulative analysis is discussed on pages 130 through 133 in Section IV.A, Transportation and Circulation. Development associated with UCSF is included in the cumulative analysis (see page 132). Removal of I-280 is discussed on page 131. Cumulative assumptions as they relate to the *Eastern Neighborhoods FEIR* are addressed on page 132.

Noise

Comments related to noise included construction period impacts to sensitive receptors, timing of construction activities, operation period impacts related to proximity of residential and school uses, and increases in street level noise. These comments are addressed below.

Construction Impacts

Several comments expressed concern that the proposed construction activities would interfere with the operation of and activities occurring at the adjacent Live Oak School, including that classrooms would not be able to open windows during construction. In particular, several comments state that given the two year duration of construction, project construction activities could adversely affect students' ability to learn and affect the use of the school's music room, which is immediately adjacent to the construction area. It was also suggested that nearby sensitive receptors could experience permanent hearing loss due to construction activities, particularly during pile driving activities. Comments suggested that the noisiest construction activities should be coordinated with the school and that these activities should occur outside of school hours. One comment also requested that sound barriers be used during construction to reduce noise levels, although barriers that consist of sound blankets should not be considered due to the loss of light that would occur. As stated on pages 43 through 44 of the CPE Checklist, temporary noise barriers would be constructed of plywood and

noise control blankets may also be utilized. Another comment requested that vibration impacts be considered. Comments also expressed concerns that the project would not comply with the City's Noise Ordinance.

Project related construction noise is addressed on pages 43 through 45 of the CPE Checklist. Mitigation measures are outlined on pages S-23 through S-26 in Summary. Pile driving is not proposed as part of the project. In addition, all construction activities for the project would be subject to and would comply with the San Francisco Noise Ordinance. It would not be feasible to conduct construction activities outside of school hours only, as these hours typically correspond with early morning or evening hours when construction activities are not permitted by the Construction Noise Ordinance (permitted hours of construction are between 7:00 a.m. and 8:00 p.m.). In addition, the school operates year-round and there are not substantial periods of time when construction activities could be scheduled around the school sessions.

Operation Impacts

Some comments expressed concern that project residents would be subject to noise generated at the school, particularly due to the proximity of the school's outdoor play area located adjacent to the project site, and that future residents may request restricted operations at the school. All uses within the City are subject to the provisions of the San Francisco Noise Ordinance, and it is assumed that the school operates within those parameters. As part of their rental agreements, project residents would be informed that they may be subject to noise generated by nearby uses, including the school. In addition interior noise standards are addressed on pages 45 through 46 of the CPE Checklist.

One comment suggested that increased street noise from additional project-related traffic and residential/commercial activity should be considered. Operational roadway noise levels are addressed on page 46 of the CPE Checklist.

One comment noted that the open space areas developed as part of the proposed project may be used by musicians or to provide concerts and asked if permits would be required for such activities. All uses within the City are required to comply with the San Francisco Noise Ordinance, including activities conducted within outdoor spaces. The City requires a permit for amplified music.

Air Quality

Comments related to air quality addressed concerns with construction and operation period impacts and associated health risks for sensitive receptors, as well as objectionable odors, as discussed below.

Construction Period

Several comments expressed concerns related to the project's construction-period air quality emissions and potential exposure of nearby sensitive receptors to toxic contaminants and fugitive dust. A few comments requested that mitigation measures be required to reduce such impacts, particularly on children. Specifically, commenters stated that project-related construction vehicles should not be permitted to idle. These issues are addressed on pages 52 through 55 of the CPE Checklist. Exposure to toxic soil contaminants are also addressed on pages 255 through 275 in Section IV.D, Hazards and Hazardous Materials.

A number of comments expressed concern that generation of fugitive dust during project construction activities is unlikely to be adequately controlled and enforced and that nearby land uses, which consist of active outdoor land uses, would be exposed to dust generated by construction. This issue is addressed on pages 52 through 53 of the CPE Checklist. Construction-period emissions of fugitive dust are also addressed on pages 258 through 260 in Section IV.D, Hazards and Hazardous Materials.

Operation Period

A few comments expressed concern that nearby land uses, which consist of active outdoor uses, would be exposed to air pollutant emissions generated by stationary sources within the project site, including those generated by use of natural gas, outdoor barbeques, and indoor cooking elements.

Residential units are expected to be primarily served by electricity, although some natural gas connections may be required for common uses, such as hot water and common area fire places. Air quality impacts associated with stationary source are discussed on page 56 of the CPE Checklist.

A few comments also noted that the project area is located within a Roadway Exposure Zone and that project related traffic and congestion in the area would contribute to air pollutant emissions. As stated on page 55, the project site is not located within an Air Pollutant Exposure Zone.[3] Roadway congestion and resulting increases in air pollutant emissions are addressed on pages 55 through 56 of the CPE Checklist.

One comment noted that removal of the existing bus depot would not generally reduce air pollutant emissions in the project area because buses do not typically idle during the day. This issue is addressed on page 55 of the CPE Checklist, although the discussion primarily focuses on impacts of the proposed project and no credit is taken for existing air pollutant sources that would be removed from the site, and the discussion of removal of the buses was provided for informational purposes.

A few comments expressed concern that project residents would be exposed to objectionable odors, including those that are generated at the nearby Anchor Steam Brewery, the First Spice Mixing Company, and other nearby PDR uses. The location of these uses is shown on Figure II-3 on page 17 in Chapter II, Project Description. As part of their rental agreements, project residents would be notified that the site is located in a mixed-use area and they may occasionally experience odors from

[3] It should be noted that Roadway Exposure Zones have been superseded by Air Pollutant Exposure Zones as defined by the San Francisco Department of Public Health in Article 38 of the Building and Health Codes. Amendments were made to the Article 38 of the Building and Health Code in April 10, 2014. According to the Air Pollutant Exposure Zone Map, the site is not located within an area of poor air quality. Website: https://www.sfdph.org/dph/files/EHSdocs/AirQuality/Article38DevGuidance.pdf.

nearby land uses.[4] Furthermore, no impacts associated with objectionable odors were identified in the *Eastern Neighborhoods FEIR*.

Shadow

Several comments expressed concerns related to the height of proposed buildings and potential impacts related to increased shadows. These comments relate to increased shadowing of Jackson Playground and existing uses within that facility, including the community garden, and increased shadows cast on classrooms and play areas at Live Oak School. One comment also noted that project-related shadows should be shown for all sides of the project. These issues are addressed on pages 181 through 216 in Section IV.B, Shadow.

Solar Access

Several comments expressed concerns related to the loss of solar access that would occur with development of tall buildings on the project site. These concerns related to the loss of direct access to sunlight for artists' residences located at 18th Street and Arkansas Street and reduced accessibility to sunlight for Live Oak School and their rooftop solar panels. One comment suggested that development of tall buildings in an area with narrow streets would also reduce indirect sunlight on public sidewalks. One comment suggested that these issues could relate to a violation of the Solar Rights Act.[5] The height and bulk of the proposed project is addressed on page 54 in Chapter II, Project Description and on pages 71 through 72 in Chapter III, Plans and Policies. Please refer to pages 195 through 209 in Section IV.B, Shadow, which depict project-related shading on nearby uses. It should also be noted that the proposed buildings on the site would not be taller than the Live Oak

[4] Related, Letter to Chelsea Fordham, San Francisco Planning Department: *Information Shared in Future Rental Agreements*, November 21, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

[5] The Solar Rights Act was established in 1978 (AB 3250, 1978), and it created a legal framework for solar access. The law includes protections to allow consumers access to sunlight (and prevent shading of systems) and to limits the ability of homeowner associations (HOA) and local governments from preventing installation of solar energy systems.

School building thus, no new shadows would be cast onto the roof of this building, where the solar panels are located.

Wind

One comment requested that wind impacts be further studied due to the topography of the area. Wind impacts are addressed on page 59 of the CPE Checklist.

Recreation and Open Space

Several comments expressed concern regarding potential impacts to nearby Jackson Playground. Many of these comments stated that the park is not currently adequately maintained and that new project residents would place additional strain on this open space area, possibly resulting in increased physical deterioration of this facility. Comments also expressed concern that overcrowding at the park could create conflicts between different types of users (i.e., active and passive users or users of different ages may not be compatible if adequate space is not available) or that project residents, which some comments state would likely be young and single, would not be compatible with the family-oriented activities and use of the park. Some comments also stated that development impact fees should be dedicated to Jackson Playground and not to other parks located outside of the community.

Some comments also expressed concern that this area of the City is underserved by parks and open space and that more open space areas should be provided to serve projected growth in the area, including growth that would occur with the proposed project. Comments also questioned the adequacy of open space to be provided within the project site to serve project residents. Comments also expressed concern that the publicly-accessible open space to be provided within the project site could later become private. Additional comments requested that public gathering areas or community facilities be provided on the project site.

The CPE Checklist addressed impacts associated with recreation on pages 60 through 61 and determined that no new impacts related to parks and recreation would result that were not already analyzed in the *Eastern Neighborhoods FEIR*. The Planning Department has nevertheless determined that additional evaluation of this environmental issue topic is warranted. The above comments are therefore considered and addressed in Section IV.C, Recreation of this EIR (pages 217 through 234) to the extent that these issues could relate to environmental impacts.

Some comments also expressed concern that students at Live Oak School would not be able to use the outdoor play areas at the school during project construction activities because noise and dust generated by the project could interfere with the use of this space. This issue is addressed on pages 43 through 44 of the CPE Checklist and page 229 in Section IV.C, Recreation.

Utilities and Infrastructure

A few comments expressed concerns related to natural gas connections and the capacity and quality of existing infrastructure in the vicinity of the site. In particular, the comment noted the proximity of a 30-inch PG&E transmission line (Line 109) to the project site. These comments related to the project's construction-period ground-borne vibration impacts that could damage the lines. The natural gas pipeline is located along 20th Street to the south of the project site and along Missouri Street to the east.[6] Based on the distance from the project site, greater than 750 feet, construction and operation of the project site would not affect the pipeline. Ground-borne vibration impacts are discussed on page 43 of the CPE Checklist.

[6] Pacific Gas & Electric Company, Gas Transmission Pipelines, July 1, 2014. Website: www.pge.com/en/safety/systemworks/gas/transmissionpipelines/index.page.

Biological Resources

A few comments noted that the nine street trees removed from the site by the current property owner were "Significant" trees. This issue is discussed on pages 65 through 66 of the CPE Checklist. The project site trees were identified as "street trees," not as "significant trees" per the City's guidelines.[7]

Another comment noted that bird safe building standards should be implemented. This issue is discussed on page 66 of the CPE Checklist.

One comment also noted that Carolina Street (a project area street) is identified in the Open Space Concept of the General Plan as a green connector street, and that additional street trees and other plantings are required along such corridors. The proposed project would comply with the City's on- and off-site landscaping requirements as discussed on pages 65 through 66 of the CPE Checklist and pages 36 through 41 of Chapter II, Project Description.

Hydrology and Water Quality

One comment noted that flooding is an issue within the project area. This issue is addressed on page 72 of the CPE Checklist.

Hazards and Hazardous Materials

Comments related to hazards and hazardous materials generally included construction and operation period emissions of hazardous materials into the environment affecting sensitive receptors and other nearby uses; health effects of toxic materials exposure; and adequacy of existing hazardous materials regulations. These issues are discussed on pages 235 through 276 in Section IV.D, Hazards and Hazardous Materials and are also summarized below.

[7] Related/Mariposa Development Co., LLC, Rick Westberg, *1601 and 1677 Mariposa and 485-487 Carolina Street Required Checklist for Tree Planting and Protection*, April 10, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Construction Impacts

Several comments expressed concern that hazardous materials would be emitted into the air during project construction, including serpentine soils (a naturally-occurring form of asbestos), posing a threat to the health of nearby sensitive receptors, including residents, school children (particularly at Live Oak School and International Studies Academy), users of Jackson Playground, and elderly individuals. These concerns also related to the length of time of overall exposure and the effects on children's health. Comments also express concern related to hazardous materials exposure that would occur with both the clean-up action of the contaminated site soils, as well as demolition of existing on-site buildings that may contain lead and asbestos. Release of toxic chemicals into surrounding soils (particularly playground areas where children come into contact with soils and sand), water systems, and the community garden at Jackson Playground (which contains vegetables for human consumption) or other impacts to plants and animals in the vicinity of the site were also cited as a concern. Sensitive receptors are discussed on page 249 of Section IV.D, Hazards and Hazardous Materials, and potential impacts to these receptors are discussed on pages 258 through 271. Potential release of hazardous materials into the environment that would affect surrounding soils, water systems, or vegetable gardens are also discussed on these pages.

Many comments expressed concern that existing hazardous materials regulations are inadequate and that compliance with these regulations would not necessarily reduce or eliminate health hazards created during construction activities due to the presence of toxic chemicals at the site, including petroleum hydrocarbons, lead, benzene, nickel, and asbestos in soils, and petroleum hydrocarbons and volatile organic compounds in groundwater and soil gases. As described under the regulatory framework section, pages 249 through 253, there are several local, State, and federal laws, regulations, and programs required to be implemented as part of the proposed project hazardous material clean-up that would address hazardous materials (also see discussion above under Air Quality). These regulatory requirements are intended to reduce significant hazardous materials exposures that could negatively impact human health and the environment. In addition, DTSC would have oversight of the project remediation, construction, and design under the Voluntary Cleanup and CLRRA

programs. DTSC and the City's Department of Public Health would coordinate the clean-up effort and ensure regulatory compliance.

Comments also requested that an environmental monitor be present on the site to ensure that clean-up activities are conducted appropriately. Continuous air monitoring of hazardous materials and contingency plans to identify and address the discovery of previously unknown hazardous materials are requirements of the Response Plan for the project site, described on pages 259 through 271.

Comments noted that construction-period impacts related to building fires or earthquakes are also a concern, particularly due to a construction fire at Mission Bay to the south of the project site. The project would be constructed in conformance with the San Francisco Building Code and Fire Code and would follow all construction-related regulations, with oversight from DTSC and the City's Department of Public Health for the clean-up actions. In addition, all work would be overseen by the City's Department of Building Inspection. Contingency plans required as part of the project site Response Plan would address construction safety and emergency response. Also refer to page 273 in Section IV.D, Hazards and Hazardous Materials.

Operation Impacts

Several comments claim that the project site is not appropriate for residential use because of the presence of known hazardous site conditions. This is addressed on pages 238 through 245 of Section IV.D, Hazards and Hazardous Materials. Comments also requested that monitoring be conducted at the site after project completion to determine the long-term effects of hazardous materials exposure. This is addressed on pages 266 through 268 in Section IV.D, Hazards and Hazardous Materials.

Comments also noted that any vapor intrusion systems installed at the site should be vented away from Live Oak School. This issue is addressed on page 267 of Section IV.D, Hazards and Hazardous Materials.

Alternatives

A few comments suggested modifications that should be considered as alternatives to the proposed project. These include alternatives that consider reduced building heights, increased setbacks, reduced building massing, lower density, fewer residential units, more family-sized units, development of more retail, office, PDR, or active ground floor space, provision of additional open space for public use, and provision of recreational facilities for community use. One comment also asked if the City could acquire part of the project site for open space given the presence of an existing sewer and storm drainage easement. These issues are addressed on pages 307 through 352 in Chapter VI, Alternatives.

Summary

The above issues are addressed and analyzed throughout this EIR and the CPE Checklist. This Draft EIR will be circulated for public review and comment. During this period, written comments concerning the accuracy and adequacy of the Draft EIR will be accepted and a public hearing will be held before the Planning Commission to receive oral comments. After the close of the public comment period, written responses will be prepared to address substantive comments received on the environmental analysis, and any revisions to the Draft EIR will be identified.

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VI. ALTERNATIVES

The *CEQA Guidelines* require the analysis of a reasonable range of alternatives to the proposed project or to the location of the project, which would feasibly attain most of the basic objectives of the project and avoid or substantially lessen any of the significant effects of the project (*CEQA Guidelines* Section 15126.6). The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit informed public participation and an informed and reasoned choice by the decision-making body (*CEQA Guidelines* Section 15126.6(f)).

CEQA generally defines "feasible" to mean the ability to be accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. The following factors may also be taken into consideration when assessing the feasibility of alternatives: site suitability; economic viability; availability of infrastructure; General Plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and the ability of the proponent to attain site control (*CEQA Guidelines* Section 15126.6(f)(1)).

CEQA also requires that a No Project Alternative be evaluated (*CEQA Guidelines* Section 15126.6(e)); the analysis of the No Project Alternative is based on the assumption that the project would not be approved. In addition, an environmentally superior alternative must be identified among the alternatives considered. The environmentally superior alternative is generally defined as the alternative that would result in the least adverse environmental impacts to the project sites and affected environment. If the No Project Alternative is found to be the environmentally superior alternative, the EIR must identify an environmentally superior alternative among the other alternatives.

CEQA Guidelines Section15126.6(c) also requires an EIR to identify and briefly discuss any alternatives that were considered by the Lead Agency but were rejected as infeasible during the scoping process. In identifying alternatives, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the basic project objectives. Those alternatives that

would have impacts identical to or more severe than the proposed project, or that would not meet most of the project objectives, were rejected from further consideration.

This chapter identifies alternatives to the proposed project and discusses environmental impacts associated with each alternative. Alternatives were selected that would reduce identified impacts of the proposed project. The proposed project would result in significant unavoidable impacts related to transportation and circulation. Specifically, under Existing Plus Project conditions, the Mariposa Street and Mississippi Street intersection (Intersection 5) currently operates at an unacceptable level (LOS F) during the PM peak hour. The proposed project's contribution to existing unacceptable operating conditions at this intersection would be five percent or more and would therefore be a significant impact. No feasible mitigation measures have been identified to reduce these impacts to a less-than-significant level.

In addition, the proposed project, combined with past, present, and reasonably foreseeable future projects, would result in a considerable contribution to significant cumulative traffic impacts at two of the study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5) – each of which would operate at LOS F under the 2025 Cumulative conditions. The proposed project's contribution to unacceptable operating conditions at these intersections would be five percent or more and would therefore be a significant contribution. No feasible mitigation measures have been identified to reduce these impacts to a less-than-significant level.

Impacts related to transportation and circulation are discussed in more detail than other topics due to the complex nature of the traffic, pedestrian, transit, bicycle, and loading issues surrounding the project. The analysis included herein is based on an evaluation of the project alternatives conducted by DKS Associates.[1]

[1] DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014. This document is available for review at the City of San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

ALTERNATIVES CONSIDERED BUT REJECTED FROM FURTHER CONSIDERATION

As discussed on page 302, a few comments submitted during the NOP scoping period suggested modifications that should be considered as alternatives to the proposed project. These include alternatives that consider reduced building heights, increased setbacks, reduced building massing, lower density, fewer residential units, and development of more retail or PDR space. These suggested alternatives have generally been captured in the Reduced Density and Reduced Height on Mariposa Street Alternatives.

Other comments suggested that alternatives consider the provision of more office space or active ground floor uses on the site, provision of additional open space for public use, and provision of recreational facilities for community use. One comment also asked if the City could acquire part of the project site for open space given the presence of an existing sewer and storm drainage easement.

The following alternatives were considered as part of this alternatives analysis, but ultimately rejected from detailed analysis:

1. *Off-site Alternative*. This alternative was rejected because the project sponsor does not have control of another site that would be of sufficient size to develop a mixed-use project with the intensities and mix of buildings that would be necessary to achieve the project objectives.
2. *Office Alternative.* An alternative which considers development of office uses on the project site was not considered for further analysis because office uses are permitted on only one story of four-story buildings in the UMU District. Furthermore, office uses are not permitted on the ground-floor.
3. *Increased Retail Alternative.* An alternative which considers a greater ratio of retail to residential uses on the project site was not considered for further analysis because of various design and economic constraints. Retail space is proposed to be located at the corner of 18th Street and Arkansas Street and at the corner of Mariposa Street and Carolina Street, extending along the Carolina Street frontage. The Arkansas Street frontage does not

contain additional retail space because this area is not a retail corridor and is a more appropriate location for residential uses. Additional retail space is not located along the 18th Street frontage because of various design constraints including 1) the extreme grade in this location; 2) the location of the garage access to the site; and 3) the need to access on-site utilities and service areas. In addition, retail uses generally have a higher trip generation rate than residential uses; therefore, an increase in retail use and decrease in residential uses on the site would not likely eliminate or reduce any of the significant unavoidable transportation-related impacts of the proposed project.

4. *Open Space Alternative.* An alternative which considers the development of additional open space on the site or provision of community recreational facilities was not considered for further analysis as the proposed project exceeds the open space requirements for the proposed development, the City does not own the subject property, and acquisition of the site for City open space is not within the City's open space acquisition priority list.

5. *All Residential Alternative.* An alternative which considers the development of only residential uses on the project site was not considered for further analysis because the site is designated for a mix of uses and ground floor retail space proposed by the project would provide neighborhood service to project- and area residents. According to the traffic consultant, this alternative would also eliminate only one of two significant intersection level of service impacts associated with the proposed project.[2]

6. *Increased Setback from Live Oak School Alternative.* An alternative which considers additional setbacks from the property line windows on the south façade of Live Oak School was not considered because the proposed project provides a setback of 20 feet from the south façade of Live Oak School, which is sufficient distance to provide light into the school and is sufficient under the Building Code for the windows on the school façade to become operable and provide ventilation. The proposed project also does not locate any dwelling

[2] Joshua Pilachowski, DKS Associates. Written communication with LSA Associates, Inc., November 11, 2014.

units facing into the setback area (rather, a corridor faces the setback) to minimize the potential visual interaction between the school and the project. An additional 20-foot setback is not necessary for light, air and privacy for Live Oak School, would significantly reduce the development potential of the project site, and would not reduce any of the identified environmental impacts of the project.

SUMMARY OF PROJECT ALTERNATIVES

This chapter compares three alternatives, as summarized below:

- The **No Project Alternative**, under which the project site would not be redeveloped with the proposed project and the project site would remain generally in its existing condition.
- The **Reduced Density Alternative**, under which the project site would be developed with 114 residential units, 3,510 square feet of commercial space, 106 off-street parking spaces within a partially below-grade garage, and associated improvements. The total building area would be 145,070 gsf and building heights would be two to three stories and would not exceed 30 feet.
- The **Reduced Height on Mariposa Street Alternative**, under which the project site would be developed with 289 residential units, 14,000 square feet of commercial and light industrial space, 258 parking spaces within a partially below-grade garage, and associated improvements. The total building area would be 410,616 gsf. Buildings would range from two to four stories in height, would not exceed 40 feet, and would be stepped back from the Mariposa Street frontage.

These alternatives are depicted in **Figures VI-1** through **VI-8**. **Table VI-1** compares key elements of the alternatives to the proposed project.

Table VI-1: Summary of Project Alternatives and Proposed Project Development

Use	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
Residential Units				
Studio	76	0	27	68
1 Bedroom	116	0	41	105
2 Bedroom	118	0	42	107
3 Bedroom	10	0	4	9
Total Units	**320**	**0**	**114**	**289**
Commercial/Industrial Use				
Retail	2,500	6,126	880	2,250
Restaurant	7,500	0	2,630	6,750
Light Industrial (PDR)	0	68,570	0	5,000
Total Commercial/Industrial Space (gsf)	**10,000**	**74,696**	**3,510**	**14,000**
Total Building Area	**427,570**	**74,696**	**145,070**	**410,616**
Building Heights (ft)	31-40	10-20	20-30	20-40
Open Space (gsf)	39,195	0	73,095	38,195
Parking				
Off-Street Vehicle Spaces	277[a]	115	106	254
On-Street Vehicle Spaces	4	–	5[b]	4
Total Vehicle Spaces	**281**	**115**	**111**	**258**
Class I Bicycle Spaces	441	0	104	149
Class II Bicycle Spaces	28	0	12	26
On-Street Loading Spaces	3	–	2	3

[a] As described in Chapter II, Project Description, the proposed project would provide between 265 and 275 parking spaces; however, to be consistent with the analysis provided in the Transportation Impact Study prepared for the project and the analysis provided in Chapter IV.A, Transportation and Circulation and for comparison purposes to project alternatives, it is assumed that the proposed project would provide 277 spaces. In addition, off-street parking garage spaces may include between two and six car share spaces.

[b] On-street parking spaces would increase compared to the proposed project due to the removal of existing on-street curb cuts.

Source: Related/Mariposa Development Co., LLC, 2014.

NO PROJECT ALTERNATIVE

Description

Under the CEQA-required No Project Alternative, the site would generally remain in its existing condition and would not be redeveloped with a mix of residential, commercial, and open space uses. No open space would be developed within the site and no changes to surrounding loading or curb space would occur. The existing underground storage tanks (USTs) would not be removed and associated soil contamination would not be remediated and removed. This alternative is intended to reduce or avoid impacts associated with building demolition, site preparation, construction activities, and effects associated with the operation of more intense uses on the site. The three existing one- and two-story structures (plus two sheds and a trailer), 100 surface parking spaces, 15 bus parking spaces, and 6 loading spaces would be retained, and the total 74,696 gsf occupied by commercial, office, warehouse, and automotive uses, including 68,570 gsf of production, distribution and repair (PDR) uses would continue operating at the site. Building heights on the site would not be increased.

Objectives

Because the physical environment of the site would be unchanged, the No Project Alternative would not achieve any of the project sponsor's objectives for the project. In particular, objectives regarding the redevelopment of a large underutilized site, creation of a mixed-use project within the UMU District, contribution to regional housing needs, provision of affordable dwelling units, provision of publicly-accessible open space, and provision of new neighborhood services would not be achieved.

Impacts

Transportation and Circulation

Existing circulation patterns within and in the vicinity of the site would continue under the No Project Alternative. Unlike the proposed project, under the No Project Alternative there would be no changes to traffic, transit, pedestrian, bicycle, loading, emergency vehicle access, or parking conditions compared to existing conditions. Therefore, compared to the proposed project, which would have significant unavoidable project impacts at one study intersection and significant

unavoidable cumulative impacts at two study intersections, and less-than-significant, transit, pedestrian, bicycle, loading, emergency vehicle access, parking and transportation-related construction impacts, the No Project Alternative would not result in any impacts related to transportation and circulation. Parking conditions within and in the vicinity of the project would also not change. The proposed alterations to the existing pedestrian circulation pattern including the proposed mid-block pedestrian pathway and plaza between Mariposa and 18th Streets, would not occur under this alternative.

Shadow

Under the No Project Alternative, shadow conditions around the site would remain unchanged. This alternative would not cast new shadow on open space facilities in the vicinity of the project site, including Jackson Playground, which would receive minimal amounts of net new shadow with implementation of the project. The proposed project's impact related to shadows would be less than significant; the No Project Alternative would result in no impact to shadow conditions.

Recreation

The No Project Alternative would not increase the population on the project site by introducing new residential uses, and there would not be an increase in demand for park and recreational services. Therefore, this alternative would not result in any increased usage that could result in the construction or alteration of facilities to provide such services to project residents. The project's impacts related to recreation would be less than significant; the No Project Alternative would result in no impact related to the provision of parks and recreational services.

Hazards and Hazardous Materials

Under the No Project Alternative, remediation, excavation, demolition, and construction activities would not occur at the project site and no residential, commercial, or open space uses would be developed. The proposed project's impacts related to the potential release of hazardous building materials during demolition and release of hazardous soils and groundwater during remediation,

construction, and operation would not occur, and no mitigation would be required with implementation of the No Project Alternative. Clean up and remediation of toxic contaminants at the project site would not occur and existing hazardous soil and groundwater conditions at the site would persist under the No Project Alternative.

REDUCED DENSITY ALTERNATIVE

Description

Under the Reduced Density Alternative all existing on-site buildings and surface pavements on the project site would be demolished and the site would be redeveloped with a mix of residential and commercial uses within two buildings. A total of 114 residential units and 3,510 square feet of commercial uses would be developed, for a total building area of 145,070 gsf.[3] Similar to the proposed project a sub-surface parking garage would provide off-street parking, with approximately 106 parking spaces, including two car share spaces, on the eastern half of the site. Maximum building heights would be less than the proposed project and would not exceed 30 feet; however, total building heights would range from 20 to 30 feet, with the concentration of lower two- to three-story building heights located along the 18th Street and Arkansas Street frontages, and within the interior of the site. The conceptual ground level uses and Level 1 West Building/Garage East Building site plans are depicted in **Figures VI-1 and VI-2**, respectively (refer to Figures II-5 and II-6 in Chapter II, Project Description for corresponding proposed project site plans). Building massing for the Reduced Density Alternative as seen from the southeast and the northwest is depicted in **Figures IV-3 and IV-4**, respectively. The Reduced Density Alternative would require two of the four modifications, waivers, and exceptions that are requested for the proposed project. The exception for non-residential ground floor floor-to-floor heights and horizontal mass reduction would not be required. The specific elements of this alternative are described below.

[3] The Reduced Density Alternative was specifically developed to reduce the project's potential level of service impacts to study intersections to a less-than-significant level. The development assumptions for the Reduced Density Alternative reflect the maximum number of residential units and commercial square footage that could be developed at the site without resulting in traffic-related impacts.

Building Characteristics

The configuration of the West Building would be similar to the configuration of the proposed project (see Figure II-5), although compared to the proposed project: 1) commercial uses would not extend along the Carolina Street frontage; 2) building heights throughout the site would be reduced from a maximum of 40 feet to a maximum of 30 feet; and 3) the size of the open courtyard within the interior of the East Building would increase. The East Building would consist of two- to three-stories of residential use and would occupy a considerably smaller footprint within the project site than the proposed project.

The East Building would be configured around a large internal podium-level courtyard and the eastern and western corners of the building would be set back approximately 0[4] to 8 feet from the Live Oak School's property line. Most of the northern property line that borders the school would include the same 9- to 20-foot setback between the Live Oak School and the proposed corridor behind the residential units. A two-story building component would be adjacent to the internal pathway (called the "light court" for the proposed project) and two-story townhomes would be concentrated along the 18th Street and Arkansas Street frontages. The two-story townhomes along 18th Street and Arkansas Street would be above one-story flats that would be accessed from the internal courtyard. A single-level below-grade parking structure would also be located under this building.

The West Building would be similar to the proposed project configuration but would consist of two to three levels of mixed-use development surrounding an at-grade open space courtyard, instead of the three to four levels proposed by the project. This courtyard would expand where it meets the pedestrian pathway that would bisect the development. Ground-floor commercial space would be concentrated at the corner of Mariposa and Carolina Streets and some residential units would be located at the ground-level along Carolina Street. Similar to the proposed project, there would be no below-grade parking under this building.

[4] The zero foot setback includes the below-grade garage, which is built to the property line.

FIGURE VI-1

NOT TO SCALE

SOURCE: DAVID BAKER + PARTNERS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR

Reduced Density Alternative - Conceptual Ground Level Uses

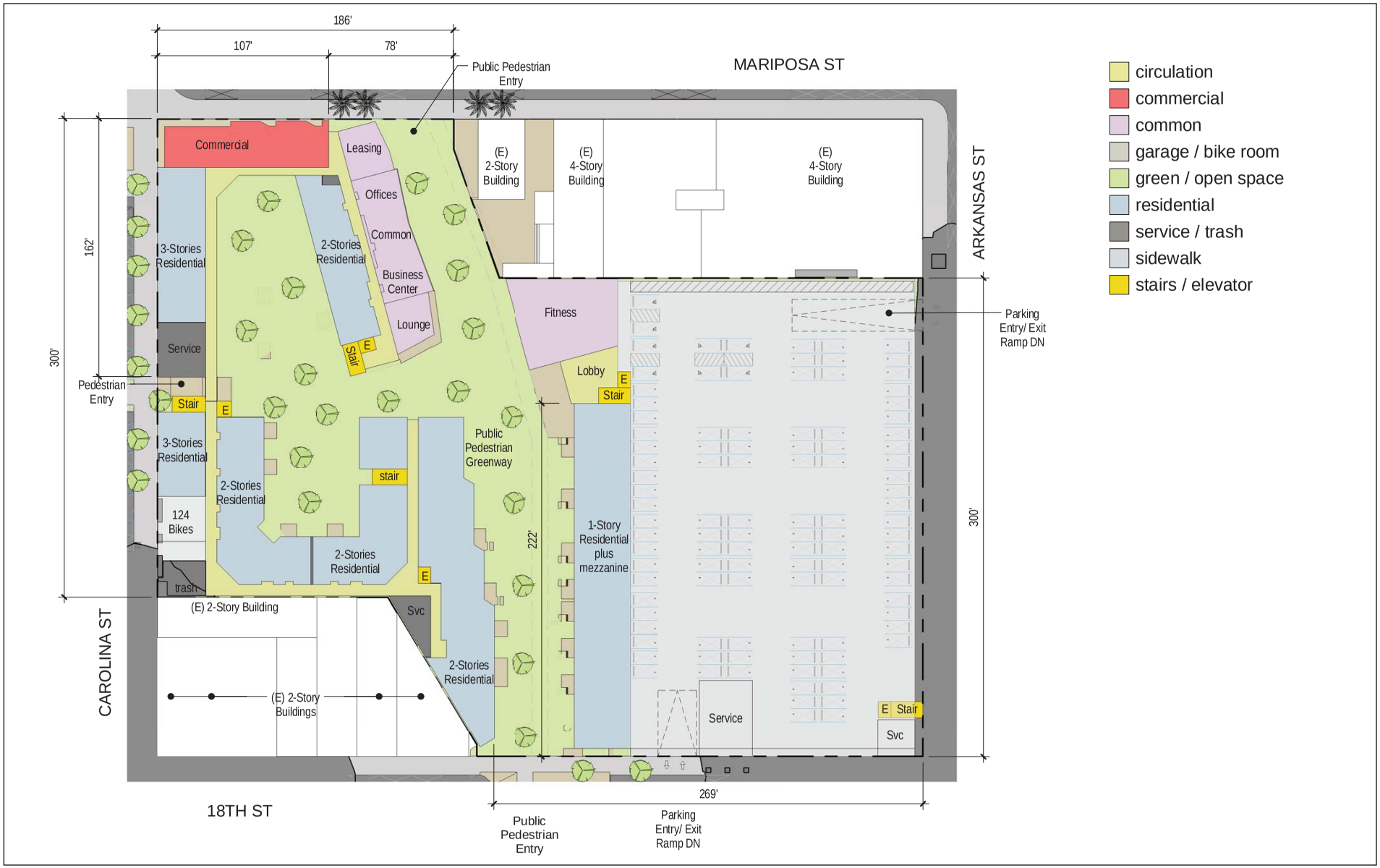

FIGURE VI-2

NOT TO SCALE

SOURCE: DAVID BAKER + PARTNERS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Density Alternative -
Conceptual Level 1 West Building/Garage East Building

FIGURE VI-3

NOT TO SCALE

SOURCE: DAVID BAKER + PARTNERS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Density Alternative -
Conceptual Massing, Looking Southeast

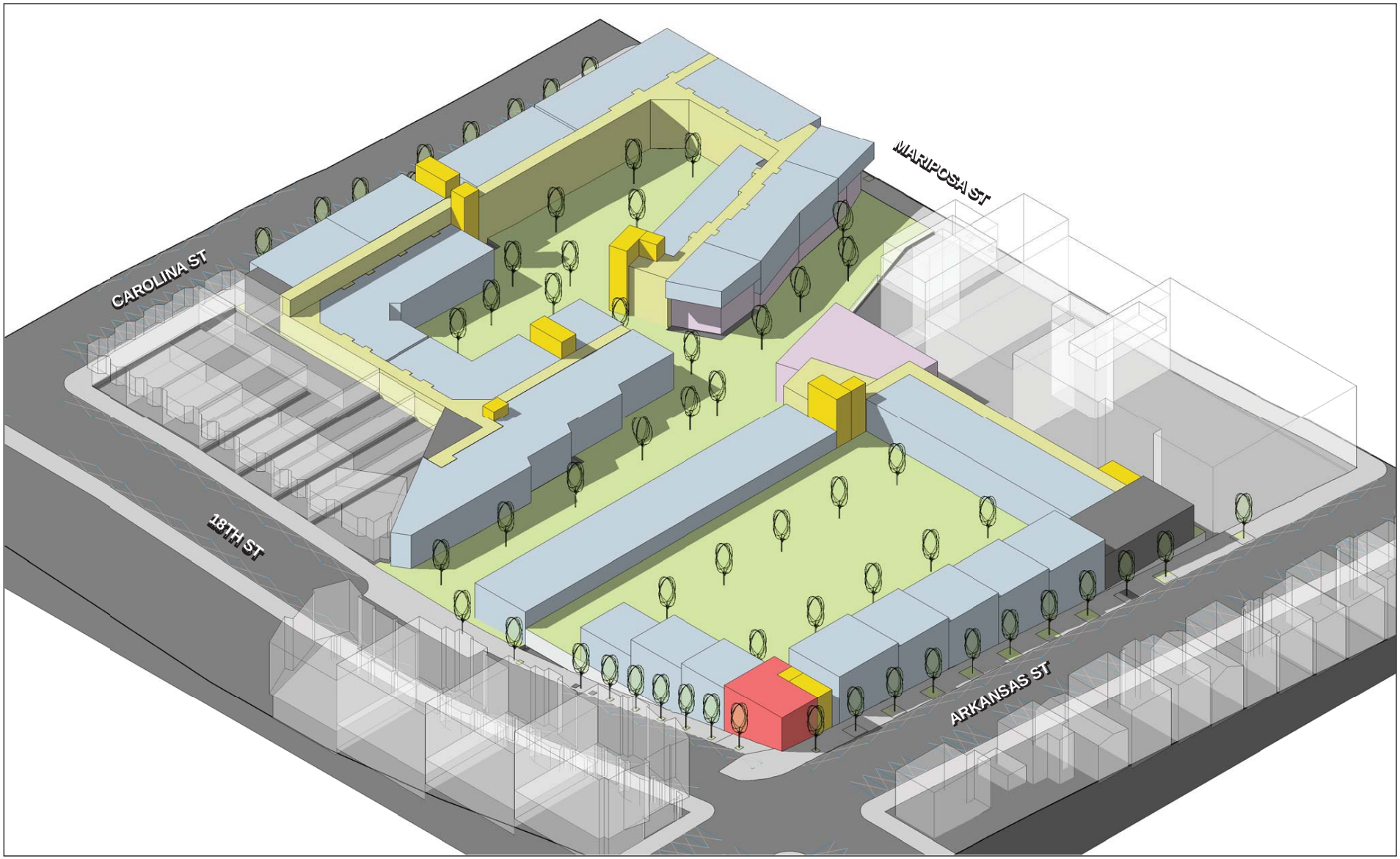

FIGURE VI-4

NOT TO SCALE

SOURCE: DAVID BAKER + PARTNERS, NOVEMBER 2014.

1601 Mariposa Street Mixed Use Project EIR

Reduced Density Alternative - Conceptual Massing, Looking Northwest

The number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units distributed throughout both buildings is shown in **Table VI-1**. The location and type of residential amenities would be similar to the proposed project.

Building heights for the West Building would range from 20 to 30 feet and for the East Building would range from 20 to 30 feet, and from generally two to four stories along the project site (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height, and two stair overruns up to 10 feet in height), measured from the average adjacent curb level.

Open Space and Landscaping

Under the Reduced Density Alternative the type and location of open space and landscaped areas would be similar to the proposed project, except there would be a larger open space area within the interiors of both the East and West Buildings. A total of approximately 73,095 gsf of publicly accessible and private open space would be developed throughout the site. Similar to the proposed project, open space would include a publicly accessible mid-block pedestrian pathway between the two buildings; all other open space would be private and only accessible to residents. Similar to the proposed project, approximately 27 new street trees would be planted on the four street frontages.

Access and Parking

Pedestrian access to and through the site under the Reduced Density Alternative would be similar to the proposed project, with the exception that two pedestrian access points would be eliminated from 18th Street and Arkansas Street. Parking would be provided within a single-level sub-surface garage rather than a two-level garage as is proposed by the project. Up to 106 parking spaces for use by project residents and commercial tenants, including up to two car share spaces would be provided. Similar to the proposed project, ingress and egress would be provided by access points on Arkansas Street and 18th Street. Due to the removal of two pedestrian access points proposed by the project, this alternative would result in the creation of one additional on-street parking space when compared to the proposed project, resulting in five new on-street parking spaces. Bicycle parking spaces would

also be provided throughout the site in secured bicycle racks. Similar to the proposed project, the Reduced Density Alternative would modify the configuration of existing on-street parking spaces adjacent to the site to including the removal of existing curb cuts and to allow for two new loading spaces (three are proposed by the project).

Objectives

The Reduced Density Alternative would achieve some of the project sponsor's objectives for the project. Because this alternative would allow for redevelopment of the site with a mix of residential, commercial, and open space land uses, but at a density substantially less than the proposed project, objectives regarding the development of a range of uses on an underutilized site, contribution to the City's regional housing and affordable housing needs, and provision of neighborhood services would be achieved to a lesser extent than the proposed project. The Reduced Density Alternative would also comply with the UMU District zoning and the existing height and bulk requirements for the site. Because the intensity of proposed uses would be less than that of the project, most of the project sponsor's objectives would be achieved to a lesser extent than the proposed project.

Impacts

Transportation and Circulation

Under the Reduced Density Alternative there would be a reduction in the overall square footage of proposed uses as compared to the proposed project. The Reduced Density Alternative would result in approximately 206 fewer residential units and 6,490 less gsf of commercial space when compared to the 320 residential units and 10,000 gsf of commercial space proposed by the project. This alternative would include 5,000 gsf of light industrial uses.

Travel demand for the Reduced Density Alternative was estimated consistent with the methodology presented in Section IV.A, Transportation and Circulation. **Table VI-2** summarizes the PM peak hour trips by mode for the Reduced Density Alternative as compared to the proposed project. Overall, the Reduced Density Alternative would represent a 65 percent decrease in both retail and residential land uses; therefore, the number of person- and vehicle-trips is substantially lower compared to the

proposed project (363 total trips with the Reduced Density Alternative rather than 1,052 under the proposed project).

Table VI-2: Trip Generation by Mode, Weekday PM Peak Hour – Proposed Project and Reduced Density Alternative

Project/Alternative	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[a]	Total[b]	
Proposed Project	661	190	167	64	1,052	452
Reduced Density Alternative	244	67	59	23	363	141

[a] "Other" mode includes bicycles, motorcycles, and taxis.

[b] Total trips include a credit for existing land uses, which accounts for a 30 trip reduction.

Sources: *SF Guidelines; 2000 U.S. Census;* DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

The Reduced Density Alternative would reduce the demand for loading spaces to less than one space when compared to the proposed project. For the Reduced Density Alternative, the parking demand would be reduced from 567 spaces for the proposed project to 219 spaces. An analysis of the traffic (project and cumulative), transit, pedestrian circulation, bicycle circulation, loading, emergency access, and construction-related impacts associated with the Reduced Density Alternative is provided below. Parking conditions are also discussed, for informational purposes.

Traffic Impacts. The proposed project identified significant and unavoidable project impacts to one of the 13 study intersections for Existing Plus Project conditions: Mariposa Street and Mississippi Street (Intersection 5). In addition, significant unavoidable impacts were identified for two of the 13 study intersections under 2025 Cumulative Plus Project conditions: 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5). The Reduced Density Alternative was specifically developed to reduce the project's project-specific and cumulative level of service impacts to these study intersections to a less-than-significant level. This alternative would eliminate all of the project-specific and cumulative traffic-related significant and unavoidable impacts of the proposed project, and operational level of service impacts to all 13 study intersections would be less than significant.

As discussed in Section IV.A, Transportation and Circulation, the unsignalized intersection of Mariposa Street and Mississippi Street currently operates at LOS F during the PM peak hour at the worst (westbound) approach. While the proposed project would contribute about 10 percent to the total PM peak hour westbound approach volume and thus result in a significant and unavoidable impact related to the operations of the intersection, the Reduced Density Alternative would contribute only 3.6 percent to this intersection, resulting in a less-than-significant impact. Similarly, under 2025 Cumulative conditions, the intersection operates at LOS F during the PM peak hour. While the proposed project would contribute 12.7 percent to the PM peak hour westbound (worst) approach and thus have a significant impact on the operations of the intersection, the Reduced Density Alternative would contribute only 4 percent to the critical westbound approach volume (below the five percent significance threshold contribution) and have a less-than-significant impact on the intersection.

As discussed in Section IV.A, Transportation and Circulation, under 2025 Cumulative conditions, the intersection of 16th Street and Arkansas Street would operate at LOS F and the project-related contribution would represent about 14 percent of the total PM peak hour volume, resulting in a significant and unavoidable impact. However, the Reduced Density Alternative's contribution to this unacceptable operating condition would be 4.5 percent (below the five percent significance threshold contribution). As a result, the Reduced Density Alternative's contribution to unacceptable operating conditions at this intersection would not be substantial and this impact would be less than significant, unlike under the proposed project.

Transit Impacts. As shown in **Table VI-2**, the number of transit trips generated by the Reduced Density Alternative would be less than that of the proposed project. As discussed in Section IV.A, Transportation and Circulation, the proposed project would result in a less-than-significant impact to local and regional transit. Therefore, implementation of this alternative would also result in a less-than-significant impact related to transit and this impact would be incrementally less than the proposed project.

Pedestrian Impacts. As shown in **Table VI-2**, the Reduced Density Alternative would generate fewer pedestrian trips than the proposed project. Two pedestrian access points to the East Building would also be eliminated with the Reduced Density Alternative, as compared to the proposed project. As discussed in Section IV.A, Transportation and Circulation, the proposed project would not result in overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, or create potentially hazardous conditions for pedestrians, and would create additional corridors for pedestrian circulation; therefore, pedestrian circulation impacts associated with the proposed project would be less-than-significant. Because fewer pedestrian trips would be generated by the Reduced Density Alternative this impact would also be less than significant under this alternative and would be incrementally less than the proposed project. An improvement measure similar to Improvement Measure I-TR-4, which would reduce pedestrian circulation conflicts at entrances to on-site parking areas, would also be recommended for this alternative.

Bicycle Impacts. Similar to the proposed project, the Reduced Density Alternative would provide Class 1 and 2 bicycle parking spaces throughout the project site within secured racks to meet the San Francisco Planning Code requirements, as shown in **Table VI-1**. As shown in **Table VI-2**, the Reduced Density Alternative would generate fewer bicycle trips than the proposed project and, similar to the proposed project, would not result in overcrowding on nearby bicycle routes, interfere with bicycle circulation, or create potentially hazardous conditions for bicycles. Therefore, implementation of the Reduced Density Alternative would result in a less-than-significant impact related to bicycle facilities and bicycle travel in the vicinity of the project site.

Loading Impacts. Loading demand, as compared to the proposed project, is presented in **Table VI-3**. As shown in **Table VI-1**, three on-street loading spaces are proposed as part of the proposed project and the proposed project provides the required number of space to meet the project demand and project impacts related to loading areas and circulation would be less than significant. The Reduced Density Alternative would include two on-street loading spaces and would also meet the loading requirements to serve demand generated by this alternative. Therefore, similar to the proposed

project, the Reduced Density Alternative would also result in a less-than-significant impact related to loading. Implementation of I-TR-6 would also be recommended for this alternative.

Table VI-3: Delivery/Service Vehicle-Trips and Loading Space Demand – Proposed Project and Reduced Density Alternative

Project/Alternative	Daily Truck Trip Generation	Peak Hour Loading Spaces	Average Hour Loading Spaces
Proposed Project	37.1	2.15	1.72
Reduced Density Alternative	13.0	0.75	0.60

Sources: *SF Guidelines*; DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

Emergency Access Impacts. Under both the proposed project and the Reduced Density Alternative, emergency access would be maintained along Carolina Street, Mariposa Street, Arkansas Street, and 18th Street. Therefore, similar to the proposed project, the Reduced Density Alternative's impact to emergency access would be less than significant.

Construction Impacts. Construction activities associated with the Reduced Density Alternative would be similar to those described for the proposed project. However, the duration and scale of the activities could be less given the reduced scale of this alternative. Similar to the proposed project, the construction-related transportation impacts of this alternative would be less than significant due to their temporary and limited duration. Improvement Measure I-TR-8, identified for the proposed project, would also be applicable to this alternative to further reduce its less-than-significant construction period transportation-related effects.

Parking. For informational purposes, **Table VI-4** presents the parking supply and demand comparisons for the proposed project and the Reduced Density Alternative. As shown, the Reduced Density Alternative would result in a shortfall of 108 spaces. Unoccupied on-street parking in the area within a reasonable distance from the project site would be able to meet the unmet demand for the proposed project for both the midday and evening periods. The unmet demand for the Reduced Density Alternative is less than that of the proposed project, and the secondary effects (i.e., impacts

related to air quality or increased traffic congestion due to motorists searching for available spaces) of the increased demand for parking were determined to be less than significant for both periods.

Table VI-4: Vehicle Parking Supply and Demand – Proposed Project and Reduced Density Alternative

Project/Alternatives	Supply	Demand	(Shortfall)/Surplus
Proposed Project	281	567	(286)
Reduced Density Alternative	111	219	(108)

Sources: *SF Guidelines*; DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

Shadow

Shadow cast by the Reduced Density Alternative would be similar to shadows cast by the proposed project, with the exception of shadows cast by the East Building. The East Building footprint and massing would be substantially less than the proposed project, and therefore, shadows cast by this building would be less than the proposed project. Under both proposed project and Reduced Density Alternative conditions, the East Building would not cast new shadows onto Jackson Playground. Shadows cast onto the Live Oak School's private play area would be similar to the proposed project, although shadows cast onto the school building itself would be slightly less given that the structure would be only three stories instead of four stories immediately adjacent to the school. Shadows cast by the West Building would also be less than the proposed project because proposed buildings heights would be two and three stories rather than three and four stories. Net new shadows would still be cast onto Jackson Playground under this alternative; however, the impacts to the use of Jackson Playground as a result of increased shadow would be somewhat further reduced compared to the already less than significant impacts from the proposed project.

Recreation

The Reduced Density Alternative would increase the density of development on the project site, but to a lesser extent than the proposed project. In addition, the alternative would provide approximately 73,095 gsf of open space on the project site, which is approximately 34,000 gsf more than the proposed project. Thus, the increase in demand for park and recreational services would be somewhat less than the proposed project. Similar to the proposed project, this alternative would not require the construction or alteration of facilities to provide such services to project residents resulting in a substantial physical environmental impact, and impacts related to the provision of parks or recreational services would be less than significant.

Hazards and Hazardous Materials

Under the Reduced Density Alternative, remediation, excavation, demolition, and construction activities at the site would be similar to the proposed project. The proposed project would result in less-than-significant impacts with mitigation related to the potential release of hazardous building materials during demolition and the release of hazardous soils and groundwater during remediation, construction, and operation. Implementation of the Reduced Density Alternative would result in similar impacts as the proposed project and implementation of Mitigation Measures HZ-2a through HZ-2e would be required to reduce these impacts to a less-than-significant level.

REDUCED HEIGHT ON MARIPOSA STREET ALTERNATIVE

Description

Under the Reduced Height on Mariposa Street Alternative (Reduced Height Alternative) all existing on-site buildings and surface pavements on the project site would be demolished and the site would be redeveloped with a mix of residential, commercial, and light industrial uses within two buildings. A total of 289 residential units, 9,000 square feet of commercial uses, and 5,000 square feet of light industrial space would be developed, for a total building area of 410,616 gsf. Similar to the proposed project a sub-surface parking garage would provide off-street parking, with approximately 254 spaces, including six car share spaces on the eastern half of the site. Similar to the proposed project, building

heights would not exceed 40 feet; however, total building heights would range from 20 to 40 feet, with the concentration of lower two to three-story building heights located along the Mariposa Street frontage. The conceptual ground level uses, Level 1 West Building/Lower Garage East Building, and Level 2 West Building/Upper Garage East Building site plans are depicted in **Figures VI-5, VI-6, and VI-7** respectively (refer to Figures II-5, II-6, and II-7 in Chapter II, Project Description for corresponding proposed project site plans). Building massing for the Reduced Height Alternative as seen from the southeast and the northwest is depicted in **Figures IV-8 and IV-9**, respectively. The Reduced Height Alternative would require the same four modifications, waivers, and exceptions that are requested for the proposed project. The specific elements of this alternative are described below.

Building Characteristics

The configuration of the East and West Buildings would be similar to the configuration of the proposed project (see Figure II-5). The East Building would consist of four levels of residential use. Similar to the proposed project, this building would be set back from the south-facing property line windows of the Live Oak School building. A two-level below-grade parking structure would also be located under this building.

The West Building would be similar to the proposed project configuration and would consist of four levels of mixed-use development surrounding an at-grade open space courtyard. Ground-floor commercial space would be concentrated at the corner of Mariposa and Carolina Streets and along the Carolina Street frontage. Up to 5,000 square feet of light industrial space would also be located along the Carolina Street frontage. Residential units would be located on the first through fourth stories. Similar to the proposed project, there would be no below-grade parking under this building.

The number of studio, 1-bedroom, 2-bedroom, and 3-bedroom units distributed throughout both buildings is shown in **Table VI-1**. The location and type of residential amenities would be similar to the proposed project.

Building heights for the West Building would range from 20 to 40 feet and for the East Building would range from 31 to 40 feet, and from generally two to four stories along the project site (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height, and two stair overruns up to 10 feet in height), measured from the average adjacent curb level. Building heights along Mariposa Street would be reduced and setbacks would be increased as compared to the proposed project. Specifically, the West Building would be set back approximately 13 feet from Mariposa Street at the ground level. Along Mariposa Street, the commercial space would be one level, the second story residential level would be stepped back approximately 53 feet from the first story, and the third residential level would be stepped back an additional 41 feet from the second level, or about 107 feet from the property line.

Open Space and Landscaping

Under the Reduced Height Alternative the type and location of open space and landscaped areas would be similar to the proposed project, except that the sidewalk on Mariposa Street would be widened in front of the West Building, which would be set back from the street front. A total of approximately 38,195 gsf of publicly accessible and private open space would be developed throughout the site under the Reduced Height Alternative. Similar to the proposed project, open space would include a publicly accessible mid-block pedestrian pathway between the two buildings; all other open space (except the widened sidewalk) would be private and only accessible to residents. Similar to the proposed project, approximately 27 new street trees would be planted on the four street frontages.

FIGURE VI-5

NOT TO SCALE

N

SOURCES: DAVID BAKER + PARTNERS; RELATED, OCTOBER 2014.

1601 Mariposa Street Mixed Use Project EIR

Reduced Height on Mariposa Street Alternative - Conceptual Ground Level Uses

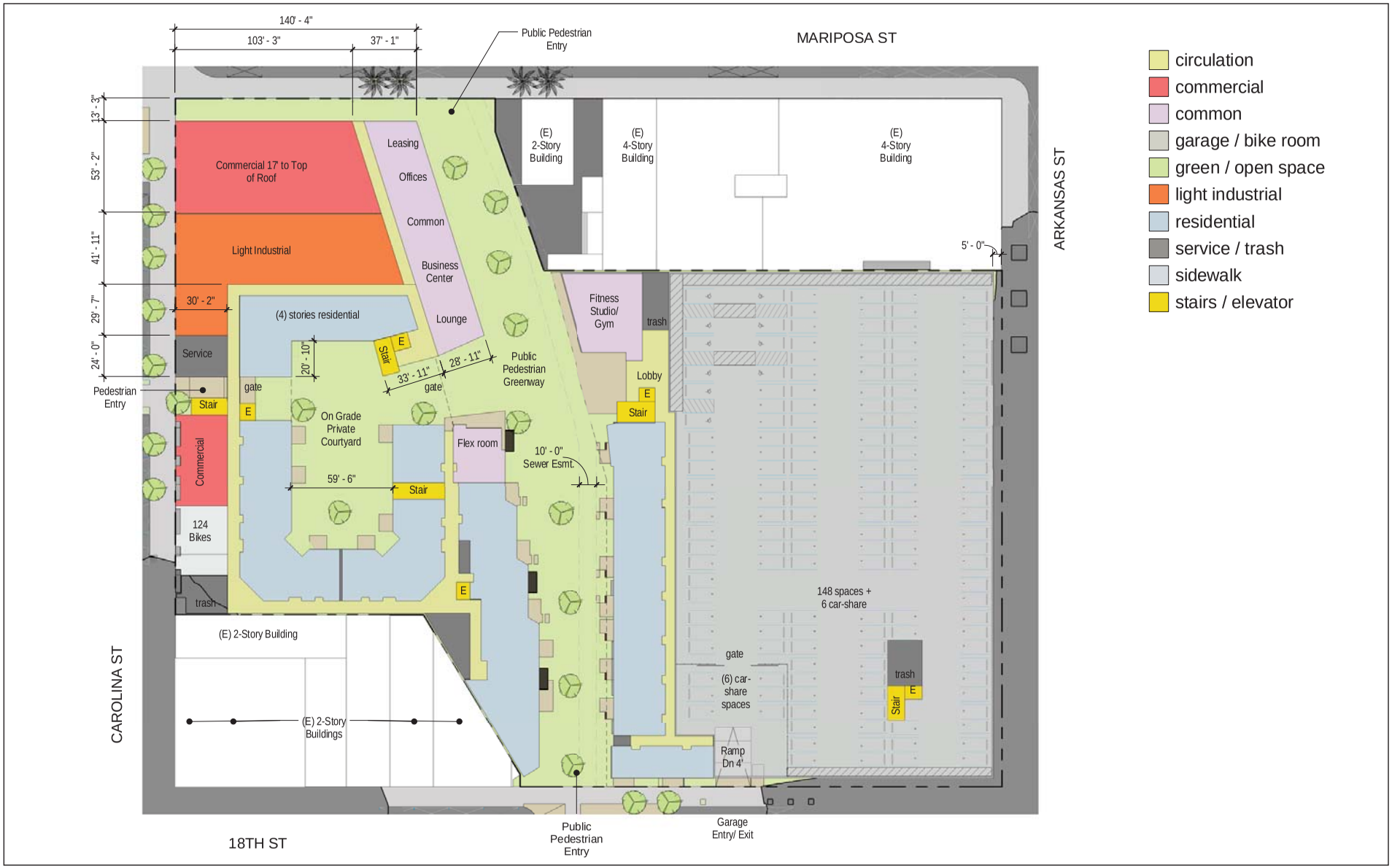

FIGURE VI-6

NOT TO SCALE

SOURCES: DAVID BAKER + PARTNERS; RELATED, OCTOBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative -
Conceptual Level 1 West Building/Lower Garage East Building

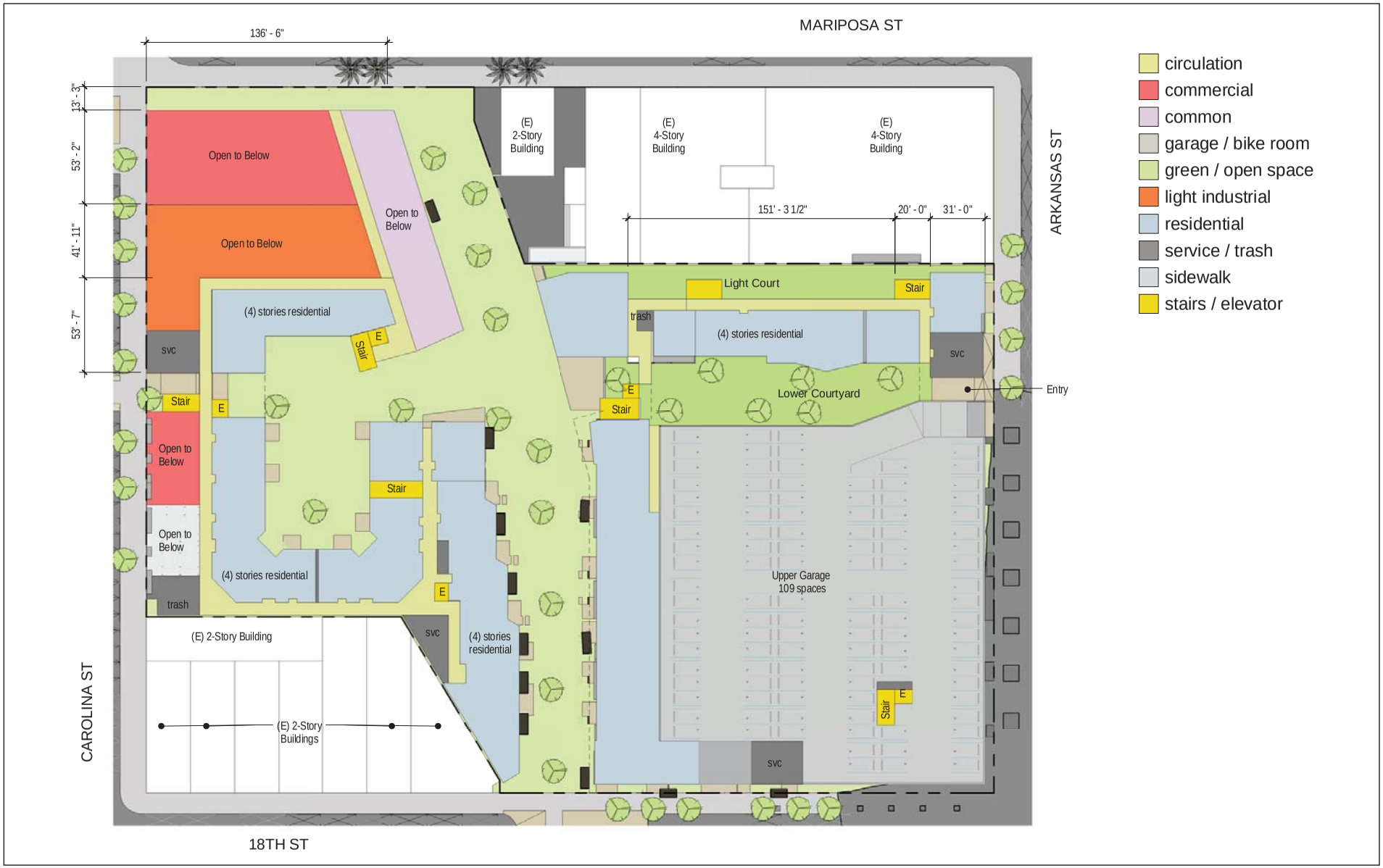

FIGURE VI-7

NOT TO SCALE

SOURCES: DAVID BAKER + PARTNERS; RELATED, OCTOBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative -
Conceptual Level 2 West Building/Upper Garage East Building

FIGURE VI-8

NOT TO SCALE

SOURCES: DAVID BAKER + PARTNERS; RELATED, OCTOBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative - Conceptual Massing, Looking Southeast

FIGURE VI-9

NOT TO SCALE

SOURCES: DAVID BAKER + PARTNERS; RELATED, OCTOBER 2014.

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative -
Conceptual Massing, Looking Northwest

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Access and Parking

Pedestrian access to and through the site under the Reduced Height Alternative would be similar to the proposed project. Parking would be provided within a two-level garage as is proposed by the project. Up to 254 parking spaces for use by project residents and commercial and light industrial tenants, including six car share spaces would be provided. Ingress and egress would be provided by access points on Arkansas Street (upper level) and 18th Street (lower level). Bicycle parking spaces would also be provided throughout the site within secured racks. Similar to the proposed project, the Reduced Height Alternative would modify the configuration of existing on-street parking spaces adjacent to the site to including the removal of existing curb cuts to allow for three new loading spaces.

Objectives

The Reduced Height Alternative would achieve the project sponsor's objectives for the project, but to a lesser extent than the proposed project. Because this alternative would allow for redevelopment of the site with a mix of residential, commercial, and open space land uses, objectives regarding the development of a range of uses on an underutilized site, contribution to the City's regional housing and affordable housing needs, and provision of neighborhood services would be achieved, but to a lesser extent than the proposed project. The Reduced Height Alternative would also comply with the UMU District zoning and the existing height and bulk requirements for the site. The type and intensity of development on the site would be similar but less intensive than the proposed project.

Impacts

Transportation and Circulation

Under the Reduced Height Alternative the intensity of development proposed for the site would be similar to the proposed project, although the mix of uses would be slightly different with the inclusion of light industrial space. The Reduced Height Alternative would result in approximately 31 fewer residential units and about 4,000 additional gsf of non-residential commercial/light industrial space when compared to the proposed project.

Travel demand for the Reduced Height Alternative was estimated consistent with the methodology presented in Section IV.A, Transportation and Circulation. **Table VI-5** summarizes the PM peak hour trips by mode for the Reduced Height Alternative as compared to the proposed project. Overall, the Reduced Height Alternative would represent a similar level of development as the proposed project; therefore, the number of person- and vehicle-trips is only slightly less than the proposed project (1,012 total trips rather than 1,052). The Reduced Height Alternative would result in a similar demand for loading space as the proposed project. For the Reduced Height Alternative, the parking demand would be reduced from 567 spaces for the proposed project to 525 spaces. An analysis of the traffic (project and cumulative), transit, pedestrian circulation, bicycle circulation, loading, emergency access, and construction-related impacts associated with the Reduced Height Alternative is provided below. Parking conditions are also discussed.

Table VI-5: Trip Generation by Mode, Weekday PM Peak Hour – Proposed Project and Reduced Height Alternative

Project/Alternative	Person-Trips					Vehicle-Trips
	Auto	Transit	Walk	Other[a]	Total[b]	
Proposed Project	661	190	167	64	1,052	452
Reduced Height Alternative	628	189	162	63	1,012	409

[a] "Other" mode includes bicycles, motorcycles, and taxis.

[b] Total trips include a credit for existing land uses, which accounts for a 30 trip reduction.

Sources: *SF Guidelines*; DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

Traffic Impacts. The proposed project identified significant and unavoidable project impacts to one of the 13 study intersections for Existing Plus Project conditions: Mariposa Street and Mississippi Street (Intersection 5). In addition, significant unavoidable impacts were identified for two of the 13 study intersections for 2025 Cumulative Plus Project conditions: 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5). Project and cumulative level traffic impacts for the proposed project and the Reduced Height Alternative are discussed in detail below. This alternative would not eliminate any of the significant and unavoidable traffic-related project- and cumulative-level impacts of the proposed project, as discussed below.

As discussed in Section IV.A, Transportation and Circulation, the unsignalized intersection of Mariposa Street and Mississippi Street currently operates at LOS F during the PM peak hour at the worst (westbound) approach. The proposed project would contribute about 10 percent to the total PM peak hour westbound approach volume and thus result in a significant unavoidable impact related to the operations of the intersection. Similarly, the Reduced Height Alternative would contribute 9.5 percent to this intersection, resulting in a significant unavoidable impact. Under Cumulative Conditions, this intersection operates at LOS F during the PM peak hour. The proposed project would contribute 12.7 percent to the PM peak hour westbound (worst) approach and thus have a significant impact on the operations of the intersection. Similarly, the Reduced Height Alternative would contribute 11.4 percent to the critical westbound approach volume and would result in a significant and unavoidable impact on the intersection.

Under 2025 Cumulative conditions, the intersection of 16th Street and Arkansas Street would operate at LOS F and the project-related contribution would represent 13.6 percent of the total PM peak hour volume for this approach under cumulative conditions, resulting in a significant and unavoidable impact. Under the Reduced Height Alternative, the contribution would be 12.7 percent; therefore, the Reduced Height Alternative's cumulative contribution to unacceptable operating conditions at this intersection would also be significant and unavoidable.

Similar to the proposed project, Improvement Measures I-TR-1a and I-TR-1b would also be recommended for this alternative.

Transit Impacts. As shown in **Table VI-5**, the number of transit trips generated by the Reduced Height Alternative would be less than that of the proposed project. As discussed in Section IV.A, Transportation and Circulation, the proposed project would result in a less-than-significant impact to local and regional transit. Therefore, implementation of the alternative would also result in a less-than-significant impact related to transit and this impact would be incrementally less than the proposed project given that the demand for services would be lower.

Pedestrian Impacts. As shown in **Table VI-5**, the Reduced Height Alternative would generate a fewer number of pedestrian trips when compared to the proposed project. As discussed in Section IV.A, Transportation and Circulation, the proposed project would not result in overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, or create potentially hazardous conditions for pedestrians, and would create additional corridors for pedestrian circulation; therefore, pedestrian circulation impacts associated with the proposed project would be less-than-significant. Because fewer pedestrian trips would be generated by the Reduced Height Alternative this impact would also be less than significant under this alternative. An improvement measure similar to Improvement Measure I-TR-4, which would reduce pedestrian circulation conflicts at entrances to on-site parking areas, would also be recommended for this alternative.

Bicycle Impacts. Similar to the proposed project, the Reduced Height Alternative would provide Class 1 and 2 bicycle parking spaces within the garage to meet the San Francisco Planning Code requirements, as shown in **Table VI-1**. As shown in **Table VI-5**, the Reduced Height Alternative would generate fewer bicycle trips than the proposed project and, similar to the proposed project, would not result in overcrowding on nearby bicycle routes, interfere with bicycle circulation, or create potentially hazardous conditions for bicycles. Therefore, implementation of the Reduced Height Alternative would result in a less-than-significant impact related to bicycle facilities and bicycle travel in the vicinity of the project site.

Loading Impacts. Loading demand for the Reduced Height Alternative, as compared to the proposed project, is presented in **Table VI-6**. As shown in **Table VI-1**, three on-street loading spaces would be provided as part of the proposed project, the proposed project provides the required number of space to meet the project demand and project impacts related to loading areas and circulation would be less than significant. The Reduced Height Alternative would also include three on-street loading spaces to serve the residential, commercial, and light industrial uses and would also meet the loading requirements to serve demand generated by this alternative. The loading requirements for the different mix of uses identified under this alternative, as compared to the proposed project, would not create any new pedestrian or vehicle conflicts because additional loading spaces would not be required and the frequency of loading activities is expected to be similar to the proposed project.

Therefore, similar to the proposed project, the Reduced Height Alternative would also result in a less-than-significant impact related to loading. Similar to the proposed project Improvement Measure I-TR-6 would also be recommended for this alternative.

Table VI-6: Delivery/Service Vehicle-Trips and Loading Space Demand – Proposed Project and Reduced Height Alternative

Project/Alternative	Daily Truck Trip Generation	Peak Hour Loading Spaces	Average Hour Loading Spaces
Proposed Project	37.1	2.15	1.72
Reduced Height Alternative	34.5	2.00	1.60

Sources: *SF Guidelines*; DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

Emergency Access Impacts. Under both the proposed project and the Reduced Density Alternative, emergency access would be maintained along Carolina Street, Mariposa Street, Arkansas Street, and 18th Street. Therefore, similar to the proposed project, the Reduced Density Alternative's impact to emergency access would be less than significant.

Construction Impacts. Construction activities associated with the Reduced Height Alternative would be similar to those described for the proposed project. The construction-related transportation impacts of this alternative would be less than significant due to their temporary and limited duration, as would the proposed project. Improvement Measure I-TR-8, identified for the proposed project, would also be applicable to this alternative to further reduce its less-than-significant construction period transportation-related effects.

Parking. For information purposes, **Table VI-7** presents the parking supply and demand comparisons for the proposed project and the Reduced Height Alternative. As shown, the Reduced Height Alternative would result in a shortfall of 267 spaces. Unoccupied on-street parking in the area within a reasonable distance from the project site would be able to meet the unmet demand for the proposed project for both the midday and evening periods. The unmet demand for the Reduced Height Alternative is similar to that of the proposed project, and the secondary effects (i.e., impacts related to air quality or increased traffic congestion due to motorists searching for available spaces) of the increased demand for parking were determined to be less than significant for both periods.

Table VI-7: Vehicle Parking Supply and Demand – Proposed Project and Reduced Height Alternative

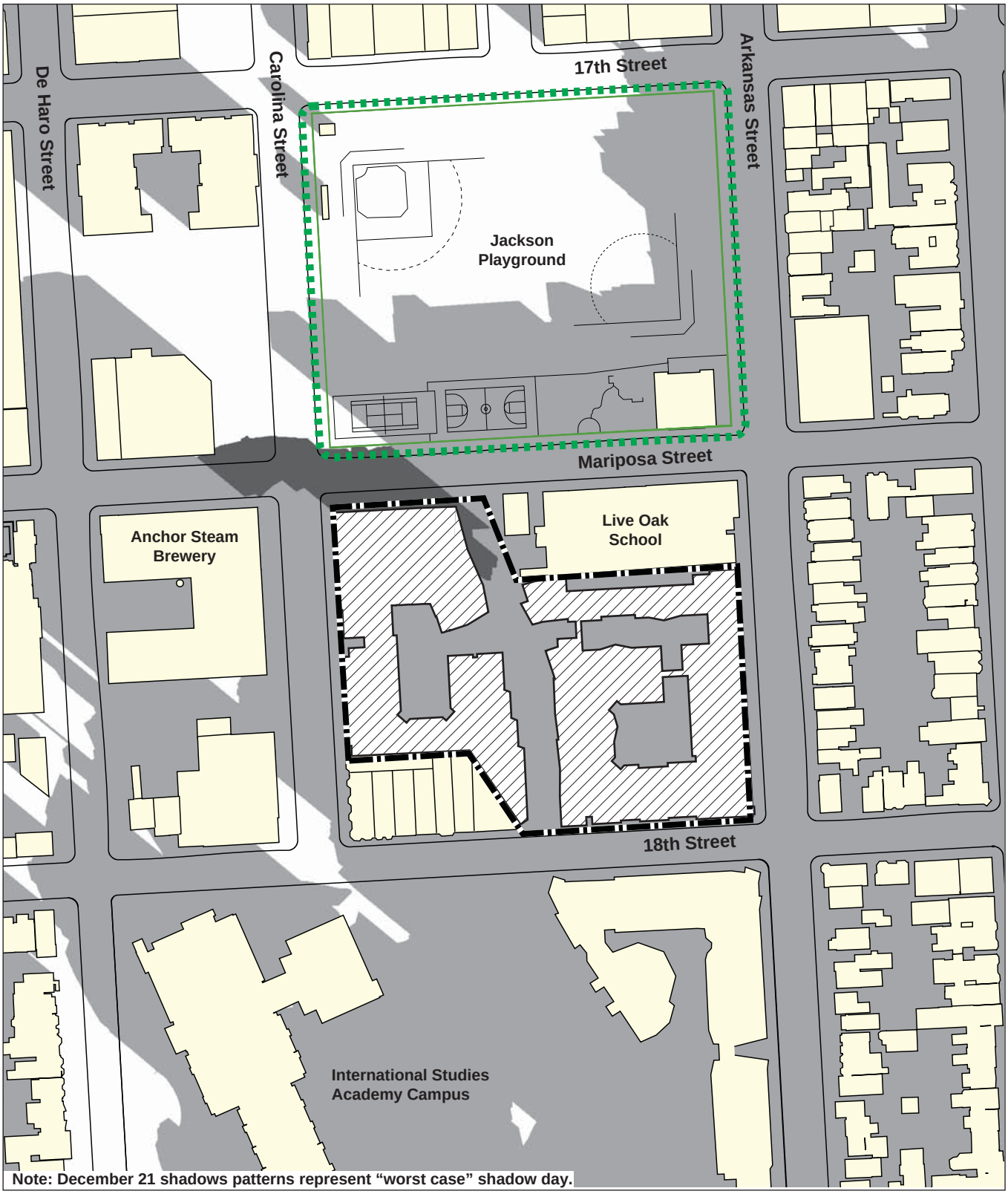
Project/Alternatives	Supply	Demand	(Shortfall)/Surplus
Proposed Project	279	503	(222)
Reduced Height Alternative	258	525	(267)

Sources: *SF Guidelines*; DKS Associates, Inc., *1601 and 1677 Mariposa Street/485 Carolina Street Project – Alternatives Assessment*, November 20, 2014.

Shadow

As described in Section IV.B, Shadow, the proposed project would cast limited new shadows onto areas along the southern edge of Jackson Playground. In the morning hours during the winter months (with December 21 being the worst-case shadow day), the project would shade a portion of the southwest corner of the park, including the tennis court and part of the community program garden. In addition, the project would cast new shadows over Live Oak School's private outdoor play area during various periods of the year. Because the net new shadow generated by the proposed project would only shade a small area of the park during the winter months, which are a time of the year when park use tends to diminish, the increased shadows would not substantially and adversely affect the use of Jackson Playground and this impact was found to be less than significant.

Under the Reduced Height Alternative, the location of project buildings would be similar to the proposed project, although building heights over one story along Mariposa Street would be substantially stepped back from the property line. **Figures IV-10, IV-11, and IV-12** illustrate the potential shadows that could be cast by the Reduced Height Alternative on December 21 (the worst-case shadow day). As shown, throughout the day during the winter months, which represent the worst-case shadow days, this alternative would not cast net new shadows onto Jackson Playground, which is already shaded by the existing three- and four-story surrounding buildings. Although the proposed project would result in a less than significant impact related to new shadows, the Reduced Height Alternative would completely eliminate shadows cast by the alternative's new buildings on the project site onto adjacent public open spaces, including on Jackson Playground and the community program garden, resulting in no impact.



SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.

FIGURE VI-10

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative-
Shadow Pattern-
December 21, 8:22 a.m. (1 hour after sunrise)

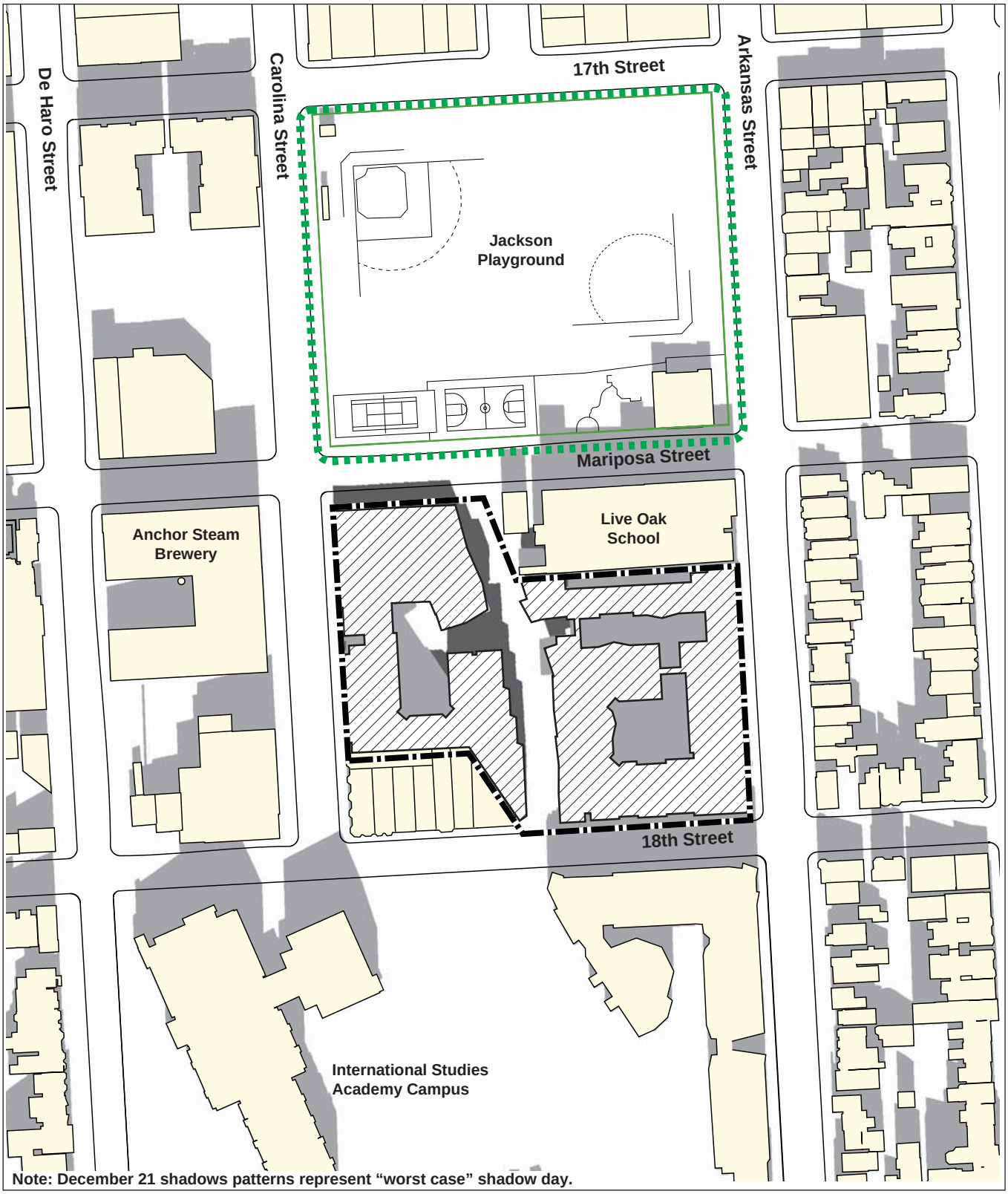
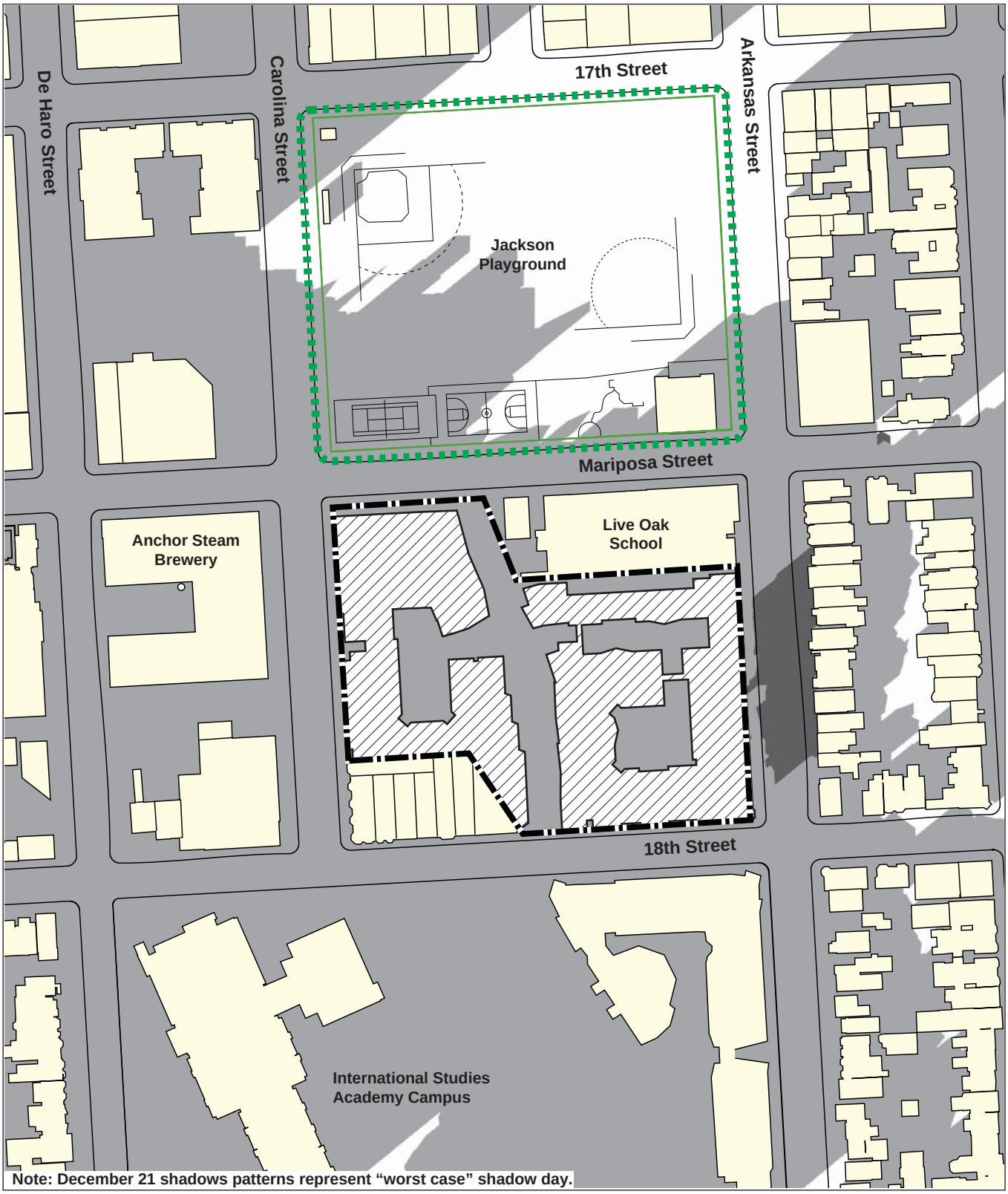


FIGURE VI-11

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative-
Shadow Pattern-
December 21, 12:00 p.m.

SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.



SOURCE: ENVIRONMENTAL VISION, NOVEMBER 2014.

FIGURE VI-12

1601 Mariposa Street Mixed Use Project EIR
Reduced Height on Mariposa Street Alternative-
Shadow Pattern-
December 21, 3:55 p.m. (1 hour before sunset)

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Recreation

The Reduced Height Alternative would increase the density of development on the project site, but to a lesser extent than the proposed project. Thus, the increase in demand for park and recreational services would be somewhat less than the proposed project. A total of approximately 38,195 gsf of publicly accessible and private open space would be developed throughout the site under the Reduced Height Alternative, or about 1,000 gsf less than the proposed project. Similar to the proposed project, open space would include a publicly accessible mid-block pedestrian pathway between the two buildings; all other open space would be private and only accessible to residents. Similar to the proposed project, approximately 27 new street trees would be planted on the four street frontages. Similar to the proposed project, this alternative would not require the construction or alteration of facilities to provide such services to project residents resulting in a substantial physical environmental impact, and impacts related to the provision of parks or recreational services would be less than significant.

Hazards and Hazardous Materials

Under the Reduced Height Alternative, remediation, excavation, demolition, and construction activities at the site would be similar to the proposed project. The proposed project would result in less-than-significant impacts with mitigation related to the potential release of hazardous building materials during demolition and the release of hazardous soils and groundwater during remediation, construction, and operation. Implementation of the Reduced Height Alternative would result in similar impacts as the proposed project and implementation of Mitigation Measures HZ-2a through HZ-2e would be required to reduce these impacts to a less-than-significant level. No additional impacts would occur with the inclusion of light industrial uses under this alternative as these uses would be limited to the Carolina Street frontage and would consist of uses that would not inherently conflict with the residential and commercial uses proposed for the project site and that already exist within the project vicinity. Similar to the proposed project, impacts associated with the routine transport, use, or disposal of hazardous materials during normal operation would be less than significant under the Reduced Height Alternative.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Pursuant to CEQA Guidelines Section 15126(e)(2), an EIR is required to identify the environmentally superior alternative from among the alternatives evaluated if the proposed project have significant impacts that cannot be mitigated to a less-than-significant level. The environmentally superior alternative is the alternative that best avoids or lessens any significant effects of the proposed project, even of the alternative would impede to some degree the attainment of the project objectives. A comparison of the development program and impacts identified for the proposed project and the project alternatives is provided below in **Table VI.8**.

The proposed project would result in significant unavoidable effects related to the contribution to traffic at area intersections. The No Project Alternative would eliminate the significant and unavoidable traffic impacts. The No Project Alternative, which would have no development on the site, would also eliminate the less-than-significant impacts associated with the proposed project's larger and taller buildings on the site (e.g., impacts related to shadow), along with less-than-significant impacts related to additional human activity on the site and on the local transportation network (e.g., recreation and transit, pedestrian, bicycle, and loading impacts). Mitigation measures to reduce hazardous materials-related impacts would also not be required, although the site would not be remediated and toxic soils and groundwater contamination would remain.

CEQA requires selection of the "environmentally superior alternative other than the no project alternative" from among the proposed project and the other alternatives evaluated. The Reduced Density Alternative is identified as the environmentally superior alternative because it would to some extent meet the project sponsor's basic objectives, while avoiding all of the traffic-related significant unavoidable impacts of the proposed project. This impact reduction would be achieved because this alternative would have fewer residential units and commercial space at the site compared to the proposed project, and therefore have associated reductions in vehicle traffic compared to the proposed project. In addition, the Reduced Density Alternative would avoid or further reduce the less-than-significant and significant but mitigable impacts for other environmental topics, including those related to the transit/pedestrian/bicycle environment, shadow, and recreation due to the decrease in the residential and commercial population on the site and reduced building heights.

Table VI-8: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
Ability to Meet Project Sponsor's Objectives				
	Yes	No	Some	Some
Transportation and Circulation				
TR-1: The proposed project would not cause a substantial increase in traffic that would adversely affect traffic operations at 12 of the 13 study intersections or otherwise conflict with traffic circulation in the vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-2: The proposed project would cause a substantial increase in traffic that would substantially affect traffic operations at one of the 13 study intersections – Mariposa Street and Mississippi Street (Intersection 5). (SU)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (SU)
TR-3: The proposed project would not result in a substantial increase in transit demand that could not be accommodated by Muni transit capacity; nor would it affect transit operating conditions within the project vicinity such that adverse impacts to Muni transit service could occur. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-4: The proposed project would not result in an increase in the amount of overcrowding on public sidewalks, interfere with pedestrian circulation and circulation to nearby areas and buildings, nor create potentially hazardous conditions for pedestrians. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-5: The proposed project would not result in potentially hazardous conditions for bicyclists, or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-6: The loading demand of the proposed project would be accommodated within the proposed on-street loading spaces, and would not create potentially hazardous conditions or significant delays for traffic, transit, bicyclists or pedestrians. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
TR-7: The proposed project would not result in significant impacts on emergency vehicle access. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
TR-8: The proposed project would not result in construction-related transportation impacts because of the temporary and limited duration of these activities. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-1: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to significant cumulative traffic impacts at 11 of the 13 study intersections. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)

Table VI-8: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
C-TR-2: The proposed project, combined with past, present, and reasonably foreseeable future projects, would contribute considerably to significant cumulative traffic impacts at two of the 13 study intersections – 16th Street and Arkansas Street (Intersection 1) and Mariposa Street and Mississippi Street (Intersection 5). (SU)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (SU)
C-TR-3: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative transit impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-4: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative pedestrian impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-5: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative bicycle impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
C-TR-6: The proposed project, combined with past, present, and reasonably foreseeable future projects, would not contribute considerably to any significant cumulative construction-related transportation impacts. (LTS)		Not applicable	Less than the proposed project (LTS)	Same as the proposed project (LTS)
Shadow				
WS-1: The proposed project would not create new shadow that would substantially and adversely affect outdoor recreation facilities or other public areas within the project site vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
C-WS-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not create new shadow that could adversely affect the use of outdoor recreation facilities or other public areas within the project site vicinity. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
Recreation				
RE-1: The construction of the open space and recreational facilities proposed as part of the project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR and construction of the project would not otherwise result in the degradation of existing open space resources within the vicinity of the site. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)

Table VI-8: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
RE-2: The proposed project would not increase the use of existing neighborhood parks or other recreational facilities, such that substantial physical deterioration of existing facilities would occur or be accelerated, or such that the construction of new facilities would be required. (LTS)		Not applicable	Less than the proposed project (LTS)	Less than the proposed project (LTS)
C-RE-1: The proposed project, combined with past, present, and reasonable foreseeable future projects, would not contribute to cumulative effects related to recreational resources. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
Hazards and Hazardous Materials				
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)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-2a: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during demolition of existing site buildings. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2b: The proposed project could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during remedial excavation activities. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2c: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-2d: The proposed project would not create a significant hazard to the public or the environment through the release of asbestos during earthmoving activities. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-2e: The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)
HZ-3: The project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (LTSM)		Not applicable	Same as the proposed project (LTSM)	Same as the proposed project (LTSM)

Table VI-8: Comparison of Proposed Project and Project Alternatives Impacts

Impacts	Proposed Project	No Project Alternative	Reduced Density Alternative	Reduced Height on Mariposa Street Alternative
HZ-4: The proposed project would not create a significant hazard to the public or the environment due to the site's inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-5: The proposed project would not result in a safety hazard for people residing or working in the project area because it is not located within an airport land use plan or within two miles of a public airport or public use airport. (NI)		Not applicable	Same as the proposed project (NI)	Same as the proposed project (NI)
HZ-6: The project would not result in a safety hazard for people residing or working in the project area because it is not located within the vicinity of a private airstrip. (NI)		Not applicable	Same as the proposed project (NI)	Same as the proposed project (NI)
HZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
HZ-8: The project would not expose people or structures to a significant risk of loss, injury or death involving fires. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)
C-HZ-1: The proposed project, in combination with other past, present, or reasonably foreseeable future projects, would not result in a considerable contribution to a significant impact on hazards and hazardous materials. (LTS)		Not applicable	Same as the proposed project (LTS)	Same as the proposed project (LTS)

Note: NI = No Impact; LTS = Less Than Significant Impact; S = Significant; LTSM = Less Than Significant with Mitigation; SU = Significant and Unavoidable; SUM = Significant and Unavoidable Impact with Mitigation; NA = Not Applicable

Source: LSA Associates, Inc., 2014

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APPENDIX A

NOTICE OF PREPARATION AND COMMUNITY PLAN EXEMPTION CHECKLIST

SAN FRANCISCO
PLANNING DEPARTMENT

PUBLIC NOTICE
Availability of Notice of Preparation of Environmental Impact Report, Public Scoping Meeting and Community Plan Exemption Checklist

1650 Mission St.
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Planning
Information:
415.558.6377

Date:	May 14, 2014
Case No.:	**2012.1398E**
Project Title:	**1601 Mariposa Street Mixed Use Project**
Project Address:	1601-1677 Mariposa Street and 485-497 Carolina Street
Zoning/Plan Area:	UMU (Urban Mixed Use) Use District 40-X Height and Bulk District Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan
Block/Lot:	Block 4005/Lots: 001B and 004 and Block 4006/Lots 006, 010, 019, and 020
Lot Size:	146,284 square feet (approximately 3.36 acres)
Project Sponsor	Related/Mariposa Development Co., LLC Rick Westberg (415) 677-9000 or rick.westberg@related.com
Lead Agency:	San Francisco Planning Department
Staff Contact:	Chelsea Fordham (415) 575-9071 or chelsea.fordham@sfgov.org

A notice of preparation (NOP) of an environmental impact report (EIR) and Community Plan Exemption (CPE) Checklist has been prepared by the San Francisco Planning Department in connection with this project. The NOP and CPE are available for public review and comment on the Planning Department's Negative Declarations and EIRs web page (http://tinyurl.com/sfceqadocs). CDs and paper copies are also available at the Planning Information Center (PIC) counter on the first floor of 1660 Mission Street, San Francisco. Referenced materials are available for review at the Planning Department's office on the fourth floor of 1650 Mission Street (call (415) 575-9071).

PROJECT DESCRIPTION

The proposed 1601 Mariposa Street Mixed Use Project (project) would develop residential and ground-floor commercial uses on a 3.36-acre project site on portions of two blocks (Assessor's Block 4005 and 4006) located in the Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan. The project would demolish three existing one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construct two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level below-grade parking garage under the East Building would contain approximately 265 to 275 parking spaces and be accessible from Arkansas Street (upper garage level) and 18th Street (lower

garage level). The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet. A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site.

PUBLIC SCOPING PROCESS

The Planning Department has determined that an EIR must be prepared for the proposed project prior to any final decision regarding whether to approve the project. The purpose of the EIR is to provide information about potential significant physical environmental effects of the proposed project, to identify possible ways to minimize the significant effects, and to describe and analyze possible alternatives to the proposed project. Preparation of an NOP or EIR does not indicate a decision by the City to approve or to disapprove the project. However, prior to making any such decision, the decision makers must review and consider the information contained in the EIR.

The Planning Department will hold a **PUBLIC SCOPING MEETING** on Wednesday, June 4, 2014 at 7:00 p.m. at the International Studies Academy located at 655 De Haro Street, San Francisco, CA, 94107. The purpose of this meeting is to receive oral comments to assist the Planning Department in reviewing the scope and content of the environmental impact analysis and information to be contained in the EIR for the project. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please contact the staff contact listed above at least 72 hours in advance of the meeting. Written comments will also be accepted until 5:00 p.m. on **June 13, 2014.** Written comments should be sent to Sarah B. Jones, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

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. If you have questions concerning environmental review of the proposed project, please contact **Chelsea Fordham** at **(415) 575-9071**.

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 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.

SAN FRANCISCO
PLANNING DEPARTMENT

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Notice of Preparation of an Environmental Impact Report, Public Scoping Meeting and Community Plan Exemption Checklist

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Lead Agency:	San Francisco Planning Department
Staff Contact:	Chelsea Fordham (415) 575-9071 or chelsea.fordham@sfgov.org

PROJECT SUMMARY

The proposed 1601 Mariposa Street Mixed Use Project (project) would develop residential and ground-floor commercial uses on a 3.36-acre project site on portions of two blocks (Assessor's Block 4005 and 4006) located in the Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan. The project would demolish three existing one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construct two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level below-grade parking garage under the East Building would contain approximately 265 to 275 parking spaces and would be accessible from Arkansas Street (upper garage level) and 18th Street (lower garage level). The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet. A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site. A complete description of the proposed project, including a detailed description of the proposed project's regional and local context, planning process and background, as well as a discussion of requested project approvals is included in this document. An evaluation of the potential environmental effects of project implementation, in the form of a Community Plan Exemption Checklist, follows the project description.

REMARKS

California Environmental Quality Act (CEQA) State Guidelines Section 15183 provides an exemption from environmental review for projects that are consistent with the development density established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or its site. Section 15183 specifies that examination of environmental effects shall be limited to those effects that: a) are peculiar to the project or parcel on which the project would be located; b) were not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan with which the project is consistent; c) are potentially significant off-site and cumulative impacts which were not discussed in the underlying EIR; and d) are previously identified in the EIR, but which are determined to have a more severe adverse impact than that discussed in the underlying EIR. Section 15183(c) specifies that if an impact is not peculiar to the parcel or to the proposed project, then an EIR need not be prepared for that project solely on the basis of that impact. Section 15183(b) specifies that in approving a project meeting the requirements of Section 15183, a public agency shall limit its examination of environmental effects to those which the agency determines in an initial study or other analysis (here, the attached Community Plan Exemption Checklist) were not analyzed as significant effects in the prior EIR prepared for the general plan, community plan, or zoning action.

This document evaluates the potential project-specific environmental effects peculiar to the 1601 Mariposa Street Mixed Use Project, and incorporates by reference information contained within the *Eastern Neighborhoods Rezoning and Area Plans Final EIR* (*Eastern Neighborhoods FEIR*) (Case No. 2004.0160E; State Clearinghouse No. 2005032048), which is the underlying EIR for the proposed project. Project-specific studies summarized in this determination were prepared for the proposed project to determine if there would be any additional potentially significant impacts attributable to (i.e., "peculiar" to) the proposed project. The Community Plan Exemption Checklist contained in this document identifies the potential environmental impacts of the proposed project and indicates whether such impacts were addressed in the *Eastern Neighborhoods FEIR* or if particular topics are to be further evaluated in an Environmental Impact Report (EIR) to be prepared for the proposed project per Section 15183(b).

The following Community Plan Exemption Checklist assesses the proposed project's potential to cause environmental impacts and concludes that the proposed project would not result in new, project-specific environmental impacts, or impacts of greater severity than were already analyzed and disclosed in the *Eastern Neighborhoods FEIR* for the following issue topics: land use and land use planning; aesthetics; population and housing; cultural and paleontological resources; noise; air quality; greenhouse gas emissions; wind; recreation; utilities and service systems; public services; biological resources; geology and soils; hydrology and water quality; mineral and energy resources; and agriculture and forest resources. Relevant information pertaining to prior environmental review conducted for the *Eastern Neighborhoods Plan* is included below, as well as an evaluation of potential environmental effects of the proposed 1601 Mariposa Street Mixed Use Project. In addition, this determination identifies mitigation measures contained in the *Eastern Neighborhoods FEIR* that would be applicable to the proposed 1601 Mariposa Street Mixed Use Project. Relevant information pertaining to prior environmental review conducted for the *Eastern Neighborhoods FEIR* as well as an evaluation of the potential impacts of the proposed 1601 Mariposa Street Mixed Use Project are provided in the Community Plan Exemption (CPE) Checklist prepared for the proposed project.

BACKGROUND

After several years of analysis, community outreach, and public review, the *Eastern Neighborhoods Rezoning and Area Plan* (*Eastern Neighborhoods Plan*) was adopted in December 2008. The *Eastern Neighborhoods Plan* was adopted in part to support housing development in some areas previously zoned to allow industrial uses, while preserving an adequate supply of space for existing and future production, distribution, and repair (PDR) employment and businesses. The *Eastern Neighborhoods Plan* also included changes to existing height and bulk districts in some areas, although these changes did not apply to the project site.

During the *Eastern Neighborhoods Plan* adoption phase, the Planning Commission held public hearings to consider the various aspects of the proposed area plans, and Planning Code and Zoning Map amendments. On August 7, 2008, the Planning Commission certified the *Eastern Neighborhoods Rezoning and Area Plan Final EIR* (*Eastern Neighborhoods FEIR*) by Motion 17659[1] and adopted the Preferred Project for final recommendation to the Board of Supervisors.[2]

In December 2008, after further public hearings, the Board of Supervisors approved and the Mayor signed the Eastern Neighborhoods rezoning and Planning Code amendments. New zoning districts include districts that would permit PDR uses in combination with commercial uses; districts mixing residential and commercial uses and residential and PDR uses; and new residential-only districts. The districts replaced existing industrial, commercial, residential single-use, and mixed-use districts.

The *Eastern Neighborhoods FEIR* is a comprehensive programmatic document that presents an analysis of the environmental effects of implementation of the *Eastern Neighborhoods Plan*, as well as the potential impacts under several proposed alternative scenarios. The *Eastern Neighborhoods Draft EIR* evaluated three rezoning alternatives, two community-proposed alternatives which focused largely on the Mission District, and a "No Project" alternative. The alternative selected, or the Preferred Project, represents a combination of Options B and C. The Planning Commission adopted the Preferred Project after fully considering the environmental effects of the Preferred Project and the various scenarios discussed in the FEIR.

A major issue in the *Eastern Neighborhoods Plan* rezoning process was the degree to which existing industrially-zoned land would be rezoned to primarily residential and mixed-use districts, thus reducing the availability of land traditionally used for PDR employment and businesses. Among other topics, the *Eastern Neighborhoods FEIR* assesses the significance of the cumulative land use effects of the rezoning by analyzing its effects on the City's ability to meet its future PDR space needs as well as its ability to meet its housing needs as expressed in the City's General Plan.

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[1] *Eastern Neighborhoods Rezoning and Area Plans Final Environmental Impact Report*, Planning Department Case No. 2004.0160E, certified August 7, 2008. The FEIR is on file for public review at the Planning Department, 1650 Mission Street Suite 400 as part of Case No. 2004.0160E, or at www.sfgov.org/site/planning_index.asp?id=67762.

[2] San Francisco Planning Commission Motion 17659, August 7, 2008. This document is available online at www.sfgov.org/site/uploadedfiles/planning/Citywide/Eastern_Neighborhoods/Draft_Resolution_Public%20Parcels_FINAL.pdf.

As a result of the *Eastern Neighborhoods Plan*, the project site has been rezoned to Urban Mixed Use (UMU). The UMU District is intended to promote a vibrant mix of uses while maintaining the characteristics of this formerly industrially-zoned area. It is also intended to serve as a buffer between residential districts and PDR districts in the Eastern Neighborhoods. The proposed project and its relation to PDR land supply and cumulative land use effects is discussed in Section 1, Land Use and Planning in the attached Community Plan Exemption checklist. The project site is located within the Showplace Square/Potrero Hill Subarea of the Eastern Neighborhoods, which is designated and envisioned as a site with a building up to 40 feet in height and containing a mix of uses.

Individual projects that could occur in the future under the Eastern Neighborhoods Rezoning and Area Plans undergo project-level environmental evaluation to determine if they would result in further impacts specific to the development proposal, the site, and the time of development and to assess whether additional environmental review is required. This determination concludes that the proposed project at 1601 Mariposa Street is generally consistent with and was encompassed within the analysis in the *Eastern Neighborhoods FEIR*. This determination also finds that the *Eastern Neighborhoods FEIR* adequately anticipated and described the majority of the impacts of the proposed 1601 Mariposa Street Mixed Use project, and identified the mitigation measures applicable to the 1601 Mariposa Street Mixed Use project. The proposed project is also consistent with the zoning controls and the provisions of the Planning Code applicable to the project site.[3,4]

ENVIRONMENTAL REVIEW TOPICS

The Planning Department has determined that the proposed project is in conformance with the height, use, and density for the site described in the *Eastern Neighborhoods FEIR*. However, the proposed project could result in potentially significant environmental effects not covered in the *Eastern Neighborhoods FEIR* per Section 15183(b). As required by CEQA, an EIR will be prepared to examine these effects, identify mitigation measures for potentially significant impacts, and analyze whether proposed mitigation measures would reduce the significant environmental impacts to less-than-significant levels. The EIR will also analyze alternatives to the proposed project that could substantially reduce or eliminate one or more significant impacts of the proposed project but could still feasibly attain most of the basic project objectives.

The EIR will be focused to address, at a minimum, the following topics:

- Hazards and Hazardous Materials;
- Shadow; and

[3] Adam Varat, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Citywide Planning and Policy Analysis, 1601 Mariposa Street, December 3, 2013. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[4] Jeff Joslin, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Current Planning Analysis, 1601 Mariposa Street, January 2, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

- Transportation and Circulation.

The Community Plan Exemption Checklist for the proposed 1601 Mariposa Street Mixed Use Project included in this document covers the following topics, which are not anticipated to be addressed in the EIR: land use and land use planning; aesthetics; population and housing; cultural and paleontological resources; noise; air quality; greenhouse gas emissions; wind; recreation; utilities and service systems; public services; biological resources; geology and soils; hydrology and water quality; mineral and energy resources; and agriculture and forest resources. These topics may however be covered in the EIR if it is later determined that the proposed project could result in potentially significant environmental effects not covered by the *Eastern Neighborhoods FIER* per Section 15183.

FINDING

This project may have a significant effect on the environment and an Environmental Impact Report is required. This determination is based upon the criteria of the State *CEQA Guidelines*, Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning), Section 15064 (Determining Significant Effect), and Section 15065 (Mandatory Findings of Significance).

PUBLIC SCOPING PROCESS

Pursuant to the State of California Public Resources Code Section 21083.9 and California Environmental Quality Act Guidelines Section 15206, a public scoping meeting will be held to receive oral comments concerning the scope of the EIR. The meeting will be held at **7:00 p.m.** on **June 4, 2014** at International Studies Academy, 655 De Haro Street, San Francisco, CA 94103. Written comments will also be accepted at this meeting and by mail, email, or fax until 5:00 p.m. on June 13, 2014. Written comments should be sent to Sarah B. Jones, Environmental Review Officer, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103. Fax comments can be sent to (415) 558-6409.

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 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.

May 13, 2014
Date

for
Sarah B. Jones
Environmental Review Officer

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PROJECT DESCRIPTION

The proposed 1601 Mariposa Street Project (project) is a mixed-use project proposed by Related/Mariposa Development Co., LLC (project sponsor). The project sponsor would develop residential and ground-floor commercial uses on a 3.36-acre project site on portions of two blocks (Assessor's Block 4005 and 4006) located in the Showplace Square/Potrero Subarea of the Eastern Neighborhoods Rezoning and Area Plan. The project site is located in an Urban Mixed Use (UMU) District and a 40-X Height and Bulk District.[5]

The project would involve demolition of three existing on-site one- and two-story commercial, office, and warehouse buildings and associated surface parking lots and construction of two four-story mixed-use buildings, referred to as the "East" and "West" Buildings. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. A two-level below-grade parking garage under the East Building would contain approximately 265 to 275 parking spaces and be accessible from Arkansas Street (upper garage level) and 18th Street (lower garage level) The proposed East and West Buildings would have heights ranging from 31 feet to 40 feet (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height and two stair overruns up to 10 feet in height). In addition to a description of the proposed project itself, the following includes a detailed description of the proposed project's regional and local context, planning process and background, as well as a discussion of requested project approvals.

Existing Site and Surroundings

The following includes a description of the project site characteristics as well as surrounding land uses.

Project Site. The approximately 3.36-acre project site is located in the Potrero Hill neighborhood of San Francisco and comprises a portion of the two existing city blocks bounded by Mariposa Street to the north, Arkansas Street to the east, 18th Street to the south, and Carolina Street to the west (Assessor's Block 4005/Lots 001B and 004 and Block 4006/Lots 006, 010, 019, and 020). **Figure 1** shows the location of the project site, **Figure 2** shows the Blocks and Lots, and **Figure 3** illustrates existing site conditions. The site is irregularly shaped and consists of three adjacent lots located at 1601 and 1677 Mariposa Street, and 485-497 Carolina Street. The topography of the site slopes upward approximately 34 feet from an elevation of about 16 feet[6] at the northwest corner, at the intersection of Mariposa and Carolina Streets, to an elevation of about 50 feet at the southeast corner, at the intersection of Arkansas and 18th Streets as part of the landform of Potrero Hill, for an overall slope of about 5 to 15 percent. The site was previously graded to below sidewalk level along Arkansas and 18th Streets, and a Southern Pacific railroad line previously bisected the project site.

[5] Article 2.5 of the San Francisco Planning Code specifies height and bulk districts. The 40-X Height and Bulk District allows a maximum building height of 40 feet across the project site, as measured from the curb level adjacent to a building (pursuant to Planning Code Section 102.12), with no bulk restrictions.

[6] Elevations reference San Francisco City Datum (SF Datum).

FIGURE 1

N

0 175 350
FEET

Project Boundary

SOURCES: GOOGLE MAPS; LSA ASSOCIATES, INC., 2013.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Project Site and Regional Location

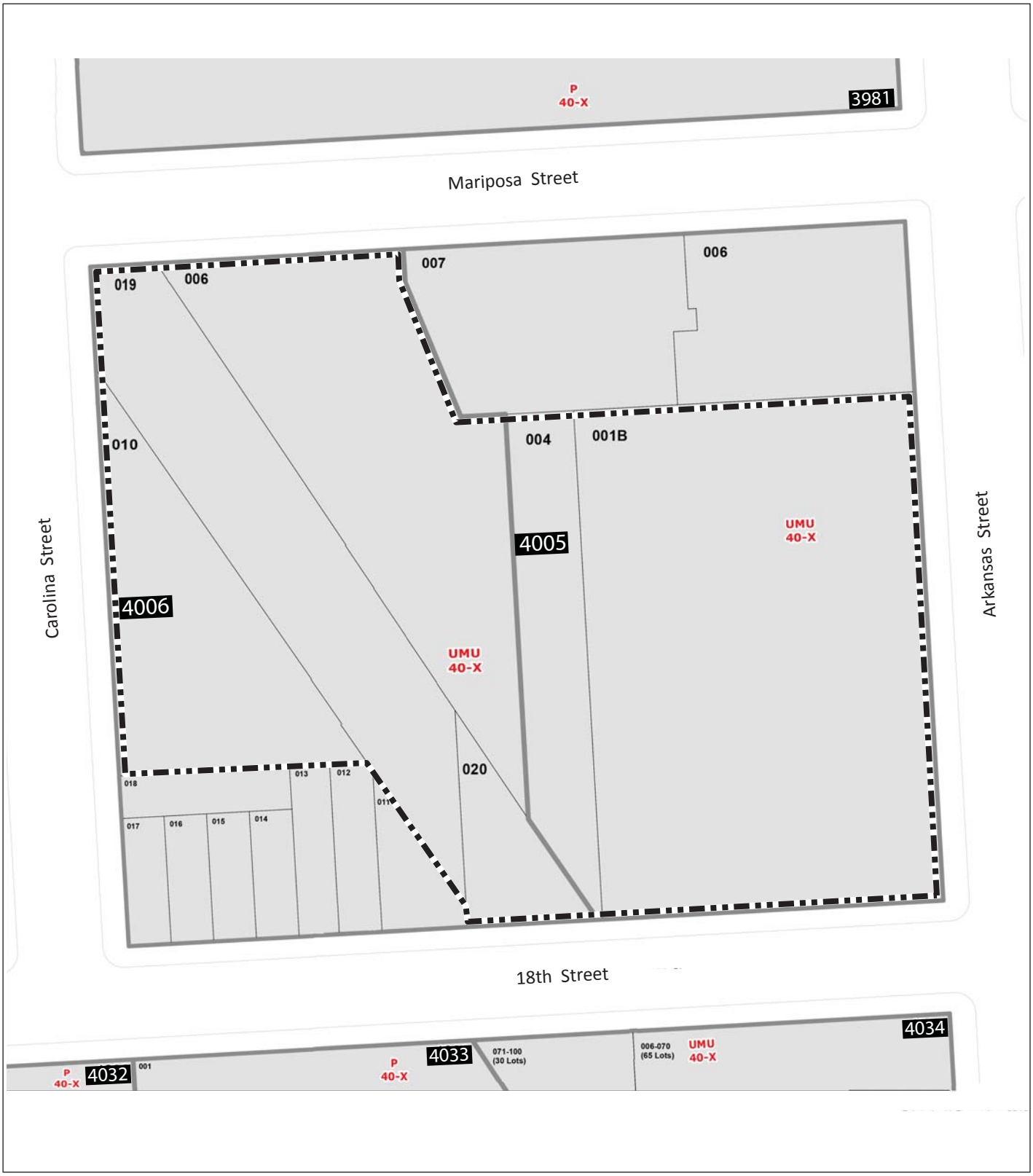


FIGURE 2

N

0 50 100
FEET

4006 Block Number
006 Lot Number
Project Boundary

SOURCES: GOOGLE MAPS; LSA ASSOCIATES, INC., 2013.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Project Site Block and Lot Details

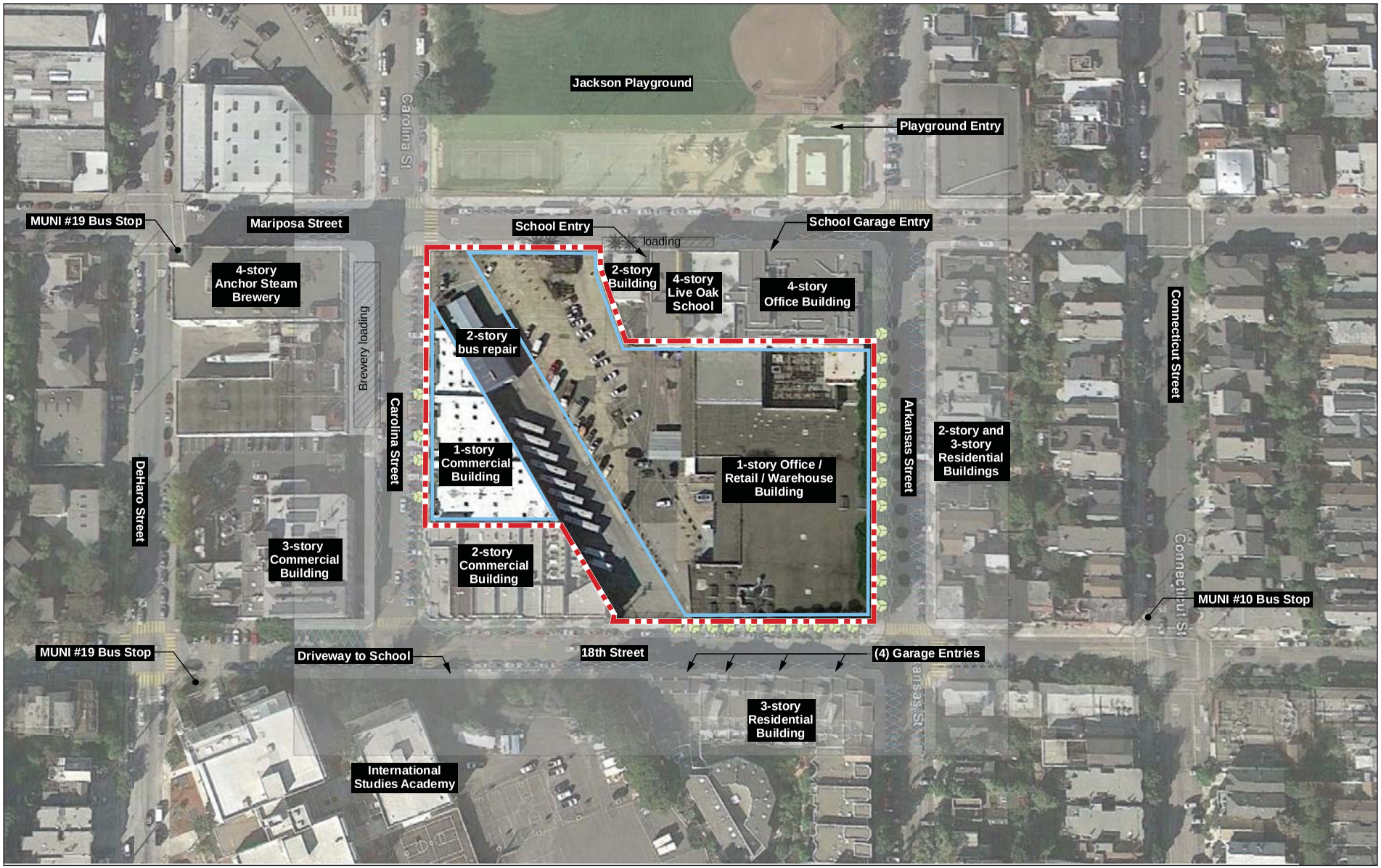


FIGURE 3

NOT TO SCALE

Project Boundary
Parcel Boundaries
Existing Street Trees

SOURCE: DAVID BAKER + PARTNERS, DECEMBER 2013.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Existing Conditions

The project site is currently developed with three separate one- and two-story structures constructed between 1940 and 1992 (plus two sheds and a trailer), 100 surface parking spaces, 15 bus parking spaces, and 6 loading spaces. Existing buildings on the project site comprise a total of 74,696 gross square feet (gsf). The site is occupied by a variety of commercial, office, warehouse tenants, and automotive uses (i.e., auto parts supply and bus parking) as shown in **Table 1**. Existing uses located on the site are further described below.

Table 1: Existing Uses on the Project Site

Assessor's Block-Lot	Street Address	Building	Year Built	Existing gsf	Use	Building Tenant	Employees
4005-001B 4005-004	1601 Mariposa Street	1-story warehouse and office	1940	54,360	Office/Retail/ Warehouse Parking Spaces: Vehicle Fleet: 28 Retail: 14 Monthly renters: 45	MacKenzie Warehouse Auto Parts	54
		Wood shed	Un-known	288			
4006-006 4006-019 4006-020	1677 Mariposa Street	1-story warehouse	1992	2,378	Bus depot 15 bus parking spaces 5 staff parking spaces	Coach 21	18
		2-story portable trailer	1992	960			
		Lean-to shed	Un-known	200			
4006-010	485 Carolina Street	1-story commercial	1979	16,510	Storage	Tamara Mack Design	0
	485-A Carolina Street				Studio	Yoga Fountain	2
	485-B Carolina Street				Office/Storage	Tamara Mack Design	3
	485-C Carolina Street				Storage	Daniel Stone, Contractor	1
	495 Carolina Street				Printing	Plotnet	7
	497 Carolina Street				Office	Uptown Resources, LLC	11
Total				**74,696**			**96**

gsf = gross square feet

Source: Related/Mariposa Development Company, LLC, 2013.

The one-story, approximately 54,360-gsf concrete building at 1601 Mariposa Street is located in the southeast portion of the project site, at the intersection of Arkansas and 18th Streets (see **Figure 3**). This building includes office, retail, and warehouse uses occupied by MacKenzie Warehouse Auto Parts. The building sits below grade along the east and south sides of the project site, bordering the adjacent 18th and Arkansas Streets, and is at-grade along the north and west sides of the project site facing the former railroad right-of-way, which runs within the interior of the project site. The finished floor height of this existing on-site building is approximately 21 feet. As shown in **Figure 3**, this on-site existing building is built out to the parcel boundary with the building to the north containing Live Oak School and other commercial tenants. A surface parking lot associated with this on-site building extends diagonally through the interior of the project site, reaching from Mariposa Street to 18th Street. The current on-site parking lot owner/operator uses this area as two separately fenced parking lots, with 28 parking spaces allocated to its vehicle fleet, 14 parking spaces for retail customers, and 45 parking spaces for monthly renters. Ingress to the on-site parking area is at Mariposa Street, and egress is at 18th Street.

As shown in **Figure 3**, the neighboring 1677 Mariposa Street property is primarily comprised of a surface parking lot and is located immediately to the west of and borders the on-site surface parking area associated with the 1601 Mariposa Street property. A chain link fence divides the two parking lots (i.e., 1677 and 1601 Mariposa Street properties and respective lots). The narrow parcel (1677 Mariposa Street) is occupied by a bus depot, operated by the company Coach 21, and includes 5 staff parking spaces and 15 bus parking spaces and areas for bus maintenance activities. A one-story, 10-foot-tall, approximately 960-gsf portable office trailer and a two-story, 21-foot-tall, approximately 2,378-gsf warehouse/ maintenance building are located near the northwest corner of the 1677 Mariposa Street property, at Mariposa and Carolina Streets. A one-story, eight-foot-tall, 200-gsf shed is located on the 1677 Mariposa Street property. Access to the 1677 Mariposa Street property is primarily via Mariposa Street; access via 18th Street is generally restricted by a chain link gate.

As also shown in **Figure 3**, the one-story, approximately 20-foot-tall, approximately 16,510-gsf building located at 485-497 Carolina Street is located along the project site's western border and borders the property at 1677 Mariposa Street. This commercial building is divided into six separate suites, occupied by six tenants, and includes storage, office, personal service, and studio spaces. Pedestrian entrances and roll-up delivery doors to the building are located along Carolina Street.

The project site is almost entirely covered by buildings or surface pavement and there is no existing vegetation on the site. The project site is currently bordered by approximately 17 street trees along Mariposa, Arkansas, 18th, and Carolina Streets. In March 2014, nine street trees were removed from Arkansas Street due to structural defects and resulting safety concerns.[7] It is anticipated that the current property owner will replace these nine trees with new trees (minimum of 24-inch box size) in the near future.

A total of approximately 105 on-street unmetered parking spaces are located adjacent to the project site, including approximately 27 spaces along the south side of Mariposa Street between Carolina and Arkansas Streets; 21 spaces along the west side of Arkansas Street between Mariposa and 18th Streets; 33 spaces along the east side of Carolina Street between Mariposa and 18th Streets; and 24 spaces along the north side of 18th Street between Carolina and Arkansas Streets. Existing on-street parking spaces are unstriped and interrupted by multiple curb cuts. Along Carolina Street, several existing curb cuts are used as parking spaces. Parking is not metered or time limited in the vicinity of the site. No existing loading spaces are present along the streets that surround the project site.

Surrounding Land Uses. As previously noted, the project site occupies a portion of two existing City blocks. Existing uses within the same two existing blocks, surrounding or in proximity to the project site but not within the boundaries of the project site, as well as surrounding land uses, are generally described below.

[7] Mohammed Nuru, San Francisco Department of Public Works. DPW Order No: 182222. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Existing land uses within the blocks occupied by the project site include a four-story building with a school (Live Oak School) and office uses and a two-story recreation building associated with the school on Block 4005, and eight two-story commercial buildings on Block 4006 as shown in **Figure 3**. Live Oak School occupies approximately half of the four-story building and is located immediately adjacent, along the parcel boundary, to the northeast portion of the project site, near the intersection of Mariposa and Arkansas Streets and is accessed by Mariposa Street. The private school provides K-8 education and has an enrollment of about 265 students. The other half of the building is occupied by various office tenants. A small two-story building containing recreational uses is also associated with Live Oak School and located west of the four-story building occupied by the main school. The eight two-story commercial buildings are located near the southeast corner of the site on 18th Street and Carolina Street on Block 4006. The ground floors of these commercial buildings are occupied by a variety of retail, office, and service uses; one or more accessory residential occupants are also located on the second floors of the eight commercial buildings, although the use of these buildings is primarily commercial.

The blocks that surround the 1601 Mariposa Street Mixed Use Project site include a variety of land uses, including commercial, residential, institutional, and recreational uses, as follows:

- ***North.*** Jackson Playground is an approximately 4.41-acre park located immediately north of the project site, across Mariposa Street. The park occupies two City blocks (Block 3981, Lot 001) and includes a recreation building, sand-floor playground, picnic area, tennis courts, basketball courts, and two ball fields. A community garden is also located along the southern park boundary, starting from the Mariposa and Carolina Streets intersection to about mid-block along Mariposa Street. Mixed commercial and residential uses are located farther north, followed by a variety of uses associated with production, distribution and repair (PDR). Downtown San Francisco is located less than two miles farther to the north.
- ***East.*** Immediately across the street and east of the project site, land uses consist primarily of two- and three-story residential buildings on Arkansas Street. This land uses pattern generally continues for several blocks further east. Neighborhood-serving commercial uses are also located along the 18th Street corridor, between Connecticut and Texas Streets.
- ***South.*** The existing topography rises uphill immediately south of the site, across 18th Street. Land uses immediately across from the project site along 18th Street include a public school, described below, and a three-story mixed-use building with primarily residential uses. The International Studies Academy is a 6th through 12th grade public school with an enrollment of about 530 students and occupies approximately three-quarters of the block bound by 18th, Arkansas, 19th, and DeHaro Streets and is located to the south of the project site. The three-story building on the eastern portion of the block immediately across from the project site along 18th Street includes primarily ground floor artist's lofts with residential uses on the upper floors. A performing arts/community center is also located within this building.
- ***West.*** Land uses immediately west of the project site, across Mariposa Street, include Anchor Steam Brewery building and a three-story commercial building. The brewery is located on the northern portion of the block bound by Mariposa, Carolina, 18th and DeHaro Streets. The building on the southern portion of this block contains a large indoor children's play space on the ground floor, as well as other service uses. Residential and commercial uses are located farther to the west.

Proposed Project

The project sponsor proposes to demolish all existing on-site buildings and surface pavement on the project site and construct two 31- to 40-foot-tall (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height and two stair overruns up to 10 feet in height), four-story, mixed-use buildings with associated infrastructure. As shown in the conceptual site plan depicted in **Figure 4**, the East Building would be located on the eastern portion of the project site, south of the existing Live Oak School. The West Building would be located on the western portion of the project site, north of the existing commercial buildings located on 18th Street. The two proposed on-site buildings would be separated by a 40- to 70-foot-wide mid-block pedestrian pathway. Approximately 320 residential units and 10,000 square feet of ground floor commercial space would be distributed throughout both buildings. Approximately 265 to 275 parking spaces would be located primarily below grade in a two level garage in the East Building. Internal courtyards and pedestrian pathways would be located at the ground floor of each building. Ground level uses are depicted in **Figure 5**.

Project Characteristics. The East Building would consist of two levels of primarily below-grade parking and four levels of a mix of uses surrounding open space courtyards. The upper portion of the proposed East Building containing residential uses would be set back 20 feet from the south-facing property line windows of the Live Oak School building, which is located immediately to the north of the project site. The West Building would consist of four levels of mixed-use development surrounding an at-grade open space courtyard. There are no below-grade levels under the West Building. **Figures 6** and **7** depict levels one and two of the West Building and the lower and upper garage levels of the East Building. **Figures 8** and **9** depict the third and first levels and the fourth and second levels of the West and East Buildings, respectively. **Figures 10** and **11** depict the third and fourth levels of the East Building, respectively. **Table 2** provides a summary of the proposed project.

Table 2: Proposed Project Details

Proposed Use	**Total**
Residential Use	330,630 gsf
Commercial Use	10,000 gsf
Parking Area	98,900 gsf
Total Floor Area	**439,530 gsf**
Open Space	39,195 gsf
Number of Dwelling Units	320 (76 studios, 116 one-bedrooms, 118 two-bedrooms, and 10 three-bedrooms)
Number of Parking Spaces	Approximately 265 to 275
Number of Loading Spaces	Three on-street yellow curb zones
Number of Buildings	2 (East Building and West Building)
Height of Buildings	31 to 40 feet
Number of Stories	East Building: 2 sub-surface, 4 above grade West Building: 4 above grade

gsf = gross square feet

Source: Related, 2013.

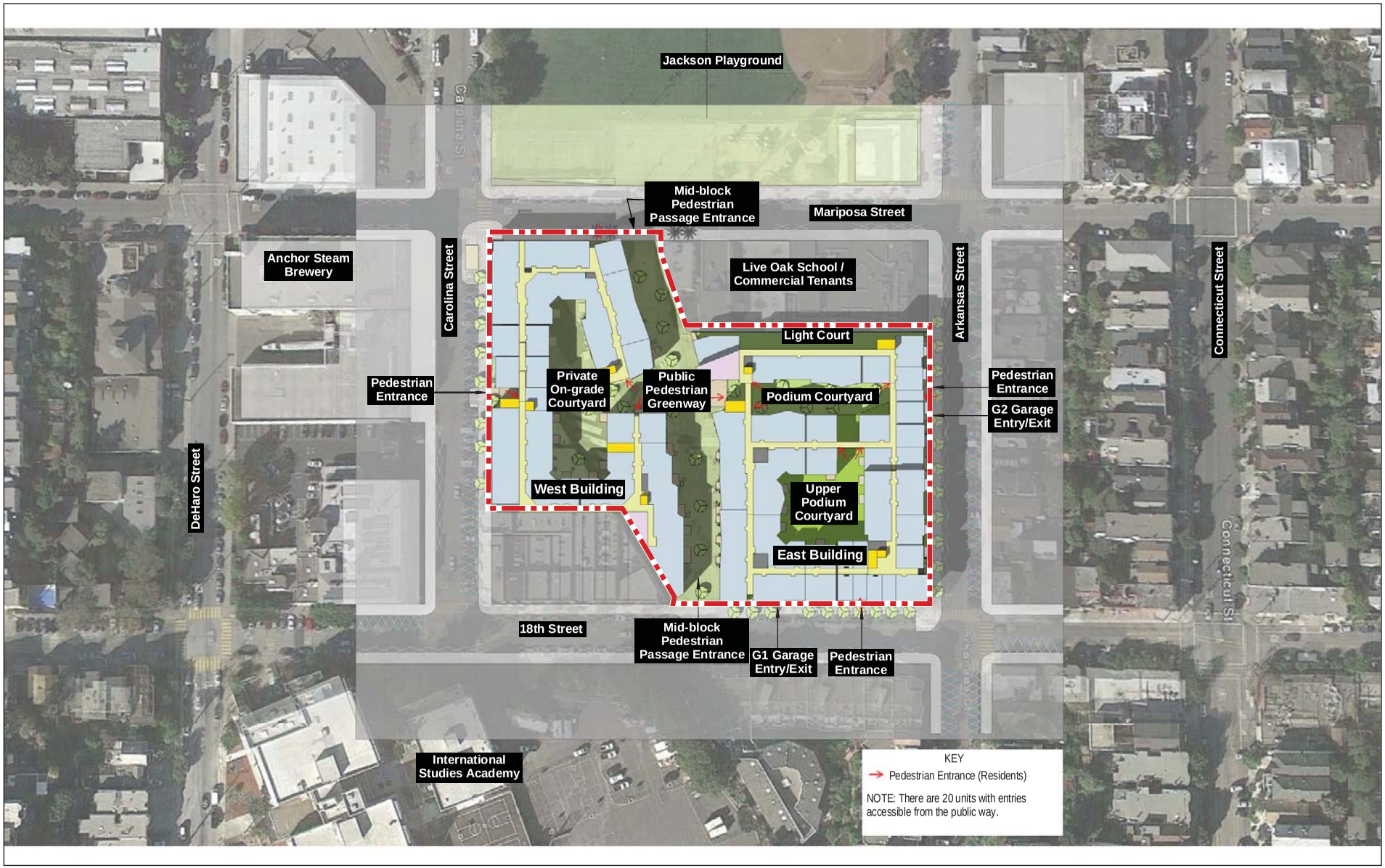


FIGURE 4

NOT TO SCALE

Project Boundary

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

FIGURE 5

0 30 60
FEET

N

SOURCE: DAVID BAKER ARCHITECTS; RELATED, DECEMBER 2013.

FIGURE 6

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

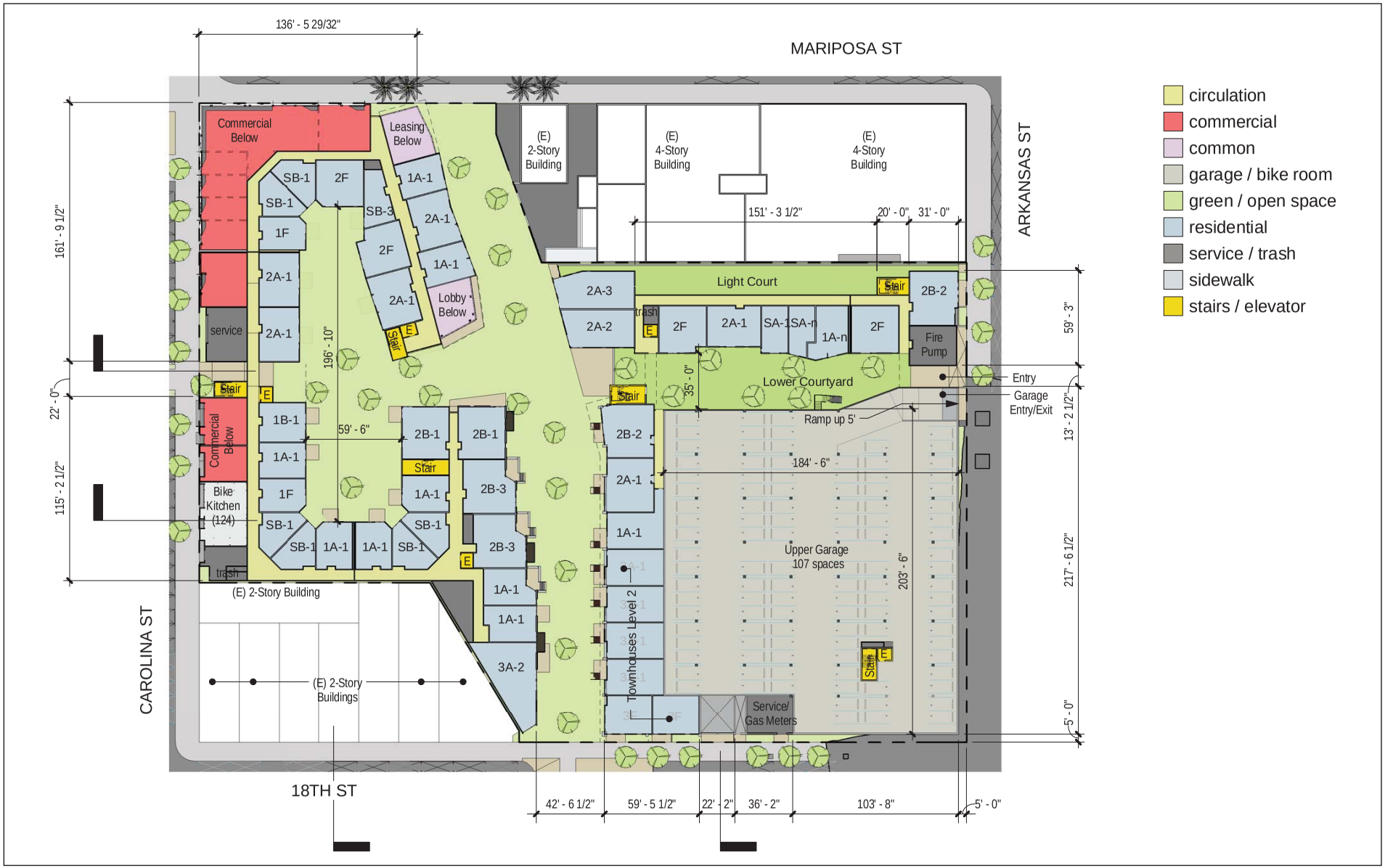


FIGURE 7

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

FIGURE 8

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

FIGURE 9

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Level 4 West Building / Level 2 East Building

FIGURE 10

NOT TO SCALE

N

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

FIGURE 11

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Roof Plan West Building / Level 4 East Building

The proposed project would include construction of approximately 320 dwelling units that would be distributed between both buildings and would include about 76 studio, 116 one-bedroom, 118 two-bedroom, and 10 three-bedroom units within an approximate total of 330,630 gsf of residential space.[8] It is anticipated that the project would be operated as a rental (rather than for-sale) development and is expected to provide approximately 46 units affordable to low-income households on-site as inclusionary units to meet the Inclusionary Affordable Housing requirement. Residential units would either face the surrounding streets (including walk-up units at the ground-floor level), the podium level courtyards, or the mid-block pedestrian pathway. The project would have on-site amenities serving the residential uses that may include a leasing office, building management offices, a business center, a lounge and flexible activity space, a fitness and yoga studio/gym, and a bike repair shop. The project would also include about 10,000 gsf of ground floor commercial use configured in not less than two individual commercial spaces. Commercial uses would be located near the corners of Mariposa and Carolina Streets and 18th and Arkansas Streets (see **Figure 5**).

Building heights for both buildings would range from 31 to 40 feet, and from generally three to four stories along the project site (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height, and two stair overruns up to 10 feet in height), measured from the average adjacent curb level. A brief five-story element (of approximately four units) would be located within the interior of the site, facing the pedestrian pathway. A two-story parking garage would also be located below grade. Along Arkansas Street, the project site slopes upward with an average slope greater than five percent, and the building height would step up in approximately 50-foot-wide increments along this street. Along 18th Street, the project site slopes upward with an average slope of about 12 percent, and the building height would step up in approximately 55-foot-wide increments along this street. Along a portion of Carolina Street, the average upward slope is between five percent and 15 percent, and the building height steps up in approximately 65-foot-wide increments. Along a portion of Carolina Street and along Mariposa Street, the average slope is less than five percent and the building height would not step. Parapets up to four feet in height and elevator and stair overruns up to 10 feet in height (provided they cover no more than 20 percent of the roof area) are exempt from the 40-foot height limit. The five elevator and two stair overruns would cover approximately one percent (1%) of the roofs of the two buildings. This method of height measurement is consistent with Planning Code Section 260. Exterior elevations of the proposed development are shown in **Figures 12, 13,** and **14**.

Open Space and Landscaping. A total of approximately 39,195 gsf of publicly accessible and private open space would be developed throughout the project site, as depicted in **Figure 15**. An approximately 21,505 gsf, 40- to 70-foot-wide publicly accessible mid-block pedestrian pathway would be located mid-block between the two buildings; all other open space (approximately 17,690 gsf) on-site would be private and accessible only to residents. The pathway would provide access to pedestrians and bicyclists between Mariposa Street and 18th Streets. Ground-floor units with patios would open onto the mid-block pathway. Additional open space areas accessible only to residents would include an internal podium-level courtyard and roof deck at the East Building, smaller courtyards and greenways at the northern portion of the East Building, and a light court near the northern property line adjacent to Live Oak School. An

[8] Residential gsf includes circulation and service space as well as space for amenities and common areas.

internal on-grade courtyard would be provided at the West Building. Both publicly accessible and private open space areas on the project site would be maintained by the project sponsor.

Open space areas within the project site would include trees and other plantings. As previously discussed, there are a total of 17 existing street trees that border the project site, and an additional 9 trees will likely be planted to replace recently removed trees prior to project construction (for a total of 26 trees assumed to be present on the site at the time of project construction). Of the 17 existing trees, 9 would be removed from the project site, as would the 9 trees to be planted in the short term (for an anticipated total of 18 trees to be removed from the site). Eight existing trees would be retained and approximately 27 new street trees would be planted on the four street frontages as part of the proposed project. Additionally, a total of 37 trees would be planted within the internal open space areas. With the proposed new and existing trees on and around the project site and there would be a total of approximately 72 trees around the project site.

Access and Parking. Pedestrian access to the site would be provided from Mariposa and 18th Streets via the mid-block pedestrian pathway, and from Carolina and Arkansas Streets by pedestrian entrances leading to the on-site courtyards (see **Figure 5**). In addition, ground floor units along Arkansas and 18th Streets would have direct access to the sidewalk from the front stoops (see **Figure 12**).

Parking for the proposed project would be provided within a two-level sub-surface garage located within the East Building. Approximately 265 to 275 parking spaces, including 10 American with Disabilities Act (ADA) accessible spaces and up to six but not less than two car share spaces, would be provided as part of the proposed project, with 10 to 20 of the spaces serving the commercial uses and the remainder serving the proposed residential uses. Ingress and egress to the garage would be via two entrances/exits, one on 18th Street and one on Arkansas Street.

Additionally, the project would include approximately 320 bicycle parking spaces located within the parking garage and bike storage areas located and accessible from adjacent sidewalks on Carolina and 18th Streets and residential lobby areas.

In addition to the off-street parking provided by the proposed project, the project would modify the configuration of existing on-street parking spaces adjacent to the site to including the removal of existing curb cuts and to allow for new loading spaces. Three on-street yellow curb zones for loading are proposed, with one such zone to be located along Carolina Street, one along Mariposa Street and one along Arkansas Street. The yellow loading zones along Carolina and Arkansas Streets would be adjacent to the proposed residential lobby entrances along those streets. The loading zone along Mariposa Street would be adjacent to the leasing office that is proposed to be located in the West Building and, when not in use for the proposed project, would also serve as a location for parents dropping off or picking up children at the Live Oak School. Pedestrian access to and through the site would be provided along all four street frontages of the project (see **Figure 5**). With these modifications, specifically the proposed removal of multiple existing curb cuts, approximately four net new on-street parking spaces would be created.

ARKANSAS STREET ELEVATION

18TH STREET ELEVATION

FIGURE 12

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

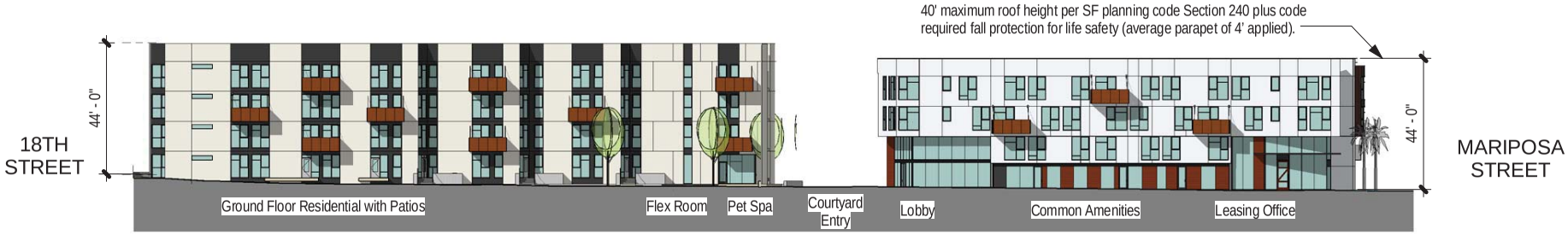
FIGURE 13

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

1601 Mariposa Street
Mixed Use Project NOP/CPE Checklist
Exterior Elevations - Carolina Street and Mariposa Street

PUBLIC PEDESTRIAN GREENWAY ELEVATION LOOKING EAST



PUBLIC PEDESTRIAN GREENWAY ELEVATION LOOKING WEST

FIGURE 14

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, MARCH 2014.

FIGURE 15

NOT TO SCALE

SOURCES: DAVID BAKER ARCHITECTS; RELATED, JANUARY 2014.

Demolition, Site Remediation and Construction. Construction activities at the project site would begin with demolition of all existing on-site structures, removal of all existing on-site pavement, and construction of the below-grade parking garage. The existing on-site parking lots and auto parts warehouse are graded into the hillside below sidewalk level along Arkansas and 18th Streets and are generally flat and therefore, minimal grading and excavation would be required for site preparation and foundations. If excess soil were to be excavated and require off-site disposal, it is not expected to exceed approximately 6,000 cubic yards. Concurrent with excavation work and pavement removal, remediation of hazardous materials in site soils and treatment of encountered groundwater would occur, which would be conducted pursuant to an approved Response Plan and with oversight from the California Department of Toxic Substances Control (DTSC). The recommended site remediation activities include removal of three underground storage tanks, excavation and off-site disposal of approximately 730 cubic yards of petroleum hydrocarbon contaminated soil, a vapor intrusion mitigation system to address volatile organic compounds in soil gas, and a Land Use Covenant that will establish Institutional Controls and require soil covers and prohibit groundwater use to ensure that future inhabitants would be protected from residual soil and groundwater contamination. The proposed Response Plan, which is required for construction of the proposed project, will be analyzed for potential environmental impacts in the EIR.

Demolition, grading, and site remediation activities are anticipated to occur over an approximate three month period and are expected to commence in late-2015. The total construction period is anticipated to occur over approximately two years. Pile driving would not be required; the project is anticipated to use a spread-foot foundation bearing on native alluvium or bedrock for much of the East Building and a spread foot foundation bearing on ground improved with rammed aggregate piers for the West Building and western part of the East Building. Neither of these foundation types would require the use of impact driven piles.

The proposed project would connect to existing water, sewer, electrical, and telecommunications connections available at the perimeter of the project site.

Required Approvals. The proposed project would require the following City, State, and regional approvals:

- Lot Merger and Subdivision Map approval to merge and re-subdivide the separate lots that comprise the project site;
- Large Project Authorization approval by the Planning Commission pursuant to Planning Code Section 329, because the project contains greater than 25,000 gsf of new construction with exceptions for rear yard configuration and off-street loading. This is considered the Approval Action for this CEQA determination pursuant to Section 31.04(h) of the San Francisco Administrative Code;
- San Francisco Municipal Transportation Agency's approval of Color Curb Program for all proposed changes in loading zones and the reconfiguration/removal of existing on-street parking spaces;
- Demolition and building permits;
- San Francisco Department of Public Health approval of Dust Control Plan;

- DTSC approval of a California Land Use and Revitalization Act (CLRRA) Final Response Plan; and
- Bay Area Air Quality Management District (BAAQMD) approval of an Asbestos Dust Mitigation Plan.

EVALUATION OF ENVIRONMENTAL EFFECTS

This Community Plan Exemption (CPE) Checklist examines the potential environmental impacts that would result from implementation of the proposed project and indicates whether such impacts are addressed in the applicable programmatic FEIR (PEIR)[9] for the *Eastern Neighborhoods Rezoning and Area Plans.* Items checked "Project-Specific Significant Impact Not Identified in PEIR" identify topics for which the proposed project would result in a significant impact that is peculiar to the project, i.e., the project may have an impact that is not identified as significant in the FEIR. These topics will be further addressed in an EIR to be prepared for the proposed project.

Items checked "Significant Unavoidable Impact Identified in PEIR" identify topics for which a significant unavoidable impact is identified in the PEIR. In such cases, the analysis considers whether the proposed project would result in impacts that would contribute to the significant unavoidable impact identified in the PEIR. Items checked "Mitigation Identified in the PEIR," "PEIR Mitigation Applies to Project," and "PEIR Mitigation Does Not Apply to Project" indicate whether mitigation measures were identified in the PEIR and if those mitigation measures do or not apply to the proposed project. Mitigation measures identified in the PEIR are discussed under each topic area, and mitigation measures that are applicable to the proposed project are identified under each topic area and on pp. 77-83.

For any topic that was found to result in less-than-significant (LTS) impacts in the PEIR and for the proposed project, or would have no impacts, the topic is marked "No Significant Impact (Project or PEIR)" and is discussed in the CPE Checklist below.

[9] In this Community Plan Exemption Checklist, the acronyms FEIR and PEIR both refer to the *Eastern Neighborhoods Rezoning and Area Plans FEIR* and are used interchangeably.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
1. LAND USE AND LAND USE PLANNING—Would the project:						
a) Physically divide an established community?	☐	☐	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☐	☐	☒
c) Have a substantial impact upon the existing character of the vicinity?	☐	☒	☒	☐	☒	☐

The project site is located in the Showplace Square/Potrero Subarea of the *Eastern Neighborhoods Plan* and the site is located in the UMU (Urban Mixed Use) and 40-X Height and Bulk zoning districts. The vision outlined in the Showplace Square/Potrero Hill Area Plan[10] for the pattern of development in this area is based on the need to increase opportunities for new housing development, particularly affordable housing; retain space for production, distribution and repair (PDR) activities; protect established residential areas; maintain vibrant neighborhood commercial areas on Potrero Hill; and allow for new neighborhood-serving retail and businesses at the base of Potrero Hill near Jackson Playground. The UMU District is intended to promote a vibrant mix of uses while maintaining the characteristics of this formerly industrially-zoned area. It is also intended to serve as a buffer between residential districts and PDR districts in the Eastern Neighborhoods. Within the UMU District, allowed uses include production, distribution, and repair uses such as light manufacturing, home and business services; arts activities; warehouse; and wholesaling. Additional permitted uses include retail, educational facilities, and nighttime entertainment. Housing is also permitted, but is subject to higher affordability requirements. Family-sized dwelling units are encouraged. Per Article 2.5 of the Planning Code, the 40-X Height and Bulk District allows a maximum building height of 40 feet across the project site, as measures from the curb level adjacent to a building, with no bulk restrictions.

The project would intensify uses on the project site by increasing the gross square footage of development and increasing the height of buildings on the site. However, the new residential and ground floor commercial land uses would not have an impact on the character of the vicinity beyond what was identified in the *Eastern Neighborhoods FEIR* and the proposed uses are consistent with the type and intensity of development that surrounds the site (e.g., residential, commercial, institutional, and recreational uses). Planning Department staff has determined that the proposed project is consistent with

[10] *Showplace Square/Potrero Hill Area Plan, An Area Plan of the General Plan of the City and County of San Francisco*, City and County of San Francisco, adopted December 2008. This document is available at the Planning Department, 1650 Mission Street, Suite 400 or at www.sf-planning.org/ftp/general_plan/Showplace_Square_Potrero.htm.

the Eastern Neighborhoods Plan and satisfies the requirements of the General Plan and the Planning Code.[11,12] The proposed building is consistent with the height and bulk controls and the proposed uses are consistent with the UMU zoning controls of the site, all of which were analyzed in the *Eastern Neighborhoods FEIR*.

The *Eastern Neighborhoods Area Plan* rezoned much of the City's industrially zoned land. The goals of the Area Plan were to reflect local values, increase housing, maintain some industrial land supply, and improve the quality of all existing areas with future development. A major issue discussed in the Area Plan process was the degree to which existing industrially zoned land would be rezoned to primarily residential and mixed-use districts, thus reducing the availability of land traditionally used for PDR employment and businesses.

The *Eastern Neighborhoods FEIR* evaluated three land use alternatives. Option A retained the largest amount of existing land that accommodated PDR uses and converted the least amount of industrially zoned land to residential use. Option C converted the most existing land accommodating PDR uses to residential and mixed uses. Option B fell between Options A and C.

While all three options were determined to result in a decline in PDR employment, the loss of PDR jobs was determined to be greatest under Option C. The alternative ultimately selected – the 'Preferred Project' – represented a combination of Options B and C. Because the amount of PDR space to be lost with future development under all three options could not be precisely gauged, the FEIR determined that the Preferred Project would result in a significant and unavoidable impact on land use due to the cumulative loss of PDR use in the Plan Area. This impact was addressed in a Statement of Overriding Considerations with CEQA Findings and adopted as part of the Eastern Neighborhoods Rezoning and Area Plans approval on January 19, 2009.

The *Eastern Neighborhoods FEIR* included one mitigation measure, Mitigation Measure A-1, for land use controls in Western SoMa that could incorporate, at a minimum, no net loss of land currently designated for PDR uses, restrict non-PDR uses on industrial (or other PDR-designated) land, and incorporate restrictions on potentially incompatible land uses proximate to PDR zones. The measure was judged to be infeasible, because the outcome of the community-based Western SoMa planning process could not be known at the time, and the measure was seen to conflict with other City policy goals, including the provision of affordable housing. The project site is not located in Western SoMa; therefore this mitigation measure is not applicable.

In the Showplace Square/Potrero Hill area, PDR businesses are more concentrated in the design and wholesale showroom district south of Division Street and the large adjacent blocks that front on 7th Street,

[11] Adam Varat, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Citywide Planning and Policy Analysis, 1601 Mariposa Street, December 3, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[12] Jeff Joslin, San Francisco Planning Department, Community Plan Exemption Eligibility Determination, Current Planning Analysis, 1601 Mariposa Street, January 2, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

bordering Mission Bay, which is about 0.5 miles northeast of the project site. The blocks of industrial zoning south of 16th Street also support a variety of manufacturing, distribution, design-related, and other PDR businesses. Some PDR uses also operate in the residential and neighborhood commercial parts of Potrero Hill, but not to the same extent as is found in the Showplace Square area, which is further north.[13]

As shown in **Table 1**, existing buildings on the project site were constructed generally between 1940 and 1992 and are currently occupied by a variety of uses including office, warehouse, and commercial uses. The one-story warehouse located at 1601 Mariposa Street was previously occupied by a meat distribution plant and is currently occupied by an automotive parts distributor. The one-story warehouse and associated structures at 1677 Mariposa Street are currently occupied by a bus depot. In addition, the building located at 485-497 Carolina Street is occupied by storage, studio, office, and printing uses. The proposed project would result in the conversion of 68,570 gsf of PDR uses located on the project site; that is, 54,648 gsf at 1601 Mariposa Street (auto part warehouse), 3,538 gsf at 1677 Mariposa Street (bus depot) and a 10,384 gsf portion of the 16,510 gsf 485-497 Carolina Street building (printing and commercial storage) to commercial and residential uses. Thus, the project would convert existing PDR uses to commercial and residential use.

As noted above, the *Eastern Neighborhoods FEIR* determined that the cumulative loss of PDR use in the Plan Area would result in a significant and unavoidable land use impact. The proposed project would contribute to this land use impact due to the demolition of 68,570 sf of existing PDR uses. The proposed project represents a small part of the loss of PDR space analyzed in the *Eastern Neighborhoods FEIR* and would not result in significant impacts that were not identified or a more severe impact than analyzed in the FEIR. Additionally, the FEIR also determined that the use regulations that apply throughout most of the Showplace Square/Potrero Hill area, including the project area, would not substantially change.

The proposed change in use from PDR (auto parts warehouse, bus depot, printing and storage) to commercial and residential would therefore not result in a cumulatively considerable contribution to the significant and unavoidable cumulative land use impact related to the loss of PDR use under the Eastern Neighborhoods Area Plan, identified in the *Eastern Neighborhoods FEIR*.

For these reasons, implementation of the proposed project would not result in significant individual or cumulative impacts that were not identified in the *Eastern Neighborhoods FEIR* related to land use and land use planning, and no mitigation measures are necessary.

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[13] *Showplace Square/Potrero Hill Area Plan, An Area Plan of the General Plan of the City and County of San Francisco*, City and County of San Francisco, adopted December 2008. This document is available at the Planning Department, 1650 Mission Street, Suite 400 or at www.sf-planning.org/ftp/general_plan/Showplace_Square_Potrero.htm.

Topics:	*Project-Specific Significant Impact Not Identified in PEIR*	*Significant Unavoidable Impact Identified in PEIR*	*Mitigation Identified in PEIR*	*PEIR Mitigation Applies to Project*	*PEIR Mitigation Does Not Apply to Project*	*No Significant Impact (Project or PEIR)*
2. AESTHETICS—Would the project:						
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?	☐	☐	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	☐	☐	☐	☐	☐	☒

Public Resources Code Section 21099(d), effective January 1, 2014, provides that, "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment." Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the following three criteria:

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

b. The project is on an infill site;[14] and

c. The project is in a transit priority area.[15]

The proposed project meets each of the above three criteria and thus, this checklist does not consider aesthetics in determining the significance of project impacts under CEQA.[16] The Planning Department recognizes that the public and decision-makers nonetheless may be interested in information pertaining

[14] Public Resources Code Section 21099(a) 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 of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

[15] Public Resources Code Section 21099(a) defines a "transit priority area" as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code 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 or service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[16] San Francisco Planning Department, Transit-Oriented Infill Project Eligibility Checklist for 1601 Mariposa, February 5, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2012.1398E.

to the aesthetics of a proposed project and may desire that such information be provided as part of the environmental review process. Therefore, certain information that would have otherwise been provided in this section (such as "before" and "after" visual simulations) will be included in the Project Description contained in the EIR. The EIR will also include a description of the existing visual character of the site and surrounding area, a description of the height of the proposed buildings in relation to existing structures, and a discussion of the project's potential to obstruct long-range views. However, this information would be provided solely for informational purposes and would not be used to determine the significance of the environmental impacts of the project.

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3. POPULATION AND HOUSING—Would the project:						
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐	☐	☒
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	☐	☐	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* found that an increase of approximately 7,400 to 10,000 households, and 14,477 to 20,488 people by the year 2025 would be expected to occur as a secondary effect of implementation of the *Eastern Neighborhoods Plan*. The *Eastern Neighborhoods FEIR* also determined that the plan would serve to advance some key City policy objectives including: provision of housing, especially permanently affordable housing; conversion of underutilized industrial lands to housing; and new opportunities for housing near downtown. In addition, the *Eastern Neighborhoods FEIR* found that the plan would not result in displacement of residents, directly result in displacement of businesses or employment, create a substantial demand for additional housing in San Francisco, or substantially reduce the housing supply. For these reasons, the *Eastern Neighborhoods FEIR* determined that implementation of the plan would not result in significant adverse physical effects related to population and housing, and no mitigation measures were required. The proposed project is within the development projected to occur under the area plan, and therefore there would be no additional impacts on population and housing beyond those analyzed in the FEIR.

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4. CULTURAL AND PALEONTOLOGICAL RESOURCES—Would the project:						
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco *Planning Code*?	☐	☒	☒	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☒	☐	☐

Historic Architectural Resources

Pursuant to *CEQA Guidelines* Sections 15064.5(a)(1) and 15064.5(a)(2), historic resources are buildings or structures that are listed, or eligible for listing, in the California Register of Historical Resources, or identified in a local register of historic resources, such as Articles 10 and 11 of the San Francisco Planning Code. The *Eastern Neighborhoods FEIR* determined that future development facilitated through the changes in use districts and height limits under the Eastern Neighborhoods Area Plan could have substantial adverse changes on the significance of both individual historical resources and on historical districts within the Plan Area. The FEIR determined that approximately 32 percent of the known or potential historical resources within the Plan Area could potentially be affected under the preferred alternative. The *Eastern Neighborhoods FEIR* found this impact to be significant and unavoidable. This impact was addressed in a Statement of Overriding Considerations with findings and adopted as part of the Eastern Neighborhoods Rezoning and Area Plans approval on January 19, 2009.

The *Eastern Neighborhoods FEIR* identifies three mitigation measures that could reduce the severity of impacts of development enabled under the Eastern Neighborhoods Plan in some cases: *Eastern Neighborhoods FEIR Mitigation Measure K-1, Interim Procedures for Permit Review in the Eastern Neighborhoods Plan Area,* required certain projects to be presented to the Landmarks Preservation Advisory Board (now the Historic Preservation Commission). This mitigation measure is no longer relevant, because the Showplace Square/Northeast Mission Historic Resource Survey was completed and adopted by the Historic Preservation Commission June 2011.[17] *Mitigation Measures K-2 and K-3*, which amended Article 10 of the Planning Code to reduce potential adverse effects to contributory structures within the South End

[17] *Showplace Square/Northeast Mission Historic Resource Survey*, City and County of San Francisco Planning Department, June 2011.

Historic District (East SoMa) and the Dogpatch Historic District (Central Waterfront), do not apply because the proposed project it is not located within the South End or Dogpatch Historic Districts.

As discussed in the *Eastern Neighborhoods FEIR*, the Showplace Square/Potrero rezoning proposals would expand residential-permitted zoning and increase height limits in the area, which would generally be limited to portions of Showplace Square/Potrero Hill neighborhood east of Kansas/Henry Adams Street and along 7th Street. The rezoning proposals would change the land use and height to three parcels containing known resources and seven parcels containing potential resources.

Adoption of the *Eastern Neighborhoods Plan* resulted in the zoning reclassification of the project site from Heavy Commercial (C-M) and Light Industrial (M-1) to Urban Mixed Use (UMU). Permitted height limits on the project site remained unchanged. The project site currently consists of three buildings and associated surface parking lots and pavements. The project site characteristics for each parcel are summarized below.

- **1601 Mariposa Street (Block 4005/Lots 001B and 004):** This site (previously known as 395 Wisconsin Street) was developed in 1940 with an industrial building that was originally occupied by a Safeway meat distribution plant that was expanded in 1941. This building is a partially below-grade, one-story, reinforced concrete building finished in stucco and capped by a flat roof. The minimally altered building appears to be in good condition. The building is currently occupied by MacKenzie Warehouse Auto Parts. The site is also developed with a total of 87 surface parking spaces.
- **1677 Mariposa Street (Block 4006/Lots 006, 019, and 020):** This site was developed in 1992 as a surface parking lot. The site has since been developed with a one-story warehouse consisting of corrugated metal siding and a slightly pitched metal roof. This site is currently operated by Coach 21 as a bus depot. About 20 surface parking spaces for buses and vehicles are also located on the site, in addition to a portable trailer and lean-to shed.
- **485 Carolina Street (Block 4006, Lot 010):** This one-story commercial building was constructed in 1979 as a stucco-clad industrial building with a flat roof and is currently occupied by storage, studio, and office space operated by a variety of tenants.

The above properties at 1601 Mariposa, 1677 Mariposa, and 485 Carolina Street were surveyed by the City of San Francisco as part of the Showplace Square/Northeast Mission Historic Resource Survey, which was adopted in 2011. Specifically, all three properties were assigned a State of California Office of Historic Preservation (CHRSC) status code of "6Z," which designates the properties as "Found ineligible for National Register, California Register or Local designation through survey evaluation." Both 1677 Mariposa and 485 Carolina Streets were classified as 6Z because these buildings do not meet the minimum age requirements to be assessed for the California or National Register. Although it meets the minimum age requirements, 1601 Mariposa Street (also known as 395 Wisconsin Street) was also classified as 6Z. Therefore, for the purposes of the Planning Department's CEQA review procedures, the three subject parcels are classified as Category C (Properties Determined Not To Be Historical Resources or Properties For Which The City Has No Information Indicating That The Property Is An Historical Resource). Given this classification, the proposed demolition of the three existing buildings on the project site would not contribute to the significant and unavoidable historical resource impacts identified in the Eastern Neighborhoods EIR and no mitigation measures would be required.

Archeological Resources

The *Eastern Neighborhoods FEIR* determined that the much of the Eastern Neighborhoods area is underlain by soils that would require geotechnical support in the form of pilings or soils improvement techniques to accommodate increased development intensities. Therefore, new development would likely increase the amount and depth of soils disturbance on individual sites, resulting in an increased potential to affect California Register-eligible archaeological resources. The *Eastern Neighborhoods FEIR* identified a significant impact to archeological resources and determined that *Mitigation Measures J-1: Properties with Previous Studies*, *J-2: Properties with No Previous Studies*, and *J-3: Mission Dolores Archeological District* would reduce the effects to a less-than-significant level. *Eastern Neighborhoods FEIR Mitigation Measure J-1* applies to properties for which a final archeological research design and treatment plan is on file at the Northwest Information Center and the Planning Department. *Mitigation Measure J-2* applies to properties for which no archeological assessment report has been prepared or for which the archeological documentation is incomplete or inadequate to serve as an evaluation of potential effects on archeological resources under CEQA. *Mitigation Measure J-3*, which applies to properties in the Mission Dolores Archeological District, requires that a specific archeological testing program be conducted by a qualified archeological consultant with expertise in California prehistoric and urban historical archeology. Since the project site is not located within the Mission Dolores Archeological District and because no previous studies have been conducted on the project site, only *Mitigation Measure J-2* applies to the proposed project.

Pursuant to *Mitigation Measure J-2,* a Preliminary Archeological Review was prepared for the proposed project.[18] The Planning Department conducted an archeological assessment review of the project site and found that there is a possibility that, due to the close proximity of the project area to the southern edge of Mission Bay, there is a potential that prehistoric resources could be uncovered in the project area. Based on a review of historical maps for the project area, there is also the potential for historic-period resources, such as a late 19th century farming complex, which could be present within the project site soils. The proposed project could result in disturbance of site soils at depths of approximately 22 feet in specified areas where the project requires the installation of foundations that require the use of rammed aggregate piers. Due to the potential for significant archaeological resources and the types of disturbance proposed by project activities, the project may have a potential adverse effect to an historical resource under CEQA. Therefore, implementation of the Planning Department's standard Mitigation Measure 3 Archeological Resources - Archeological Testing would reduce potential significant impacts of the proposed project to archeological resources to a less-than-significant level. Overall, no significant archeological resource impacts are anticipated to occur either individually or cumulatively that were not identified in the *Eastern Neighborhoods FEIR*.

[18] Allison Vanderslice, Environmental Planning Archaeologist, memorandum to Chelsea Fordham, EP planner, December 24, 2013. This memorandum is available for review at the Planning Department, 1650 Mission Street, Suite 400, in File No. 2012.1398E.

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5. TRANSPORTATION AND CIRCULATION—Would the project:						
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☒	☒	☐	☒	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☒	☒	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks?	☒	☐	☐	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	☒	☐	☐	☐	☐	☐
e) Result in inadequate emergency access?	☒	☐	☐	☐	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☒	☐	☐	☐	☐	☐

The proposed project has the potential to result in a significant transportation and circulation impact. Accordingly, this topic will be further analyzed and included in the EIR.

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6. NOISE—Would the project:						
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☒	☐	☐
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☒	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☒	☐	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒	☐	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐	☐	☒
g) Be substantially affected by existing noise levels?	☐	☐	☒	☒	☐	☐

The *Eastern Neighborhoods FEIR* identified potential conflicts related to residences and other noise-sensitive uses in proximity to noisy uses such as PDR, retail, entertainment, cultural/institutional/ educational uses, and office uses. In addition, the *Eastern Neighborhoods FEIR* noted that implementation of the Area Plan would incrementally increase traffic-generated noise on some streets in the Plan Area and result in construction noise impacts from pile driving and other construction activities. The *Eastern Neighborhoods FEIR* therefore identified six noise mitigation measures that would reduce noise impacts to less-than-significant levels. A noise assessment was prepared for the proposed project to determine the projects ability to comply with the Eastern Neighborhoods EIR, which is discussed further below.[19]

[19] Charles M. Salter Associates, Inc., *1601 Mariposa Residences, San Francisco, CA, Eastern Neighborhoods Plan Environmental Noise Assessment*. April 29, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Project Impacts

Ambient noise levels in the vicinity of the project site are typical of noise levels in neighborhoods in San Francisco, which are dominated by vehicular traffic, including trucks, cars, Muni light rail and buses, emergency vehicles, and land use activities, such as industrial uses and periodic temporary construction-related noise from nearby development, or street maintenance.

Eastern Neighborhoods FEIR Mitigation Measures F-1 and F-2 relate to construction noise. Mitigation *Measure F-1: Construction Noise* addresses individual projects that include pile-driving, and *Mitigation Measure F-2: Construction Noise* addresses individual projects that include particularly noisy construction procedures (including pile-driving). The project is anticipated to use a spread-foot foundation bearing on native alluvium or bedrock for the majority of the East Building and a spread foot foundation bearing on ground improved with rammed aggregate piers on for the West Building and western part of the East Building. A rammed aggregate pier is installed by drilling a hole in the soil, and then ramming gravel (aggregate) into the bottom of the shaft with a hydraulic hammer. This ramming effect, performed in the pre-drilled hole below the at-grade surface, creates a very dense, stiff, rock pier that expands the drilled shaft and reinforces the soil. This pre-drilling and impaction below the surface foundation technique does not involve impact pile-driving and noise levels would be similar to demolition activities. Pile driving of piers during construction can generate loud noises. Neither of the proposed foundation types would require the use of impact driven piles and would not generate noise and vibration impacts typically caused by pile driving; therefore, Mitigation Measure F-1 would not apply to the proposed project.

However, implementation of the project would result in noise generating construction activities. Construction of the project would result in temporary elevated noise levels at existing adjacent land uses. Major construction phases are expected to include demolition and ground clearing, dewatering, shoring, excavation, utility and street improvements, street improvements, and concrete work. In addition, construction of the mixed-use development would include structural framing, exterior finishes, interior framing, and interior finishes. The noisiest of these activities is typically demolition and grading, when heavy machinery would be in use. Grading and shoring work would be minimal because the site is already graded and shored, thus minimal additional excavation is required. Implementation of *Mitigation Measure F-2: Construction Noise* would ensure that construction noise impacts would be less than significant. Mitigation Measure F-2 requires individual projects that include particularly noisy construction procedures in proximity to sensitive land uses to submit site-specific noise attenuation measures under the supervision of a qualified acoustical consultant to the Department of Building Inspection prior to commencing construction. As recommended in the *Environmental Noise Assessment* prepared for the proposed project, the project applicant would implement the following site-specific noise-attenuation measures during project construction in compliance with *Mitigation Measure F-2*: *Construction Noise (Project Mitigation Measure 2)*:

1. Conduct noise monitoring at the beginning of major construction phases (e.g., demolition, excavation) to determine the need and the effectiveness of noise-attenuation measures.
2. Erect temporary plywood noise barriers around the construction site where the site adjoins noise-sensitive receivers, such as the Live Oak School.

3. Utilize noise control blankets on the building structure adjacent to Live Oak School – and possibly other noise-sensitive receivers – as the building is erected to reduce noise emission from the site.
4. Post signs on-site pertaining to permitted construction days and hours, complaint procedures, and who to notify in the event of a problem, with telephone numbers listed.
5. Notify the Department of Building Inspection and neighbors in advance of the schedule for each major phase of construction and expected loud activities.
6. When feasible, select "quiet" construction methods and equipment (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds).
7. Require that all construction equipment be in good working order and that mufflers are inspected to be functioning properly. Avoid unnecessary idling of equipment and engines.
8. Mobile noise-generating equipment (e.g., dozers, backhoes, and excavators) shall be required to prepare the entire site. However, the developer will endeavor to avoid placing stationary noise generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas (measured at linear 20 feet) between immediately adjacent neighbors.
9. The project sponsor shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools.

In addition, all construction activities for the proposed project (which would occur over approximately 24 months) would be subject to and would comply with the San Francisco Noise Ordinance (Article 29 of the San Francisco Police Code) (Noise Ordinance). Construction noise is regulated by the Noise Ordinance. The Noise Ordinance requires that construction work be conducted in the following manner: (1) noise levels of construction equipment, other than impact tools, must not exceed 80 dBA at a distance of 100 feet from the source (the equipment generating the noise); (2) impact tools must have intake and exhaust mufflers that are approved by the Director of the Department of Public Works (DPW) or the Director of the Department of Building Inspection (DBI) to best accomplish maximum noise reduction; and (3) if the noise from the construction work would exceed the ambient noise levels at the site property line by 5 dBA, the work must not be conducted between 8:00 p.m. and 7:00 a.m. unless the Director of DPW authorizes a special permit for conducting the work during that period.

DBI is responsible for enforcing the Noise Ordinance for private construction projects during normal business hours (8:00 a.m. to 5:00 p.m.). The Police Department is responsible for enforcing the Noise Ordinance during all other hours. Nonetheless, during the approximately 24 month construction period for the proposed project, occupants of the nearby properties could be disturbed by construction noise. Times may occur when noise could interfere with indoor activities in nearby residences and other businesses near the project site and may be considered an annoyance by occupants of nearby properties. The increase in noise in the project area during project construction would not be considered a significant impact of the proposed project, because the construction noise would be temporary (approximately 24

months), intermittent, and restricted in occurrence and level, as the contractor would be subject to and would comply with the Noise Ordinance.

Implementation of the measures outlined for compliance with Mitigation Measure F-2 and the San Francisco Noise Ordinance would ensure that construction noise impacts are less than significant.

Eastern Neighborhoods FEIR Mitigation Measures F-3: Interior Noise Levels, *F-4: Siting of Noise Sensitive Uses* and *F-6: Open Space in Noisy Environments* include additional measures for individual projects that include new noise-sensitive uses. Mitigation Measure F-3 requires that new development that includes noise-sensitive uses located along streets with noise levels above 60 dBA (Ldn), where such development is not already subject to California Noise Insulation Standards in Title 24, the project sponsor shall conduct a detailed analysis of noise reduction requirements. However, Mitigation Measure F-3 is not applicable to the proposed project because the project is required to comply with Title 24 standards. The noise assessment prepared also analyzed whether the proposed project can feasibly attain acceptable noise levels consistent with Title 24.

Eastern Neighborhoods FEIR Mitigation Measure F-4: Siting of Noise-Sensitive Uses states that "to reduce potential conflicts between existing noise-generating uses and new sensitive receptors, for new development including noise-sensitive uses, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within 900 feet of, and that have a direct line-of-sight to, the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes) to demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained."

As part of the project's *Environmental Noise Assessment*, noise data was collected continuously for 48 hours on weekdays at four locations around the project site. Noise levels from 64 to 74 dB L_{dn} were measured around the project site. Noise-generating uses within the vicinity of the site include Anchor Brewing Company, International Studies Academy, Jackson Playground, Live Oak School, and various restaurants along 18th Street. It was assumed that these facilities were operating when on-site noise measurements were conducted. To meet the 45 dB L_{dn} criterion called out in the building code (Title 24), the proposed project would be required to install windows with noise reduction ratings of up to STC 38. The windows could be operable, but would need to be in the closed position to meet the indoor noise standard. Therefore, these units would require a ventilation or air-conditioning system that does not compromise the sound attenuation of the exterior façade However, units facing the interior courtyards are exposed to noise levels no greater than 60 dB L_{dn} and windows in these units do not need to be sound-rated and these units are not subject to the ventilation requirement. With installation of the appropriate windows, the project would comply with Title 24 requirements and thus would be consistent with Mitigation Measure F-4, ensuring that the proposed new residents would not be exposed to significant noise impacts.

Mitigation Measure F-6: Open Space in Noisy Environments requires that open space required under the Planning Code for individual projects located in noisy areas be protected, to the maximum feasible extent, from existing ambient noise levels. The project open space would be the courtyards for each building. The noise level in the courtyards was calculated to be less than 60 dB L_{dn}. The noise level in the mid-block alley would be up to 70 dB L_{dn} in areas with a direct line of sight to surrounding roadways. The alley is a public throughway and, therefore, there is no feasible noise mitigation (e.g., noise barriers) that could be applied that would be "consistent with other principles of urban design" (as noted in Mitigation Measure F-6). Specifically, the primary method to reduce noise from roadway traffic would be to block the line of sight from the source to the receptor area; this is typically done through the use of a noise barriers or placement of new structures to provide screening. However, due to the plans for this area to be a mid-block public pedestrian throughway, the use of such measures would be infeasible from a design standpoint and would not meet the Planning Code requirements for mid-block through fares. Therefore, as this proposed open space area is already protected from existing noise sources "to the maximum feasible extent," the project would be in compliance with the requirements of Mitigation Measure F-6.

Eastern Neighborhoods FEIR Mitigation Measure F-5: Siting of Noise Generating Uses, addresses impacts related to individual projects that include new noise-generating uses that would be expected to generate noise levels in excess of ambient noise in the proposed project site vicinity. An approximate doubling in traffic volumes in the area would be necessary to produce an increase in ambient noise levels barely perceptible to most people (3.0 decibel increase). According to the *Transportation Impact Study* prepared by DKS Associates,[20] existing traffic volumes during the PM peak hour at the four intersections that surround the project site are 1,844 vehicles. The proposed project would not double traffic volumes because the proposed project would generate approximately 3,192 daily vehicle trips, with approximately 452 trips during the PM peak-hour. In addition, operation of the proposed project would not include any other constant or short-term noise sources (e.g., diesel generator) that would be perceptible in the project vicinity. Therefore, Mitigation Measure F-5 is not applicable to the proposed project since the project would not include new noise-generating uses (such as commercial, industrial, or other uses) that would be expected to generate noise levels in excess of ambient noise.

The project site is not located within an airport land use plan area, within two miles of a public airport, or in the vicinity of a private airstrip. Therefore, topic 12e and f from the CEQA Guidelines, Appendix G are not applicable.

For the above reasons, the proposed project would not result in significant individual or cumulative noise impacts that were not identified in the *Eastern Neighborhoods FEIR*.

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[20] DKS Associates, 1601 and 1677 Mariposa Street/485 Carolina Street, Related California Residential Project, Transportation Impact Study, April 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Topics:		*Project-Specific Significant Impact Not Identified in PEIR*	*Significant Unavoidable Impact Identified in PEIR*	*Mitigation Identified in PEIR*	*PEIR Mitigation Applies to Project*	*PEIR Mitigation Does Not Apply to Project*	*No Significant Impact (Project or PEIR)*
7.	**AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.**—Would the project:**						
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐	☐	☒
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	☐	☐
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* identified potentially significant air quality impacts related to construction activities that may cause wind-blown dust and pollutant emissions; roadway-related air quality impacts on sensitive land uses; and the siting of uses that emit diesel particulate matter (DPM) and toxic air contaminants (TACs) as part of everyday operations. These significant impacts would conflict with the applicable air quality plan at the time, the Bay Area 2005 Ozone Strategy. The *Eastern Neighborhoods FEIR* identified four mitigation measures that would reduce air quality impacts to less-than-significant levels.

Background

The San Francisco Bay Area Air Basin (SFBAAB) encompasses San Francisco, Alameda, Contra Costa, San Mateo, and Napa Counties, and includes parts of Solano and Sonoma Counties. Although air quality in the air basin has generally improved over the last several decades, elevated levels of ozone, carbon monoxide, and particulate matter have been observed. In most of the Bay Area, transportation-related sources account for a majority of air pollutant emissions. Therefore, a major focus of the BAAQMD is on reducing vehicle trips associated with new development.

The federal Clean Air Act and California Clean Air Act contain ambient air standards and related air quality reporting systems to be used by regional regulatory agencies in developing air pollution control measures. The Bay Area Air Quality Management District (BAAQMD) is the primary responsible regulatory agency in the Bay Area for planning, implementing, and enforcing the federal and State ambient air quality standards for criteria pollutants. Both State and federal governments have established

health-based Ambient Air Quality Standards for six criteria air pollutants:[21] carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and suspended particulate matter (PM).

In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Long-term exposure to elevated levels of criteria pollutants may result in adverse health effects. However, emission thresholds established by an air district are used to manage total regional emissions within an air basin based on the air basin's attainment status for criteria pollutants. These emission thresholds were established for individual projects that would contribute to regional emissions and pollutant concentrations and could adversely affect or delay the projected attainment target year for certain criteria pollutants. **Table 3**, below, identifies air quality significance thresholds of criteria air pollutants followed by a discussion of each threshold. 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 SFBAAB.

Table 3: Criteria Air Pollutant Significance Thresholds

	Construction Thresholds	Operational Thresholds	
Pollutant	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	

Source: City of San Francisco and BAAQMD, 2014.

Because of the conservative nature of the thresholds and the basin-wide context of individual project emissions, there is no direct correlation between a single project and localized air quality-related health effects. One individual project that generates emissions exceeding a threshold does not necessarily result in adverse health effects for residents in the project vicinity. This condition is especially true when the criteria pollutants exceeding thresholds are those with regional effects, such as ozone precursors like nitrogen oxides (NO_x) and reactive organic gases (ROG). Criteria pollutants are discussed below.

Ozone Precursors. As discussed previously, the SFBAAB is currently designated as non-attainment for ozone and particulate matter. Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and oxides of nitrogen (NO_x). 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, are based on the State

[21] Criteria pollutants are defined as those pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health.

and federal Clean Air Acts emissions limits for stationary sources. To ensure that new stationary sources do not cause or contribute to a violation of an air quality standard, BAAQMD Regulation 2, Rule 2 requires that any new source that emits criteria air pollutants above a specified emissions limit must offset those emissions. For ozone precursors ROG and NO_x, the offset emissions level is an annual average of 10 tons per year (or 54 pounds (lbs.) per day).[22] 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.

Particulate Matter (PM_{10} and $PM_{2.5}$).[23] The federal New Source Review (NSR) 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. For PM_{10} and $PM_{2.5}$, the emissions limit under NSR is 15 tons per year (82 lbs. per day) and 10 tons per year (54 lbs. per day), respectively. These emissions limits represent levels at which a source is not expected to have an impact on air quality.[24] Although the regulations specified above apply to new or modified stationary sources, land use development projects result in ROG, NO_x, PM_{10} and $PM_{2.5}$ emissions as a result of increases in vehicle trips, architectural coating and construction activities. Therefore, the above thresholds can be applied to the construction and operational phases of land use projects and those projects that result in emissions below these thresholds would not be considered to contribute to an existing or projected air quality violation or result in a considerable net increase in ozone precursors or particulate matter. Due to the temporary nature of construction activities, 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 control fugitive dust.[25] Individual measures have been shown to reduce fugitive dust by anywhere from 30 to 90 percent.[26] The BAAQMD has identified a number of BMPs to control fugitive dust emissions from construction activities.[27] The City's Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) requires a number of fugitive dust control measures to 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.

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[22] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance,* October 2009, page 17.

[23] PM_{10} is often termed "coarse" particulate matter and is made of particulates that are 10 microns in diameter or smaller. $PM_{2.5}$, termed "fine" particulate matter, is composed of particles that are 2.5 microns or less in diameter.

[24] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance,* October 2009, page 16.

[25] Western Regional Air Partnership. *2006. WRAP Fugitive Dust Handbook.* September 7, 2006. This document is available online at www.wrapair.org/forums/dejf/fdh/content/FDHandbook_Rev_06.pdf, accessed February 16, 2012.

[26] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance,* October 2009, page 27.

[27] BAAQMD, *CEQA Air Quality Guidelines,* May 2011.

Local Health Risks and Hazards

In addition to criteria air pollutants, individual projects may emit toxic air contaminants (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 of short-term) adverse effects to human health, including carcinogenic effects. Human health effects of TACs include birth defects, neurological damage, cancer, and mortality. 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 but are regulated by the BAAQMD using a risk-based approach 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.[28]

Air pollution does not affect every individual in the population in the same way, and 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 for other land uses. Therefore, these groups are referred to as sensitive receptors. Exposure assessment guidance typically assumes that residences would be exposed to air pollution 24 hours per day, 350 days per year, for 70 years. Therefore, assessments of air pollutant exposure to residents typically result in the greatest adverse health outcomes of all population groups.

Exposures to fine particulate matter ($PM_{2.5}$) are strongly associated with mortality, respiratory diseases, and lung development in children, and other endpoints such as hospitalization for cardiopulmonary disease.[29] In addition to $PM_{2.5}$, diesel particulate matter (DPM) is also of concern. The California Air Resources Board (ARB) identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans.[30] The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

In an effort to identify areas of San Francisco most adversely affected by sources of TACs, San Francisco partnered with the BAAQMD to inventory and assess air pollution and exposures from mobile,

[28] In general, a health risk assessment is required if the BAAQMD 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.

[29] 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.

[30] California Air Resources Board, Fact Sheet, "The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines," October 1998.

stationary, and area sources within San Francisco. Areas with poor air quality, termed the "Air Pollutant Exposure Zone," were identified based on two health-protective criteria: (1) excess cancer risk from the contribution of emissions from all modeled sources greater than 100 per one million population, and/or (2) cumulative $PM_{2.5}$ concentrations greater than 10 micrograms per cubic meter ($\mu g/m^3$).

Excess Cancer Risk. The above 100 per one million persons (100 excess cancer risk) criteria is based on United State Environmental Protection Agency (USEPA) guidance for conducting air toxic analyses and making risk management decisions at the facility and community-scale level.[31] As described by the BAAQMD, the USEPA considers a cancer risk of 100 per 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 (NESHAP) rulemaking,[32] 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 one in one million and (2) limiting to no higher than approximately one in ten thousand [100 in one 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." The 100 per one million excess cancer cases is also consistent with the ambient cancer risk in the most pristine portions of the Bay Area based on BAAQMD regional modeling.[33]

Fine Particulate Matter. In April 2011, the USEPA published *Policy Assessment for the Particulate Matter Review of the National Ambient Air Quality Standards*, "Particulate Matter Policy Assessment." In this document, USEPA staff concludes that the current federal annual $PM_{2.5}$ standard of 15 $\mu g/m^3$ should be revised to a level within the range of 13 to 11 $\mu g/m^3$, with evidence strongly supporting a standard within the range of 12 to 11 $\mu g/m^3$. The Air Pollutant Exposure Zone for San Francisco is based on the health protective $PM_{2.5}$ standard of 11 $\mu g/m^3$, as supported by the USEPA's Particulate Matter Policy Assessment, although lowered to 10 $\mu g/m^3$ to account for uncertainty in accurately predicting air pollutant concentrations using emissions modeling programs.

Land use projects within the Air Pollutant Exposure Zone require special consideration to determine whether the project's activities would expose sensitive receptors to substantial air pollutant concentrations or add emissions to areas already adversely affected by poor air quality.

Eastern Neighborhoods FEIR

Eastern Neighborhoods FEIR Mitigation Measure G-1 requires individual projects that include construction activities to include dust control measures and maintain and operate construction equipment so as to minimize exhaust emissions of particulates and other pollutants. Mitigation Measure G-2 involves new residential development near high-volume roadways. Mitigation Measure G-3 involves uses generating

[31] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance,* October 2009, page 67.

[32] 54 Federal Register 38044, September 14, 1989.

[33] BAAQMD, *Revised Draft Options and Justification Report, California Environmental Quality Act Thresholds of Significance,* October 2009, page 67.

substantial DPM emissions, including warehouse and distribution centers, commercial, industrial that would be served by 100 truck trips per day, and Measure G-4 involves the siting of commercial, industrial, or other uses that emit TACs as part of everyday operations.

Construction Emissions

Construction activities from the proposed project would result in the generation of dust, primarily from ground-disturbing activities. *Eastern Neighborhoods FEIR* Mitigation Measure G-1 requires individual projects that include construction activities to include dust control measures and maintain and operate construction equipment so as to minimize exhaust emissions of particulates and other pollutants. (This mitigation measure was identified in the Eastern Neighborhoods Initial Study.) Subsequent to publication of the *Eastern Neighborhoods FEIR*, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health Codes, generally referred to as the Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008). The intent of the Construction Dust Control Ordinance is to reduce the quantity of dust generated during site preparation, demolition, and construction work in order to protect the health of the general public and of on-site workers, minimize public nuisance complaints, and to avoid orders to stop work by DBI. The proposed project would be subject to and would comply with the Construction Dust Control Ordinance, therefore the portions of Mitigation Measure G-1 that deal with dust control are not applicable to the proposed project.

The Ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specified dust control measures whether or not the activity requires a permit from DBI. The Director of DBI may waive this requirement for activities on sites less than one half-acre that are 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 use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the Director. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible. Contractors shall provide as much water as necessary to control dust (without creating run-off in any area of land clearing, and/or earth movement). 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 of excavated material, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 mil (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques.

For projects over one half-acre, such as the proposed project, the Dust Control Ordinance requires that the project sponsor submit a Dust Control Plan for approval by the San Francisco Department of Public Health. DBI will not issue a building permit without written notification from the Director of Public

Health that the applicant has a site-specific Dust Control Plan, unless the Director waives the requirement. Interior-only tenant improvement projects that are over one-half acre in size that will not produce exterior visible dust are exempt from the site-specific Dust Control Plan requirement.

The site-specific Dust Control Plan would require the project sponsor to: submit of a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site; wet down areas of soil at least three times per day; provide an analysis of wind direction and install upwind and downwind particulate dust monitors; record particulate monitoring results; hire an independent, third-party to conduct inspections and keep a record of those inspections; establish shut-down conditions based on wind, soil migration, etc.; establish a hotline for surrounding community members who may be potentially affected by project-related dust; limit the area subject to construction activities at any one time; install dust curtains and windbreaks on the property lines, as necessary; limit the amount of soil in hauling trucks to the size of the truck bed and securing with a tarpaulin; enforce a 15 mph speed limit for vehicles entering and exiting construction areas; sweep affected streets with water sweepers at the end of the day; install and utilize wheel washers to clean truck tires; terminate construction activities when winds exceed 25 miles per hour; apply soil stabilizers to inactive areas; and sweep off adjacent streets to reduce particulate emissions. The project sponsor would be required to designate an individual to monitor compliance with these dust control requirements.

Also, subsequent to publication of the FEIR, the BAAQMD provided updated 2011 BAAQMD *CEQA Air Quality Guidelines* (Air Quality Guidelines),[34] which provided new methodologies for analyzing air quality impacts, including construction activities. The Air Quality Guidelines provide screening criteria for determining whether a project's criteria air pollutant emissions may 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. If a project is below the screening criteria, then the lead agency or applicant would not need to perform a detailed air quality assessment of their proposed project's air pollutant emissions and construction or operation of the proposed project would result in a less-than-significant air quality impact. The proposed project would exceed the screening criteria provided in the BAAQMD Air Quality Guidelines for construction-related criteria air pollutants; therefore, an *Air Quality Criteria Pollutant Analysis*[35] was prepared for the proposed project. To determine project construction and operational criteria air pollutant emissions, the California Emissions Estimator Model (CalEEMod v.2013.2.2)[36] was used.

Construction activities from the proposed project would also result in the emission of criteria air pollutants and DPM from equipment exhaust, construction-related vehicular activity, and construction

[34] Bay Area Air Quality Management District (BAAQMD), *California Environmental Quality Act Air Quality Guidelines*, updated May 2011.

[35] LSA Associates, Inc., *Final 1601 Mariposa Air Quality Criteria Pollutant Analysis*, March 4, 2014.

[36] CalEEMod is the latest air quality emissions model approved for use by the BAAQMD. CalEEMod incorporates ARB approved Off-Road and On-Road Mobile-Source Emission Factor models (OFFROAD and EMFAC, respectively) and is designed to estimate emissions for land use development projects. CalEEMod allows for the input of project-specific information.

worker automobile trips. Construction of the project would occur over an approximately 24-month period. Diesel-fueled equipment would be required for the duration of the project.

Based on information provided by the applicant, the construction phasing schedule shown in **Table 4** was input in CalEEMod. The criteria pollutants reactive organic ROG and NO_x (two precursors of ozone) and particulate matter (PM_{10} and $PM_{2.5}$) associated with construction of the proposed project have been evaluated. Using the Annual Emissions Results data set from CalEEMod, average daily construction emissions were calculated by converting the annual results from tons per year to pounds per day, then dividing the result by 522, the total number of days of construction (5 days per week for 24 months).

Table 4: Project Construction Phasing

Phase Name	Start Date	End Date
Demolition	10/01/2015	11/15/2015
Site Preparation	10/15/2015	11/15/2015
Grading	10/15/2015	11/30/2015
Building Construction	11/01/2015	02/01/2017
Paving	08/01/2017	09/30/2017
Architectural Coating	03/01/2017	08/01/2017

Source: Related California, 2014.

Model estimated construction-related emission results are presented in **Table 5** for average daily construction emissions. As shown in **Table 5**, project construction emissions would be below the significance thresholds, therefore the project would not result in significant construction emissions. Therefore, the construction equipment exhaust maintenance portion of Eastern Neighborhoods FEIR Mitigation Measure G-1 is not applicable. Construction emissions would be below the significance thresholds, therefore the proposed project would not result in significant construction emissions.

Table 5: Daily Project Construction Emissions

	Pollutant Emissions (Average Pounds/Day)			
Project Construction	**ROG**	**NO_x**	**Exhaust PM_{10}**	**Exhaust $PM_{2.5}$**
Average Daily Construction Emissions	20.2	42.1	2.4	2.2
Significance Thresholds	**54.0**	**54.0**	**82.0**	**54.0**
Significant?	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., 2014.

Additionally, certain coarse-grained soils at the project site contain serpentine, a naturally-occurring form of asbestos. As no historical land uses at the project site have involved the use of asbestos, the asbestos is assumed to have been present in fill materials of unknown origin placed at the site during its initial development. Asbestos is a known human carcinogen, and exposure to asbestos is associated with increased risk of lung cancer, mesothelioma (a cancer of the thin membrane that surrounds the lungs and other internal organs), and other illnesses. As the project site is currently covered with buildings, pavement, and landscaping, there is currently no potential for human exposure to asbestos in the soils. However, during project development, earthmoving activities would disturb soils containing asbestos, with the potential to release asbestos fibers to the air where they could potentially affect construction workers and nearby members of the general public. The disturbance of naturally occurring asbestos from construction activities would be required to comply with the Asbestos Airborne Toxic Control Measure

(ATCM) enforced by the Bay Area Air Quality Management District (BAAQMD) and the Construction Dust Control Ordinance. This issue will also be further discussed in the Hazards section of the EIR to be prepared for the project.

Construction Health Risk Assessment

The project site is not located within an identified Air Pollutant Exposure Zone, therefore, the ambient health risk to sensitive receptors from air pollutants is not considered substantial. The proposed project's construction activities would be temporary and variable in nature. Furthermore, the proposed project would be subject to California regulations limiting idling times to five minutes, which would further reduce sensitive receptors exposure to temporary and variable DPM emissions.[37] Therefore, the construction of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. In addition, as demonstrated in the CalEEMod analysis below, the proposed project would not exceed the thresholds provided by the BAAQMD for construction-related criteria air pollutants including exhaust particulate matter.

Operational Health Risk Assessment

Mitigation Measure G-2 requires new sensitive receptors near sources of TACs, including DPM, to include an analysis of air pollutant concentrations ($PM_{2.5}$) to determine whether those concentrations would result in a substantial health risk to new sensitive receptors. The proposed project would include new sensitive receptors. However, the project site is not located within an identified air pollution Air Pollutant Exposure Zone, therefore, the ambient health risk to sensitive receptors from air pollutants is not considered substantial. Therefore, Mitigation Measure G-2 is not applicable to the proposed project.

Mitigation Measure G-4 involves the siting of commercial, industrial, or other uses that emit TACs as part of everyday operations that would be served by at least 100 trucks per day. According to the *Transportation Impact Study*[38] prepared for the project, the proposed project would generate 3,192 vehicle trips per day and would therefore, not generate more than 10,000 vehicle trips per day, 100 truck trips per day, or include a new stationary source (such as on on-site generator), or other items that would emit TACs as part of everyday operations. Furthermore, the project site is not located within an identified Air Pollutant Exposure Zone, therefore, the ambient health risk to sensitive receptors from air pollutants is not considered substantial. Therefore, Mitigation Measure *G*-4 is not applicable to the proposed project.

A portion of the site currently operates as a bus maintenance/staging and parking area which would be removed with implementation of the project. Diesel fueled buses are a source of odors and toxic air contaminants. Therefore, by removing this existing source of air contaminants, air quality in the immediate project vicinity, including exposure levels for students and residents in the project, could be improved with implementation of the project.

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[37] California Code of Regulations, Title 13, Division 3, § 2485.

[38] DKS Associates, 1601 and 1677 Mariposa Street/485 Carolina Street, Related California Residential Project, Transportation Impact Study, April 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Operational Emissions

The proposed project would result in an increase in operational-related criteria air pollutants including from the generation of daily vehicle trips and energy demand. The proposed project meets the screening criteria provided in the BAAQMD CEQA Air Quality Guidelines (May 2011) for operational-related criteria air pollutants for residential and retail uses individually; however, to determine project impacts of the land uses together an analysis using CalEEMod was conducted.

The operational and area source emissions of criteria air pollutants for the project were estimated using CalEEMod, with project-specific land use data. The project would generate criteria pollutant emissions associated with vehicle traffic and on-site area sources (i.e., natural gas combustion for space and water heating, and combustion of other fuels by building and grounds maintenance equipment). Model inputs include 320 mid-rise residential units, 10,000 square feet of retail space, and a 265 to 275 space parking enclosure. Operational emissions for the proposed project are based on vehicle trip generation rates by land use type as identified in Table 9 of the *Transportation Impact Study*.[39] The daily emissions associated with operation of the proposed project (project-related trip generation and operational increases in stationary sources) are identified in **Table 6** for ROG, NO_x, PM_{10} and $PM_{2.5}$. Annual emissions are shown in **Table 7**.

A portion of the site currently operates as a bus maintenance/staging and parking area, which would be removed with implementation of the project. Diesel fueled buses are a source of odors and toxic air contaminants. In addition, there is approximately 74,696 gross square feet of commercial office and warehouse use on the site, including the MacKenzie Warehouse which also runs a fleet of delivery vehicles. The analysis includes all trips generated by the proposed project; however, it does not account for the reduction in trips that would occur as a result of the removal of current uses. Therefore, emission estimates for the proposed project are conservative; net new emissions associated with the project would actually be less than those shown in **Table 6** and **Table 7**.

Table 6: Daily Project Operational Emissions

	Pollutant Emissions (Pounds/Day)			
Sources	**Reactive Organic Gases**	**Nitrogen Oxides**	**PM_{10}**	**$PM_{2.5}$**
Area (Land Use)	12.3	0.3	0.5	0.5
Energy	0.1	0.7	0.1	0.1
Mobile (Vehicle)	10.6	19.4	12.6	3.6
Total Project Emissions	**23.0**	**20.5**	**13.2**	**4.1**
Significance Threshold	**54.00**	**54.00**	**82.00**	**54.00**
Exceed Threshold? (Yes/No)	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., 2014.

[39] DKS Associates, 1601 and 1677 Mariposa Street/485 Carolina Street, Related California Residential Project, Transportation Impact Study, April 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Table 7: Annual Project Operational Emissions

Sources	Pollutant Emissions (Tons/Year)			
	Reactive Organic Gases	Nitrogen Oxides	PM_{10}	$PM_{2.5}$
Area	2.1	0.0	0.0	0.0
Energy	0.0	0.1	0.0	0.0
Mobile	1.8	3.4	2.1	0.6
Total Project Emissions	**3.9**	**3.5**	**2.1**	**0.6**
Significance Threshold	**10.00**	**10.00**	**15.00**	**10.00**
Exceed Threshold? (Yes/No)	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., 2014.

As shown in **Tables 6 and 7**, the proposed project would not exceed the significance threshold for operational emissions.

Clean Air Plan Consistency

The *Eastern Neighborhoods FEIR* stated that with implementation of Mitigation Measures G-2, G-3, and G-4, the Area Plan would be consistent with the Bay Area 2005 Ozone Strategy, the applicable air quality plan at the time. Subsequent to the certification of the FEIR, the 2010 Clean Air Plan was adopted by the BAAQMD and it updates the Bay Area 2005 Ozone Strategy in accordance with the requirements of the California Clean Air Act to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and greenhouse gases in a single, integrated plan; and establish emission control measures to be adopted or implemented. Consistency with the 2010 Clean Air Plan is determined by whether or not the proposed project would result in significant and unavoidable air quality impacts or hinder implementation of control measures (e.g., excessive parking or preclude extension of transit lane or bicycle path). As stated above, the proposed project would not result in significant and unavoidable air quality impacts and the proposed project does not include elements that would hinder implementation of control measures. Therefore the proposed project would not conflict with an applicable air quality plan.

For the above reasons, the proposed project would not result in significant individual or cumulative impacts that were not identified in the *Eastern Neighborhoods FEIR* related to air quality.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
8. GREENHOUSE GAS EMISSIONS—Would the project:						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☐	☐	☒
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* assessed the GHG emissions that could result from rezoning of the Showplace Square/Potrero Hill Area Plan under the three rezoning options. The Eastern Neighborhoods Rezoning Options A, B, and C are anticipated to result in GHG emissions on the order of 4.2, 4.3 and 4.5 metric tons of CO_2E per service population,[40] respectively. The *Eastern Neighborhoods FEIR* concluded that the resulting GHG emissions from the three options analyzed in the Eastern Neighborhoods Area Plans would be less than significant. No mitigation measures were identified in the FEIR. The proposed project is within the development projected to occur under the area plan, and therefore there would be no additional impacts on greenhouse gas emissions beyond those analyzed in the FEIR.

These regulations, as outlined in San Francisco's Strategies to Address Greenhouse Gas Emissions, have proven effective as San Francisco's GHG emissions have measurably reduced when compared to 1990 emissions levels, demonstrating that the City has met and exceeded EO S-3-05, AB 32, and the Bay Area 2010 Clean Air Plan GHG reduction goals for the year 2020. The proposed project was determined to be consistent with San Francisco's GHG Reduction Strategy.[41] Other existing regulations, such as those implemented through AB 32, will continue to reduce a proposed project's contribution to climate change. Therefore, the proposed project's GHG emissions would not conflict with state, regional, and local GHG reduction plans and regulations, and thus the proposed project's contribution to GHG emissions would not be cumulatively considerable or generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. As such, the proposed project would result in a less-than-significant individual and cumulative impacts with respect to GHG emissions.

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[40] Memorandum from Jessica Range, MEA to MEA staff, Greenhouse Gas Analyses for Community Plan Exemptions in Eastern Neighborhoods, April 20, 2010. This memorandum provides an overview of the GHG analysis conducted for the Eastern Neighborhoods Rezoning EIR and provides an analysis of the emissions using a service population (equivalent of total number of residents and employees) metric.

[41] *Greenhouse Gas Analysis: Compliance Checklist*, 1601 Mariposa Street, February 5, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
9. WIND AND SHADOW—Would the project:						
a) Alter wind in a manner that substantially affects public areas?	☐	☐	☐	☐	☐	☒
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	☒	☒	☐	☐	☐	☐

Wind

Wind impacts are directly related to building design and articulation and the surrounding site conditions. The *Eastern Neighborhoods FEIR* determined the area plans would not result in a significant impact to wind because the Planning Department, in review of specific future projects, would continue to require analysis of wind impacts, where deemed necessary, to ensure that project-level wind impacts would be mitigated to a less-than-significant level. No mitigation measures were identified in the FEIR.

Based upon experience of the Planning Department in reviewing wind analyses and expert opinion on other projects, it is generally (but not always) the case that projects under 80 feet in height do not have the potential to generate significant wind impacts. The project site is located within a 40-X Height and Bulk District. The proposed buildings on the site would be up to 40 feet in height and, with the exception of one five-story element within the interior of the site, three to four stories (excluding parapets approximately four feet in height, five elevator overruns approximately six feet in height and two stair overruns up to 10 feet in height) and would be similar to height to most existing buildings in the area, which include a mix of two- to four-story buildings. At some locations along Arkansas Street and 18th Street, the proposed buildings would be up to two stories taller than nearby buildings; however, this height difference would not be substantial enough to alter wind conditions or result in wind-related impacts. For these reasons, the proposed project is not anticipated to cause significant individual or cumulative impacts that were not identified in the *Eastern Neighborhoods FEIR* related to wind.

Shadow

The proposed project has the potential to result in a significant shadow impact on Jackson Playground. Accordingly, this topic will be further analyzed and included in the EIR.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
10. RECREATION—Would the project:						
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☐	☐	☒
c) Physically degrade existing recreational resources?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* concluded that implementation of the Eastern Neighborhoods Rezoning and Area Plans would not result in substantial or accelerated deterioration of existing recreational resources or require the construction or expansion of recreational facilities that may have an adverse effect on the environment. No mitigation measures related to recreational resources were identified in the *Eastern Neighborhoods FEIR*.

The *Eastern Neighborhoods FEIR* also found that implementation of the plan would not result in direct physical degradation of any existing recreational resources within the project area or Citywide, nor would the plan result in any specific alterations to infrastructure, such as new park or recreational facility development. As such, no adverse physical impacts associated with the construction or expansion of recreational facilities is expected, as none would be undertaken as part of the implementation *Eastern Neighborhoods Plan*. Specific proposals for the development of park space or recreation facilities would be subject to subsequent project-level environmental review. No mitigation measures were identified in the *Eastern Neighborhoods FEIR*.

The Eastern Neighborhoods are collectively served by about 50 acres of neighborhood parks and facilities (district- neighborhood- and sub-neighborhood-serving parks) and Potrero Hill is served by 21.33 acres of open space and recreational facilities. With a baseline (2000) population of approximately 67,000 residents, the existing resources provided approximately 0.75 acres of neighborhood parks per 1,000 residents. The *Eastern Neighborhoods FEIR* relied on a 2006 study,[42] which determined that while there are relatively few parks within the Showplace Square/Potrero Hill neighborhood, existing parks are large in size and, in general, adequately serve the majority of the neighborhood. The proposed project is within

[42] *Recreation and Park Acquisition Policy*, City and County of San Francisco, Recreation and Park Department, May 2006.

the development projected to occur under the area plan, and therefore there would be no additional impacts related to recreational facilities beyond those analyzed in the FEIR.

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11. UTILITIES AND SERVICE SYSTEMS—Would the project:						
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☐	☐	☒
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	☐	☐	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* determined that the anticipated increase in population associated with implementation of the *Eastern Neighborhoods Plan* would not result in significant impacts related to the provision of water, wastewater collection and treatment, or solid waste collection and disposal. The *Eastern Neighborhoods Plan* is considered infill development (i.e., new development associated with implementation would occur in an area of San Francisco that is already developed and already served by existing utilities) and is not expected to result in substantial adverse physical impacts associated with the provision of new or physically altered public utility facilities or power and communications facilities. The

added growth and increased demand for utilities would be consistent with planned service levels and capacity, and new utility infrastructure or facilities would not need to be constructed to accommodate the increased demand. Each development project proposed would be required to comply with current State and local regulations related to energy consumption, waste disposal, wastewater treatment, and water conservation. No mitigation measures with respect to utilities and service systems were identified in the *Eastern Neighborhoods FEIR*.

The project would also be subject to the City's Stormwater Management Ordinance, which requires the project to maintain or reduce the existing volume and rate of stormwater runoff discharged from the site. To achieve this, the project would implement and install appropriate stormwater management systems that retain runoff on site, promote stormwater reuse, and limit site discharges entering the combined sewer collection system. This, in turn, would limit the incremental demand on both the collection system and wastewater facilities resulting from stormwater discharges, and minimize the potential need for expanding or construction new facilities. Thus, the project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

The San Francisco Public Utilities Commission (SFPUC) has concluded that under its Water Shortage Allocation Plan with additional local Water System Improvement Program supplies, sufficient water would be available to meet the existing and planned future water retail demand within San Francisco, inclusive of the growth in the Eastern Neighborhoods area.[43] The FEIR found that sufficient dry weather capacity exists at the Southwest Water Pollution Control plant, and that development pursuant to the Eastern Neighborhoods Rezoning and Area Plans would not substantially result in new wet weather flow because the area is already substantially built out. Incremental increase in sanitary sewage volume could cumulatively contribute to an increase in average volume of combined sewer overflow (CSO) discharge during wet weather, but the impact was found to be less than significant through the City's development of a Wastewater Management Plan. Regarding solid waste, the FEIR found that impacts would be less than significant because solid waste generated by development pursuant to the Eastern Neighborhoods Rezoning and Area Plans would be accommodated within projected landfill capacity. For these reasons, implementation of the proposed project would not result in significant individual or cumulative impacts on utilities and service systems that were not identified in the *Eastern Neighborhoods FEIR*, and no mitigation measures are necessary.

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[43] San Francisco Public Utilities Commission, *2010 Urban Water Management Plan*, June 2011.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
12. PUBLIC SERVICES—Would the project:						
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection, police protection, schools, parks, or other services?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* determined that the anticipated increase in population due to the implementation of the plan would result in an increased demand for schools and police and fire services, but would not exceed planned service levels or capacity and therefore would not result in a significant impact to public services. No mitigation measures related to the provision of public services were identified in the *Eastern Neighborhoods FEIR*. The proposed project is within the development projected to occur under the area plan and no aspects of the project would result in increased demand beyond those analyzed in the FEIR.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
13. BIOLOGICAL RESOURCES—Would the project:						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☐	☒

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
13. BIOLOGICAL RESOURCES—Would the project:						
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* did not identify any significant biological impacts, noting that the Eastern Neighborhood Plan Area is in a developed urban area and does not provide native natural habitat for any rare or endangered species. There are no riparian corridors, estuaries, marshes, or wetlands in the Plan Area that could be affected by the development anticipated under the Area Plan. In addition, development envisioned under the Eastern Neighborhoods Area Plan would not substantially interfere with the movement of any resident or migratory wildlife species. Further, because future development projects that would be expected to occur largely consist of new construction of housing in heavily built-out former industrial neighborhoods, there would be little in the way of loss of vegetation or disturbance of wildlife other than common urban species. For these reasons, the *Eastern Neighborhoods FEIR* concluded that no significant impacts related to biological resources would result and no mitigation measures were identified.

The project site is almost entirely covered by buildings or surface pavement and there is no existing vegetation on the site. This site is located in a developed urban area which does not support or provide habitat for any known rare or endangered wildlife species, animal, or plant life or habitat, and the proposed project would not interfere with any resident or migratory species. In addition, the project site does not support riparian or wetland habitat. The project site is not located within an adopted habitat conservation planning area.

The San Francisco Planning Department, Department of Building Inspection and Department of Public Works have established guidelines to ensure that legislation adopted by the Board of Supervisors governing the protection of trees is implemented. Department of Public Works Code Section 8.02-8.011 requires disclosure and protection of Landmark, Significant, and Street trees, collectively "protected trees" located on private and public property. A Landmark Tree has the highest level of protection and must meet certain criteria for age, size, shape, species, location, historical association, visual quality, or other contribution to the City's character and have been found worthy of Landmark status after public hearings at both the Urban Forestry Council and the Board of Supervisors. A Significant tree is either on property under the jurisdiction of the Department of Public Works, or on privately owned land within 10 feet of the public-right-of-way, that is greater than 20 feet in height or which meets other criteria.

As previously discussed, the site is currently bordered by approximately 17 street trees along Carolina, Mariposa, Arkansas, and 18th Streets and an additional 9 street trees (minimum of 24-inch box size) will likely be planted to replace recently removed trees prior to construction of the proposed project (for a total of 26 street trees assumed to be present on the site at the time of project construction). Two arborist reports prepared for the project evaluated the status and health of a total of 27 trees on and within the immediate vicinity of the site.[44,45] A Tree Disclosure Statement, supported by the conclusions found in the arborist reports, noted that there are no Landmark or Significant trees and there are a total of 17 existing trees on the project site.[46] The reports determined that 11 of the surveyed trees that border Arkansas and 18th Streets were in poor or very poor health due to girdled roots or root destabilization due to pruning. Since preparation of the arborist reports, 9 street trees have been removed from the Arkansas Street frontage due to poor health and corresponding safety concerns.[47] Several other trees along Mariposa and Carolina Streets also exhibited additional health concerns and were recommended for replacement due to the risk to life and property, although these trees are currently present on the site.

It is anticipated that 18 of the 26 protected street trees (17 existing and 9 anticipated to be planted prior to project construction) would be removed with development of the proposed project and the remaining 8 trees would be retained. The proposed project would include the replacement of removed trees with new street trees in compliance with Planning Code Section 143, which requires that new street trees are installed at the rate of one street tree per each 20 feet of frontage of the property along each street or alley. Therefore, approximately 27 new street trees would be planted on all four street frontages as part of the

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[44] *Draft Assessment of Twenty-Seven (27) Protected Street Trees at 1601 Mariposa Street, San Francisco, California,* Walter Levison, May 1, 2013. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[45] *1601 Mariposa Street, San Francisco, Peer Review of Levison Report*, Tree Management Experts, Consulting Arborists, July 3, 2013. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[46] 1601 and 1677 Mariposa and 485-487 Carolina Street Required Checklist for Tree Planting and Protection, Rick Westberg, Related/Mariposa Development Co., LLC, April 10, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

[47] Mohammed Nuru, San Francisco Department of Public Works. DPW Order No: 182222. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

proposed project for a total of approximately 35 street trees around the project site (8 existing trees would be retained). An additional 37 trees would be planted within the internal open space areas, for a total of 72 trees within and around the project site. The removal of a protected tree would require issuance of a permit from the Director of Public Works, and may be subject to replacement or payment of an in-lieu fee in the form of a contribution to the City's Adopt-a-Tree Fund. Compliance with the requirements set forth in DPW Code Section 8.02-8.11 would ensure that potential impacts to trees protected under the City's Tree Preservation Ordinance would be less than significant. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

In September 2011, the Board of Supervisors approved Planning Code Section 139, which includes amendments to incorporate bird-safe building standards into the code, and adopted the Standards for Bird-Safe Buildings. Planning Code Section 139, Standards for Bird-Safe Buildings, focuses on buildings that create location specific hazards and building feature-related hazards. Location-specific hazards apply to buildings within 300 feet of, and having a direct line of sight to, an urban bird refuge, including open spaces two acres and larger dominated by vegetation, wetlands, or open water. Building feature–related hazards include free-standing clear glass walls, skywalks, greenhouses on rooftops, and balconies that have unbroken glazed segments measuring 24 square feet or larger. The project site is not located within a "location-related" hazard zone for bird strikes; however, the project would be required to comply with applicable design restrictions outlined in the Section, which include guidelines for use and types of glass and façade treatments, wind generators and grates, and lighting treatments that would prevent impacts on avian species.

For these reasons, the proposed project would not result in significant individual or cumulative impacts to biological resources that were not identified in the *Eastern Neighborhoods FEIR*.

Topics:	*Project-Specific Significant Impact Not Identified in PEIR*	*Significant Unavoidable Impact Identified in PEIR*	*Mitigation Identified in PEIR*	*PEIR Mitigation Applies to Project*	*PEIR Mitigation Does Not Apply to Project*	*No Significant Impact (Project or PEIR)*
14. GEOLOGY AND SOILS—Would the project:						
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☐	☐	☒

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
14. GEOLOGY AND SOILS—Would the project:						
ii) Strong seismic ground shaking?	☐	☐	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☐	☐	☒
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐	☐	☒
f) Change substantially the topography or any unique geologic or physical features of the site?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* concluded that implementation of the plan would indirectly increase the population that would be subject to an earthquake, including seismically induced groundshaking, liquefaction, and landslides. The FEIR also noted that new development is generally safer than comparable older development due to improvements in building codes and construction techniques. Compliance with applicable codes and recommendations made in project-specific geotechnical analyses would not eliminate earthquake risk, but would reduce them to an acceptable level, given the seismically active characteristics of the Bay Area. Therefore, the *Eastern Neighborhoods FEIR* concluded that implementation of the plan would not result in significant impacts related to geology, soils or seismicity. No mitigation measures were identified in the *Eastern Neighborhoods FEIR*.

A geotechnical investigation was prepared for the proposed project.[48] The following discussion relies on the information provided in the geotechnical investigation.

[48] *Geotechnical Investigation Mariposa-Potrero Project, Mariposa and Carolina Streets, San Francisco, California,* Rockridge Geotechnical, May 21, 2013.

The topography of the site slopes upward approximately 34 feet from an elevation of about 16 feet[49] at the northwest corner, at the intersection of Mariposa and Carolina Streets, to an elevation of about 50 feet at the southeast corner, at the intersection of Arkansas and 18th Streets, for an overall slope of about 5 to 15 percent. The site was previously graded to below sidewalk level along Arkansas and 18th Streets.

For the geotechnical investigation, soil borings were excavated to a maximum depth of approximately 41.5 feet below the ground surface (bgs). Based on the soil analysis of the borings, the eastern limit of the project site (along Arkansas) is generally underlain by alluvium above bedrock at depths of 18.5 to 19.5 bgs. Similarly, the subsurface conditions below the existing warehouse (1601 Mariposa Street) at the eastern portion of the site consist of approximately 3.5 feet of fill underlain by 7 feet of alluvium. Sandstone bedrock was encountered below the fill and alluvium at about 10.5 feet below the top of the floor slab. The alluvium consists primarily of stiff to hard clay with variable amounts of sand.

Soil analysis results indicated that the central and western portions of the site are underlain by up to 14 feet of heterogeneous fill. The fill consists of medium stiff to stiff clay with variable amounts of sand, and loose to dense gravel with variable amounts of clay and sand. The fill also contains gravel and cobble sized material derived from serpentine and in places, includes variable amounts of brick and glass debris. Underlying the fill material is alluvium consisting of layers of medium stiff clay, medium dense to dense clayey sand, very dense sand, and stiff to hard clay and sandy clay. Bedrock was encountered beneath the alluvium at depths between 20 to 35 feet bgs. At the central and western parts of the site, the top of bedrock dips down from an elevation of 4 feet to below 25 feet bgs.

Groundwater was encountered at depths of 12.5, 21, and 16 feet bgs. However, the recorded depths are not considered the stabilized groundwater table, and are expected to vary several feet annually, depending upon rainfall amounts.

The project site does not lie within an Alquist-Priolo Earthquake Fault Zone as defined by the California Division of Mines and Geology. No known active faults cross the project site. The closest mapped active fault in the vicinity of the project site is the San Andreas Fault, located approximately 11 miles west from the project site. However, like the entire San Francisco Bay Area, the project site is subject to strong ground shaking during an earthquake.

The project site is not located within a liquefaction potential zone as mapped by the U.S. Geological Survey.[50] Based on project site conditions, a quantitative liquefaction analysis was performed. The results of the analysis show that the soil encountered below the groundwater table (approximately 10 feet bgs) is relatively dense granular, stiff cohesive, or bedrock. Therefore, the potential for liquefaction or lateral spreading is very low. Similarly, the soil encountered above the groundwater table was either clayey or gravelly, and sufficiently dense to resist cyclic densification. Since the potential for liquefaction is low, the potential for other geologic hazards associated with liquefaction, such as lateral spreading, landslides, subsidence, or collapse, is low.

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[49] Elevations reference San Francisco City Datum (SF Datum).

[50] *Susceptibility Map of the San Francisco Bay Area*, U.S. Geological Survey, 2005.

The geotechnical investigation provided recommendations for the proposed project's site preparation, grading, seismic design, and foundation design and recommends that the proposed East Building be located within the footprint of the existing warehouse and be supported on shallow spread footings bearing on alluvium or bedrock. The West Building and western portion of the East Building would need to be reinforced with rammed aggregate piers due to the fill and weak soil beneath those portions of the site. Additionally, the investigation recommends that during construction activities temporary slopes would be necessary during excavations deeper than five feet, and underpinning of adjacent structures during construction may be necessary. The deep support system would be intended to reduce potential liquefaction, differential settlement, and compressibility.

The site analysis concluded that during project excavation, there is a potential for encountering serpentinite in the fill, and as a result, a soil management plan, a health and safety plan, and air quality control measures would likely need to be prepared and implemented (these issues will be further discussed in the Hazards and Hazardous Material Section of EIR). Similarly, corrosivity testing was performed on site soils and samples showed "moderately corrosive" and "corrosive," soils; therefore, any buried iron, steel, cast iron, galvanized steel and dielectric-coated steel or iron should be properly protected before installed on the site.

The project site is covered by impervious surfaces; therefore, implementation of the proposed project would not result in soil erosion or the loss of topsoil. The proposed project would not include the use of septic tanks or alternative wastewater disposal systems, and there is no topography or unique geologic or physical features on the project site that could be altered by implementation of the proposed project.

Based on the above-noted recommendations, the geotechnical investigation concluded that the project would not cause significant geology and soil impacts. The proposed project would follow the recommendations of the geotechnical investigation by incorporating the recommendations into the final building design, including the use of spread footings bearing on native alluvium or bedrock for the eastern part of the East Building, and spread footings bearing on ground improved with rammed aggregate piers for the West Building and western part of the East Building, subject to the building permit review process.

Additionally, the final building plans would be reviewed by the Department of Building Inspection (DBI). In reviewing building plans, DBI refers to a variety of information sources to determine existing hazards. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco as well as the building inspectors' working knowledge of areas of special geologic concern. DBI will review the geotechnical report and building plans for the proposed project to determine the adequacy of the proposed engineering and design features and to ensure compliance with all applicable San Francisco Building Code provisions regarding structural safety. The above-referenced geotechnical investigation report would be available for use by DBI during its review of building permits for the site. In addition, DBI could require that additional site specific soils report(s) be prepared in conjunction with permit applications, as needed. The DBI requirement for a geotechnical report and review of the building permit application pursuant to DBI's implementation of the Building Code would ensure that the proposed project would have no significant impacts related to soils or geology.

For these reasons, the proposed project would not result in significant individual or cumulative impacts that were not identified in the *Eastern Neighborhoods FEIR* related to geology and soils.

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15. HYDROLOGY AND WATER QUALITY—Would the project:						
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	☐	☐	☐	☐	☐	☒

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15. HYDROLOGY AND WATER QUALITY—Would the project:						
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐	☐	☒
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* determined that the anticipated increase in population would not result in a significant impact on hydrology and water quality, including the combined sewer system and the potential for combined sewer outflows. No mitigation measures were identified in the FEIR.

The existing project site is currently developed with three separate one- and two- story structures and associated surface parking and pavements. The proposed project would construct two new buildings on the project site. Groundwater is relatively shallow throughout the project site at a minimum depth of approximately 12.5 feet bgs. The proposed project's excavation has the potential to encounter groundwater, which could impact water quality. Any groundwater encountered during construction of the proposed project would be subject to requirements of the City's Sewer Use Ordinance (Ordinance Number 19-92, amended 116-97), as supplemented by Department of Public Works Order No. 158170, requiring a permit from the Wastewater Enterprise Collection System Division of the San Francisco Public Utilities Commission. A permit may be issued only if an effective pretreatment system is maintained and operated. Each permit for such discharge would be required to contain specified water quality standards and may require the project sponsor to install and maintain meters to measure the volume of the discharge to the combined sewer system. Although dewatering could be required during construction, any effects related to lowering the water table would be temporary and would not be expected to substantially deplete groundwater resources. In addition, the project sponsor would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) that would be reviewed, approved, and enforced by the San Francisco Public Utilities Commission. The SWPPP would specify best management practices and erosion and sedimentation control measures to prevent sedimentation from entering the City's combined stormwater/sewer system.

The proposed project would be constructed in compliance with all applicable federal, state and local regulations governing water quality and discharges to surface and ground water bodies. The proposed project would not increase the amount of impervious surface area on the project site, which is currently completely covered in impervious surface materials including buildings and pavements. Rather, it would increase permeable surfaces over existing conditions through the introduction of new partially permeable open space areas, such as the mid-block pedestrian green space and the on-grade courtyard in the West

Building. The proposed project would not alter drainage patterns in a manner that would result in substantial erosion, siltation, or flooding. Runoff from the project site would drain into the City's combined stormwater/sewer system, ensuring that such runoff is properly treated at the Southeast Water Pollution Control Plant before being discharged into San Francisco Bay. In accordance with the City's Stormwater Management Ordinance (Ordinance No. 83-10), the proposed project would be subject to Low Impact Design (LID) approaches and stormwater management systems to comply with the Stormwater Design Guidelines. As a result, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality.

Development in the City and County of San Francisco must account for flooding potential. Areas located on fill or bay mud can subside to a point at which the sewers do not drain freely during a storm (and sometimes during dry weather) and there can be backups or flooding near these streets and sewers. The proposed project falls within an area in the City prone to flooding during storms, especially where ground stories are located below an elevation of 0.0 City Datum or, more importantly, below the hydraulic grade line or water level of the sewer.

The City has implemented a review process to avoid flooding problems caused by the relative elevation of the structure to the hydraulic grade line in the sewers. Applicants for building permits for either new construction, change of use (Planning) or change of occupancy (Building Inspection), or for major alterations or enlargements are referred to the SFPUC for a determination of whether the project would result in ground-level flooding during storms. The side sewer connection permits for these projects need to be reviewed and approved by the SFPUC at the beginning of the review process for all permit applications submitted to the Planning Department, the Department of Building Inspection, or the Redevelopment Agency. The SFPUC and/or its delegate (SFDPW, Hydraulics Section) will review the permit application and comment on the proposed application and the potential for flooding during wet weather. The SFPUC will receive and return the application within a two-week period from date of receipt. The permit applicant shall refer to PUC requirements for information required for the review of projects in flood-prone areas. Requirements may include provision of a pump station for the sewage flow, raised elevation of entryways, and/or special sidewalk construction and the provision of deep gutters.

As required, the sponsor for the proposed project would coordinate a review with SFPUC in order to determine if the project would result in ground-level flooding during storms and would incorporate any required design measures, as applicable. Measures may include, but are not limited to, location of finished floor areas above the current grade in flood-prone areas, and realignment of driveway locations. As required, the project sponsor coordinated with SFPUC in order to determine if the project would result in ground-level flooding during storms. SFPUC determined that ground-level flooding could occur and the units facing the mid-block pedestrian pathway may need to be raised to accommodate potential flooding.[51] With incorporation of these design measures, the project would result in less-than-significant impact on wastewater systems.

[51] Email Correspondence from Cliff Wong, San Francisco Department of Public Works to Michael Kuykendall, April 14, 2014. A copy of this correspondence is available for public review at the Planning Department, 1650 Mission Street, 4th Floor, as part of Case File No. 20121398E.

For the above reasons, the proposed project would not result in significant individual or cumulative impacts related to hydrology and water quality that were not identified in the *Eastern Neighborhoods FEIR*.

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16. HAZARDS AND HAZARDOUS MATERIALS—Would the project:						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐	☐	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☒	☐	☐	☐	☐	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	☒	☐	☐	☐	☐	☐

The proposed project has the potential to result in a significant hazards and hazardous materials impact due to the required site remediation and hazardous materials cleanup that would be conducted as part of the proposed project. Accordingly, this topic will be further analyzed and included in the EIR.

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17. MINERAL AND ENERGY RESOURCES—Would the project:						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☐	☐	☒
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	☐	☐	☐	☐	☐	☒

The *Eastern Neighborhoods FEIR* determined that implementation of *Eastern Neighborhoods Plan* would facilitate the construction of new residential units and commercial buildings. Development of these uses would not result in the use of large amounts of fuel, water, or energy in the context of energy use throughout the City and region. The energy demand for individual buildings would be typical for such projects and would meet, or exceed, current State and local codes and standards concerning energy consumption, including Title 24 of the California Code of Regulations enforced by the Department of Building Inspection. The project area does not include any routinely extracted natural resources and the proposed rezoning would not include or result in any natural resource extraction program. For these reasons, the *Eastern Neighborhoods FEIR* concluded that implementation of the plan would not result in a wasteful use of energy, and result in a less-than-significant impact related to mineral and energy resources. No mitigation measures were identified in the FEIR. The proposed project is within the projected development under the area plan and no aspects of the project would result in increased demand beyond those analyzed in the FEIR.

Topics:	Project-Specific Significant Impact Not Identified in PEIR	Significant Unavoidable Impact Identified in PEIR	Mitigation Identified in PEIR	PEIR Mitigation Applies to Project	PEIR Mitigation Does Not Apply to Project	No Significant Impact (Project or PEIR)
18. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to 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 Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to 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 forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.**—Would the project:**						
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	☐	☐	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	☐	☐	☐	☐	☐	☒

All of San Francisco is identified by the California Department of Conservation's Farmland Mapping and Monitoring Program as "Urban and Built-up Land."[52] In addition, no part of San Francisco falls under the State Public Resource Code definitions of forest land or timberland.[53] Therefore, the *Eastern Neighborhoods FEIR* determined that implementation area plans would have no effect on agricultural resources. No mitigation measures were identified in the FEIR. The project site is zoned UMU and is not zoned for agricultural uses. The proposed project would demolish all existing buildings and associated pavements on the project site and construct new residential and commercial uses. There are no agricultural, forest, or timber resources on the project site. Therefore, the proposed project would not contribute to individual or cumulative impacts related to agricultural or forest resources that were not identified in the *Eastern Neighborhoods FEIR*.

[52] California Department of Conservation Farmland Mapping and Monitoring Program, 2012. Website: maps.conservation.ca.gov/ciff/ciff.html, accessed January 27, 2014.

[53] Public Resources Code §4789.2.

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19. MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:						
a) Have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☒	☒	☐	☒
b) Have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☒	☒	☐	☒	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☐	☐	☐

The *Eastern Neighborhoods FEIR* identified significant impacts related to land use, transportation, cultural resources, shadow, noise, air quality, and hazardous materials. Mitigation measures reduced all impacts to less than significant, with the exception of those related to land use (cumulative impacts on PDR use), transportation (traffic impacts at nine intersections, and transit impacts on seven MUNI lines), cultural (demolition of historical resources), and shadow (impacts on parks).

The proposed project would demolish 74,696 square feet of existing warehouse, office and commercial use, and construct two 40-foot-tall, four-story, mixed use buildings with associated infrastructure, including a 40- to 70-foot-wide mid-block pedestrian pathway. The proposed use would include approximately 320 dwelling units and 10,000 square feet of commercial use. As discussed in the checklist responses above, development of the proposed project would not: 1) substantially reduce the habitat of a fish or wildlife species; 2) cause a fish or wildlife species population to drop below self-sustaining levels; 3) threaten to eliminate a plant or animal community; 4) reduce the number or restrict the range of a rare or endangered plant or animal; or 5) eliminate important examples of the major periods of California history or prehistory.

However, potentially significant impacts related to transportation and circulation, shadow, and hazards and hazardous materials could occur with implementation of the proposed project. These impacts, as well as any cumulatively considerable impacts that may result from the proposed project, will be evaluated in the EIR that will be prepared for the proposed project.

MITIGATION MEASURES

The following mitigation measures from the *Eastern Neighborhoods FEIR* are applicable to the proposed project and have or will be incorporated into the proposed project. The project sponsor has agreed to implement these mitigation measures as part of the proposed project at 1601 Mariposa Street:

Project Mitigation Measure 1: Archeological Testing (Mitigation Measure J-2 from the Eastern Neighborhoods EIR)

This measure would apply to those properties within the project area for which no archeological assessment report has been prepared or for which the archeological documentation is incomplete or inadequate to serve as an evaluation of potential effects on archeological resources under CEQA (CEQA Guidelines § 15064.5(a)(1)(3) and (c)(1)(2)),4 with the exception of those properties within Archeological Mitigation Zone B as shown in Figure 29 in Chapter IV, for which Mitigation Measure J-3, is applicable). That is, this measure would apply to the entirety of the study area outside of Archeological Mitigation Zones A and B.

For projects proposed outside Archeological Mitigation Zones A and B, a Preliminary Archeological Sensitivity Study must be prepared by an archeological consultant with expertise in California prehistoric and urban historical archeology. The Sensitivity Study should contain the following:

1. Determine the historical uses of the project site based on any previous archeological documentation and Sanborn maps;
2. Determine types of archeological resources/properties that may have been located within the project site and whether the archeological resources/property types would potentially be eligible for listing in the CRHR;
3. Determine if 19th or 20th century soils-disturbing activities may adversely affected the identified potential archeological resources;
4. Assess potential project effects in relation to the depth of any identified potential archeological resource;
5. Conclusion: assessment of whether any CRHP-eligible archeological resources could be adversely affected by the proposed project and recommendation as to appropriate further action.

Based on the Sensitivity Study, the Environmental Review Officer (ERO) shall determine if an Archeological Research Design/Treatment Plan (ARD/TP) shall be required to more definitively identify the potential for CRHP-eligible archeological resources to be present within the project site and determine the appropriate action necessary to reduce the potential effect of the project on archeological resources to a less than significant level. The scope of the ARD/TP shall be determined in consultation with the ERO and consistent with the standards for archeological documentation established by the Office of Historic Preservation for purposes of compliance with CEQA, in Preservation Planning Bulletin No. 5). Based upon the sensitivity study conducted for the project, it was determined that archeological testing would be required for the proposed project.

Based on a reasonable presumption that archeological 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. The project sponsor shall retain the services of an archaeological consultant from the rotational Department Qualified Archaeological Consultants List (QACL) maintained by the Planning Department archaeologist. The project sponsor shall contact the Department archeologist to obtain the names and contact information for the next three archeological consultants on the QACL. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure at the direction of the Environmental Review Officer (ERO). All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological 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 ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).

Consultation with Descendant Communities: On discovery of an archeological site[54] associated with descendant Native Americans or the Overseas Chinese an appropriate representative[55] of the descendant group and the ERO shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archeological field investigations of the site and to consult with ERO regarding appropriate archeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archaeological Resources Report shall be provided to the representative of the descendant group.

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[54] The term "archeological site" is intended here to minimally included any archeological deposit, feature, burial, or evidence of burial.

[55] An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America.

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

A) The proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or

B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented the archeological monitoring program shall minimally include the following provisions:

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits;

- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should 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 archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures*. Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis*. Description of selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy*. Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program*. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.
- *Security Measures*. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- *Final Report*. Description of proposed report format and distribution of results.

- *Curation*. Description 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 of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

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

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

Project Mitigation Measure 2: Construction Noise (Mitigation Measure F-2 from the Eastern Neighborhoods EIR, as modified)

Where environmental review of a development project undertaken subsequent to the adoption of the proposed zoning controls determines that construction noise controls are necessary due to the nature of planned construction practices and the sensitivity of proximate uses, the Planning Director shall require that the sponsors of the subsequent development project develop a set of site-specific noise attenuation measures under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted to the Department of Building Inspection to ensure that maximum feasible noise attenuation will be achieved. These attenuation measures shall include the following control strategies:

1. Conduct noise monitoring at the beginning of major construction phases (e.g., demolition, excavation) to determine the need and the effectiveness of noise-attenuation measures.
2. Erect temporary plywood noise barriers around the construction site where the site adjoins noise-sensitive receivers, such as the Live Oak School.
3. Utilize noise control blankets on the building structure adjacent to Live Oak School – and possibly other noise-sensitive receivers – as the building is erected to reduce noise emission from the site.
4. Post signs on-site pertaining to permitted construction days and hours, complaint procedures, and who to notify in the event of a problem, with telephone numbers listed.
5. Notify the Department of Building Inspection and neighbors in advance of the schedule for each major phase of construction and expected loud activities.
6. When feasible, select "quiet" construction methods and equipment (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds).
7. Require that all construction equipment be in good working order and that mufflers are inspected to be functioning properly. Avoid unnecessary idling of equipment and engines.
8. Mobile noise-generating equipment (e.g., dozers, backhoes, and excavators) shall be required to prepare the entire site. However, the developer will endeavor to avoid placing stationary noise generating equipment (e.g., generators, compressors) within noise-sensitive buffer areas (measured at linear 20 feet) between immediately adjacent neighbors.
9. The project sponsor shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools.

Project Mitigation Measure 3: Siting of Noise-Sensitive Uses (Mitigation Measure F-4 from the Eastern Neighborhoods EIR)

To reduce potential conflicts between existing noise-generating uses and new sensitive receptors, for new development including noise-sensitive uses, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within 900 feet of, and that have a direct line-of-sight to, the project site, and including at least one 24-hour noise measurement (with maximum noise level readings taken at least every 15 minutes), prior to the first project approval action. The analysis shall be prepared by persons qualified in acoustical analysis and/or engineering and shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity.

Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained. Pursuant to this measure, Charles M. Salter Associates conducted an *Environmental Noise Assessment*[56] that included the continuous collection of noise data for 48 hours on weekdays at four locations around the project site. Noise levels from 64 to 74 dB L_{dn} were measured around the project site. Noise-generating uses within the vicinity of the site include Anchor Brewing Company, International Studies Academy, Jackson Playground, Live Oak School, and various restaurants along 18th Street. To meet the 45 dB L_{dn} criterion called out in the building code (Title 24), the proposed project would be required to install windows with noise reduction ratings of up to STC 38. The windows could be operable, but would need to be in the closed position to meet the indoor noise standard. Therefore, these units would require a ventilation or air-conditioning system that does not compromise the sound attenuation of the exterior façade However, units facing the interior courtyards are exposed to noise levels no greater than 60 dB L_{dn} and windows in these units do not need to be sound-rated and these units are not subject to the ventilation requirement.

Project Mitigation Measure 4: Open Space in Noisy Environments (Mitigation Measure F-6 from the Eastern Neighborhoods EIR)

To minimize effects on development in noisy areas, for new development including noise sensitive uses, the Planning Department shall, through its building permit review process, in conjunction with noise analysis required pursuant to Mitigation Measure F-4, require that open space required under the Planning Code for such uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.

[56] Charles M. Salter Associates, Inc., *1601 Mariposa Residences, San Francisco, CA, Eastern Neighborhoods Plan Environmental Noise Assessment*. April 28, 2014. This document is available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case File No. 2012.1398E.

DETERMINATION

On the basis of this review, it can be determined that:

☒ The proposed project qualifies for consideration of a Community Plan exemption based on the applicable General Plan and zoning requirements; **AND**

☐ All potentially significant individual or cumulative impacts of the proposed project were identified in the applicable programmatic EIR (PEIR) for the Plan Area, and all applicable mitigation measures have been or incorporated into the proposed project or will be required in approval of the project.

☐ The proposed project may have a potentially significant impact not identified in the PEIR for the topic area(s) identified above, but that this impact can be reduced to a less-than-significant level in this case because revisions in the project have been made by or agreed to by the project proponent. A focused Initial Study and MITIGATED NEGATIVE DECLARATION is required, analyzing the effects that remain to be addressed.

☒ The proposed project may have a potentially significant impact not identified in the PEIR for the topic area(s) identified above. An ENVIRONMENTAL IMPACT REPORT is required, analyzing the effects that remain to be addressed.

May 13, 2014
Date

J. Wise for
Sarah B. Jones
Environmental Review Officer

PLACE
POSTAGE
HERE

San Francisco Planning Department
Environmental Planning Division
1650 Mission Street, Suite 400
San Francisco, California 94103

Attn: Chelsea Fordham, EIR Coordinator
Case No. 2012.1398E
1601 Mariposa Street Mixed Use Project

PLEASE CUT ALONG DOTTED LINE

RETURN REQUEST REQUIRED FOR FINAL
ENVIRONMENTAL IMPACT REPORT

REQUEST FOR FINAL ENVIRONMENTAL IMPACT REPORT

TO: San Francisco Planning Department, Environmental Planning Division

Check one box: ☐ Please send me a copy of the Final EIR on CD

☐ Please send me a paper copy of the Final EIR

Signed: _____

Print Your Name and Address in the Box Below: