
CHAPTER 5

Draft SEIR Revisions

This chapter presents text changes for the Balboa Reservoir Project draft SEIR. The revisions reflect changes identified in RTC Chapter 2, Revisions and Clarifications to the Project Description, RTC Chapter 4, Comments and Responses, or staff-initiated text changes, all of which clarify, expand, or update information and/or graphics presented in the draft SEIR. Staff-initiated changes to clarify information presented in the draft SEIR are highlighted with an asterisk (*) in the margin to distinguish them from text changes in response to comments. For each change, new language is double underlined, while deleted text is shown in ~~striketrough~~. The changes are organized in the order of the draft SEIR and initial study table of contents.

These revisions do not result in any changes in the draft SEIR conclusions prepared pursuant to CEQA, and thus do not constitute “new information of substantial importance” within the meaning of CEQA Guidelines section 15162(a)(3). Therefore, recirculation of the draft SEIR is not required.

5.A Revisions to the Table of Contents, Summary, and Introduction Chapter

- * To be consistent with the revisions made under the applicable resource topics in response to comments, p. viii of the SEIR Table of Contents is revised as follows:

Table 3.B-8 ~~Existing Transit Delay~~Existing Transit Travel Times 3.B-22

- * To reflect the addition of Appendix C4, Transit Delay Analysis and Capital Improvements and Appendix I, Updated Health Risk Assessment Memorandum, p. vi of the SEIR Table of Contents has been revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):

Appendices

- A Notice of Preparation
- B Initial Study
- C Transportation Supporting Information
 - C1 Travel Demand Memorandum
 - C2 Transit Assessment Memorandum
 - C3 Freight Loading Data
 - C4 Transit Delay Analysis and Capital Improvements
- D Noise Supporting Information
 - D1 Construction Noise Model Output
 - D2 Traffic Noise Model Output

- D3 Calculations of Long-Term Noise Metrics
- D4 Sound Level Meter Reports
- E Air Quality Technical Memorandum
- F Water Supply Assessment
- G Biological Resources Supporting Information
- H Balboa Park Station Area Plan PEIR Mitigation Measures
- I Updated Health Risk Assessment Memorandum

The new Appendix C4 and Appendix I are provided at the end of this RTC chapter.

To be consistent with the revisions made under the applicable resource topics in response to comments, the following revisions are made to Table S-2, Summary of Impacts of the Proposed Project—Disclosed in this Draft SEIR including the Initial Study.

- * **The third paragraph on draft SEIR p. S-5 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

Construction phasing is shown in **Figure 2-18, Proposed Developer’s Option Construction Phasing**, p. 2-40 and **Figure 2-19, Additional Housing Option Construction Phasing**, p. 2-41. The project characteristics presented above (including the total number of residential units, square footage of commercial use, acres of open space, bicycle and automobile spaces) are totals based on full buildout and completion of all phases of the proposed project. Construction would generally occur between the hours of 7 a.m. and 8 p.m., up to seven days a week, consistent with San Francisco Police Code section 2908. Certain construction activities such as large concrete pours, may require earlier start or later finish times to accommodate such time-specific activities, and could include one concrete pour per building, which could occur a total of 12 times throughout the project construction period. Such ~~E~~construction activities ~~that extend beyond normal hours~~—would be subject to review, permitting, and approval by the San Francisco Department of Building Inspection.

- * In Table S-2, Mitigation Measure M-C-TR-4 on draft SEIR p. S-13 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

(REVISED) TABLE S-2: SUMMARY OF IMPACTS OF THE PROPOSED PROJECT—DISCLOSED IN THIS SEIR INCLUDING THE INITIAL STUDY [EXCERPT]

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation																
SEIR Section 3.B,Transportation and Circulation [EXCERPT]																			
Impact C-TR-4: The proposed project, in combination with reasonably foreseeable future projects, may result in a potentially significant cumulative impact related to public transit delay and the project could contribute considerably.	S	<p>Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay. The project sponsor, under either project option, shall monitor cumulative transit travel times for the identified route segments of the K/T Third/Ingleside, 29 Sunset, 43 Masonic, and 49 Van Ness/Mission lines to determine if a route does not meet its performance standard. If applicable, the project sponsor shall implement feasible measures (as developed in consultation with SFMTA) to reduce transit delay and meet the transit travel time performance standard for the identified segments of the K/T Third/Ingleside, 29 Sunset, and 43 Masonic.</p> <p><u>Transit Travel Time Performance StandardRoutes and Study Segments.</u> Existing transit travel times and performance standards for the routes subject to this measure, including study segment and time periods, are shown in Table M-C-TR-4. The following routes and study segments shown in Table M-C-TR-4 represent routes and study segments most likely to have a cumulative impact to which the project would have a considerable cumulative contribution.</p> <ul style="list-style-type: none"><u>K/T Third/Ingleside (outbound): Jules Avenue/Ocean Avenue to Balboa Park Bay Area Rapid Transit (BART)</u><u>K/T Third/Ingleside (inbound): San Jose Avenue/Geneva Avenue to Dorado Terrace/Ocean Avenue</u><u>29 Sunset (outbound): Plymouth Avenue/Ocean Avenue to Mission St/Persia Avenue</u><u>29 Sunset (inbound): Mission St/Persia Avenue to Plymouth Avenue/Ocean Avenue</u><u>43 Masonic (outbound): Gennessee Street/Monterey Boulevard to Geneva Avenue/Howth Street</u><u>43 Masonic (inbound): Geneva Avenue/Howth Street to Foerster Street/Monterey Boulevard</u> <p style="text-align: center;">TABLE M-C-TR-4 TRANSIT TRAVEL TIME PERFORMANCE STANDARD</p> <table><tr><th rowspan="2">Transit Line</th><th rowspan="2">Study Segment</th><th colspan="2">Existing Transit Travel Time^a</th><th colspan="2">Performance Standard^b</th></tr><tr><th>A.M. Peak Period</th><th>P.M. Peak Period</th><th>A.M. Peak Period</th><th>P.M. Peak Period</th></tr><tr><td>K/T</td><td>Jules Ave/Ocean Ave to Balboa Park BART</td><td>3:30</td><td>8:42</td><td>7:30</td><td>12:42</td></tr></table>	Transit Line	Study Segment	Existing Transit Travel Time ^a		Performance Standard ^b		A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period	K/T	Jules Ave/Ocean Ave to Balboa Park BART	3:30	8:42	7:30	12:42	SUM
Transit Line	Study Segment	Existing Transit Travel Time ^a			Performance Standard ^b														
		A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period														
K/T	Jules Ave/Ocean Ave to Balboa Park BART	3:30	8:42	7:30	12:42														

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures						Level of Significance after Mitigation
			San Jose Ave/Geneva Ave to Dorado Terr/Ocean Ave	3:28	10:03	7:28	11:28	
		29	Plymouth Ave/Ocean Ave to Mission St/Persia Ave	8:01	12:09	12:01	16:01	
			Mission St/Persia Ave to Plymouth Ave/Ocean Ave	7:10	9:55	11:10	15:10	
		43	Frida Kahlo Way/CCSF South Entrance to Foerster St/Monterey Blvd	4:20	4:37	8:20	8:37	
			Genessee St/Monterey Blvd to Frida Kahlo Way/CCSF South Entrance	4:16	4:23	8:16	8:23	
		49	Frida Kahlo Way/CCSF South Entrance to Mission St/Persia Ave	5:22	10:04	9:22	14:04	
			Mission St/Ocean Ave to Frida Kahlo Way/CCSF South Entrance	7:18	11:25	11:18	15:25	
		SOURCE: — Kittelson & Associates, Inc. 2019; SFMTA Automatic Vehicle Location Data, 2019.						
		NOTES:						
		a Kittelson staff collected transit travel time data along route segments via onboard surveys. Transit travel times were collected on Tuesday, April 2, 2019, during the weekday a.m. peak period (7 to 9 a.m.) and the weekday p.m. peak period (4 to 6 p.m.). Staff boarded a transit vehicle at the route start point and recorded the travel time between each stop and the dwell time at each stop. Onboard survey data was used to supplement and verify automatic vehicle location data provided by SFMTA. Agencies may determine to update the existing baseline transit travel times closer to commencement of construction.						
		b The performance standard is calculated as the existing transit travel time plus four minutes, or half the headway of a route with headways of less than eight minutes.						
		Monitoring and Reporting. The project sponsor shall retain a transportation consultant to monitor and report cumulative transit travel times to determine if a route exceeds its performance standard and the project's fair share contribution to such exceedance, if applicable. The transportation consultant shall be on a list of qualified consultants at the SFMTA or San Francisco Planning Department (agencies). The monitoring plan is subject to agencies' review and approval. All reporting documents are also subject to review and approval by the agencies. The agencies may modify the monitoring and reporting program to account for transit route or transportation network changes, or major changes to the project's development program.						
Timing. The project sponsor shall retain a transportation consultant within one year of occupancy of								

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
		<p>one new major building¹ at the City College of San Francisco Ocean Avenue campus (City College) and at least 750 units are occupied at the project site.</p> <p>The transportation consultant shall submit its first transit travel time reporting document to the agencies within 18 months of occupancy of one new major building at the City College San Francisco Ocean Avenue campus (City College) and at least 750 units are occupied at the project site. Thereafter, the transportation consultant shall submit annual reporting documents until the project sponsor meets its terms for this measure.</p> <p><i>Collection and Reporting Details.</i> For each reporting document, the transportation consultant shall collect transit travel time data during the a.m. peak (7 to 9 a.m.) and p.m. peak (4 to 6 p.m.) periods during three consecutive, non-holiday weekdays (Tuesday, Wednesday or Thursday) when City College is in typical (i.e., non-finals or spring break week) session. The transportation consultant may use automatic vehicle location on the routes to average the transit travel time data for the peak hour within the peak period of each route in both the inbound and outbound directions along the study segment. Transit travel time surveys shall be conducted within the same month for each reporting period.</p> <p>For the first reporting document, the transportation consultant shall collect and report additional data during the peak periods to determine the project sponsor's fair share impacts of the cumulative transit delay. The transportation consultant may use methodologies such as cordons, intersection counts, or video cameras to determine traffic congestion and reentry delay attributable to the project and intercept surveys to determine passenger boarding/alighting delay attributable to the project. Agencies will determine if the collecting and reporting of this subsequent data is required for subsequent reporting documents (e.g., if a route exceeds or is close to exceeding the performance standard in a prior reporting document).</p> <p>Implement Fair Share of Capital Improvement Measures. If the agencies determine a route does not meet its performance standard and the project contributes greater than or equal to two minutes' delay to that route, the The project sponsor shall <u>implement/contribute funds for the following capital improvement measures</u> that reduce transit travel times. These measures are subject to agency approval and could include:</p> <ol style="list-style-type: none"> <u>1. Signal Timing Modifications at Ocean Avenue/Brighton Avenue.</u> The project sponsor shall fund the design and construction of signal timing modifications and restriping, as needed, at the Ocean Avenue/Brighton Avenue intersection. The existing traffic signal shall be modified to prohibit eastbound left turns and provide a protected green arrow signal phase for westbound left turns. <u>2. Signal Timing Modifications at Ocean Avenue/Plymouth Avenue.</u> The project sponsor shall fund the design and construction of signal timing modifications and restriping, as needed, at the Ocean Avenue/Plymouth Avenue intersection. The existing traffic signal shall be modified to 	

¹ A new major building is City College of San Francisco Ocean Avenue campus construction post-2019 that results in a cumulative net addition of more than 50,000 square feet to an existing building(s) or a new building(s), or a new or expanded parking facility of more than a 50,000 square feet.

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
		<p><u>prohibit eastbound left turns and provide a protected green arrow signal phase for westbound left turns.</u></p> <p><u>3. Bus boarding island on southbound Frida Kahlo Way. The project sponsor shall fund the design and construction of a bus boarding island on southbound Frida Kahlo Way, north of the Frida Kahlo Way/Geneva Avenue/Ocean Avenue intersection, and restriping, as needed.</u></p> <p><u>The cost of these capital improvement measures is \$200,000 in 2020 dollars, and shall be considered the project's fair share toward mitigating this significant cumulative impact. This amount shall be increased by consumer price index per year. The fair share contribution, as documented by SFMTA², shall not exceed this amount across all phases. Payment of the fair share contribution levels would mitigate the impacts of the estimated transit delay added by full development of the proposed project options.</u></p> <p><u>If SFMTA adopts a strategy to reduce transit travel times along these routes that does not involve signal timing modifications or bus boarding islands, the project's fair share contribution shall remain the same, and may be used for other transit travel time saving strategies on these routes, as deemed desirable by SFMTA.</u></p> <p><u>1. Expansion of measures already included in the project's transportation demand management (TDM) Plan (e.g., increases in tailored transportation marketing services, additional bicycle parking, etc.). The project sponsor shall pay the full cost of implementation.</u></p> <p><u>2. Measures identified in the City's TDM Program Standards Appendix A (as such appendix may be amended by the Planning Department from time to time) that have not yet been included in the project's TDM Plan. The project sponsor shall pay the full cost of implementation.</u></p> <p><u>3. Other measures not included in the City's TDM Program Standards Appendix A that the agencies agree are likely to reduce transit travel times. These other measures may include off-site capital improvements such as, turn pockets, bus bulbs, queue jumps, turn restrictions, boarding islands, and/or transit signal priority projects. The project sponsor shall pay their fair share, calculated as the project's percent contribution to the increase in transit travel time between baseline and cumulative conditions, of the selected measures.</u></p> <p><u>Term Condition A: The project sponsor shall monitor, submit reporting documents, and implement their fair share portion of measures for each route until the agencies determine that three consecutive reporting documents demonstrate: (1) the route does not exceed its performance standard or (2) the project does not contribute greater than or equal to two minutes' delay to a route that exceeds its performance standard.</u></p> <p><u>Term Condition B: The project sponsor shall be subject to the term condition A for every new major building at City College or for every additional 250 occupied dwelling units at the project site. The agencies may waive term Condition B if past reporting documents demonstrate the project has no</u></p>	

² Henderson, Tony, SFMTA, e-mail communication to Elizabeth White, San Francisco Planning Department, and Leigh Lutenski, Office of Economic and Workforce Development on March 30, 2020.

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
		potential to contribute to greater than or equal to two minutes' delay to a route that exceeds or may exceed its performance standard.	

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- * In Table S-2, the sixth bullet point of Mitigation Measure M-NO-1 on draft SEIR p. S-18 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

(REVISED) TABLE S-2: SUMMARY OF IMPACTS OF THE PROPOSED PROJECT—DISCLOSED IN THIS SEIR INCLUDING THE INITIAL STUDY [EXCERPT]

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
SEIR Section 3.C, Noise [EXCERPT]			
Impact NO-1: Project construction would cause a substantial temporary or periodic increase in ambient noise levels at noise-sensitive receptors above levels existing without the project.	S	Mitigation Measure M-NO-1: Construction Noise Control Measures. ... <ul style="list-style-type: none"> Undertake the noisiest activities (e.g., demolition using hoe rams) during times of least disturbance to surrounding residents and occupants to (9 a.m. to 4 p.m.); and select or construct haul routes that avoid the North Access Road and the adjacent Archbishop Riordan High School and residential uses along Plymouth Avenue and Lee Avenue, such as the temporary or permanent relocation of North Street. ...	SUM

- * In Table S-2, Mitigation Measure M-AQ-2d (Offset Construction Emissions for the Compressed Schedule) on SEIR pp. S-23 to S-24 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

(REVISED) TABLE S-2: SUMMARY OF IMPACTS OF THE PROPOSED PROJECT—DISCLOSED IN THIS SEIR INCLUDING THE INITIAL STUDY [EXCERPT]

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
SEIR Section 3.D, Air Quality [EXCERPT]			
...			
Impact AQ-2a: During construction, the proposed project would generate criteria air pollutants which would violate an air quality standard, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in criteria air pollutants.	S	<p>...</p> <p>Mitigation Measure M-AQ-2d: Offset Construction Emissions for the Compressed Schedule. Under the compressed three-year construction schedule for either the Developer's Proposed Option or the Additional Housing Option, the project sponsor shall implement this measure. Prior to issuance of the final certificate of occupancy for the final building associated with Phase 1, the project sponsor, with the oversight of the <u>Environmental Review Officer (ERO)</u>, shall either:</p> <ol style="list-style-type: none"> 1. <i>Directly fund or implement a specific offset project within San Francisco if available</i> to achieve the equivalent to a one-time reduction of 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option. To qualify under this mitigation measure, the specific emissions offset project must result in emission reductions within the San Francisco Bay Area Air Basin that would not otherwise be achieved through compliance with existing regulatory requirements. A preferred offset project would be one implemented locally within the City and County of San Francisco. Prior to implementing the offset project, it must be approved by the ERO. The project sponsor shall notify the ERO within six months of completion of the offset project for verification; or 2. <i>Pay mitigation offset fees to the Bay Area Air Quality Management District Bay Area Clean Air Foundation or other governmental entity or third party.</i> The mitigation offset fee, currently estimated at approximately \$30,000 per weighted ton, plus an administrative fee of no more than 5 percent of the total offset, shall fund one or more emissions reduction projects within the San Francisco Bay Area Air Basin. The fee will be determined by the planning department <u>ERO</u>, the project sponsor, and the air district governmental entity or third party responsible for administering the funds, and be based on the type of projects available at the time of the payment. This fee is intended to fund emissions reduction projects to achieve reductions of 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option, which is the amount required to reduce emissions below significance levels after implementation of other identified mitigation measures as currently calculated. <p>The agreement that specifies fees and timing of payment shall be signed by the project sponsor, the air district governmental entity or third party responsible for administering the funds, and the ERO prior to issuance of the first site permit. This offset payment shall total the predicted 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option above the 10-ton-per-year threshold after</p>	SUM

Environmental Impact	Level of Significance prior to Mitigation	Improvement/Mitigation Measures	Level of Significance after Mitigation
		<p>implementation of Mitigation Measures M-AQ-2a, M-AQ-2b, and M-AQ-2c.</p> <p>The total emission offset amount is presented above <u>was</u> calculated by summing the maximum daily construction of ROG and NOx (pounds/day), multiplying by 260 work days per year, and converting to tons. The amount represents the total estimated operational and construction-related ROG and NOx emissions offsets required. No reductions are needed for operations or overlapping construction and operations.</p>	

- * **The text on SEIR p. 1-14 is revised as follows to include Appendix C3 and to reflect the addition of Appendix C4, Transit Delay Analysis and Capital Improvements and Appendix I, Updated Health Risk Assessment Memorandum (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

- Appendix C: Transportation Supporting Information
 - Appendix C1: Travel Demand Memorandum
 - Appendix C2: Transit Assessment Memorandum
 - Appendix C3: Freight Loading Data
 - Appendix C4: Transit Delay Analysis and Capital Improvements
- Appendix D: Noise Supporting Information
 - Appendix D1: Construction Noise Model Output
 - Appendix D2: Traffic Noise Model Output
 - Appendix D3: Calculations of Long-Term Noise Metrics
 - Appendix D4: Sound Level Meter Reports
- Appendix E: Air Quality Technical Memorandum
- Appendix F: Water Supply Assessment
- Appendix G: Biological Resources Supporting Information
- Appendix H: Balboa Park Station Area Plan PEIR Mitigation Measures
- Appendix I: Updated Health Risk Assessment Memorandum

5.B Revisions to Chapter 2, Project Description

The following figure has been revised to show the revised street ownership; the revised figure is provided at the end of this chapter.

- Figure 2-12 on draft SEIR p. 2-27

The last paragraph on SEIR p. 2-7 is revised as follows:

The site does not contain any permanent structures and currently contains 1,007 surface vehicular parking spaces. The lot provides overflow vehicular parking for City College students, faculty, and staff.²⁶ The San Francisco Municipal Transportation Agency (SFMTA) is also temporarily using a portion of the project site for SFMTA employee parking, under an agreement with SFPUC. The SFMTA started temporarily using on October 1, 2019, an approximate 29,100-square-foot area of the project site. This temporary use will expire September 2020.

The paragraph under Section 2.E.1, Developer's Proposed Option on SEIR p. 2-13 is revised as follows:

The Developer's Proposed Option would include up to 1.64 million gsf in new construction on 10 Blocks (**Figure 2-4, Developer's Proposed Option Site Plan and Height Ranges**). Construction under this option would provide 1,100 residential units totaling about 1.3 million gsf. Housing would be provided on each block. A total of up to 50 percent of the new units would be designated affordable to persons earning between 55 and 120 percent of the area median income, depending on market surveys, funding source restrictions and other stakeholder input on the affordable housing plan. Affordable housing would be distributed throughout the site. For purposes of this SEIR, the unit mix is assumed to be 40 percent studio/one bedroom units and 60 percent two-or-more-bedroom units. The project proposes to provide approximately 150 moderate-income dwelling units (as a component of the project's 50 percent affordable housing element) that would be deed-restricted to occupancy by educator households with an average income of 100 percent of the area median income. Households with at least one full-time employee of the City College of San Francisco or San Francisco Unified School District would have preferential priority for all educator dwelling units, with City College households having first priority and San Francisco Unified School District households having second priority.

Figure 2-5, Ground Floor Use Plan for Developer's Proposed Option, presents the proposed ground floor use plan at the project site. With the exception of the townhome blocks (Blocks TH1 and TH2), the ground floor areas on all blocks could include common spaces, building lobbies, residential units, as well as utility and parking access. As shown in Figure 2-5, the ground floor of Block B would contain approximately 10,000 gsf of childcare and community space. Approximately 7,500 gsf of retail space, including a café, could be provided on the ground level of Block A, C, D, E, or F.

The first bullet under Section 2.E.6, Vehicle Parking and Loading, on SEIR p. 2-23 is revised as follows:

Developer's Proposed Option: The Developer's Proposed Option would provide a total of up to 1,300 off-street vehicle parking spaces. **Figure 2-10, Developer's Proposed Option Parking Facilities and Street Parking Plan**, illustrates the proposed off-street parking locations. Up to 550 off-street parking spaces for project residents may be located in parking garages below grade at Blocks A, B, C, D, F, and G and in the townhomes. In addition to resident parking, the Developer's Proposed Option would include a below-grade multilevel public garage of up to 750 spaces located under Blocks A and B and accessed from South Street, or in dedicated public parking areas within several of the residential garages, all of which would be separate from the residential parking. The Developer's Proposed Option would include a minimum of seven car-share parking spaces located on streets and in buildings. In addition, the Developer's Proposed Option would include approximately six on-street freight loading areas and approximately eight passenger loading areas along the internal streets.

The text on SEIR p. 2-39 is revised as follows to clarify the compressed schedule:

As stated in the footnote to Table 2-2, the phasing of project implementation would be subject to changes due to market conditions and other unanticipated factors. Consequently, construction could be complete as early as 2024 under a compressed schedule or extend beyond 2027. If construction occurs over a shorter period than shown in Table 2-2 (e.g., Phases 1 and 2 occurring simultaneously following Phase 0), a relatively larger amount of construction would take place during a relatively shorter period of time of three years, thereby increasing the typical daily construction activity. Phase 0 would occur in 2021, followed by Phases 1 and 2 occurring simultaneously for approximately 24 months from 2022 to 2023, and completed by early 2024. The construction analysis in SEIR Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, is generally based on conservative assumptions where appropriate and described in the “Approach to Analysis” section of the resource topic area.

Section 2.I.1, State and Regional Agencies on SEIR p. 2-50 is revised as follows:

California Department of Transportation

- Transportation permit for oversized or excessive load vehicles

- * **Section 2.I.2, Local Agencies on SEIR pp. 2-50 to 2-51 is revised as follows to update or correct local agency approval actions:**

2.I.2 Local Agencies

San Francisco Board of Supervisors

- Adoption of CEQA findings
- Approval of general plan amendments
- Approval of planning code amendments (SUD) and associated zoning map and height map amendments
- Approval of a development agreement
- Approval of final subdivision map(s)
- Approval of dedications and easements for public improvements, and acceptance of public improvements, as necessary
- Approval of an amended easement and access agreement with City College of the San Francisco Community College District for roadway access and any joint development of streets, if applicable
- Approval of a resolution(s) authorizing the sale of property under SFPUC jurisdiction and various license agreements for use, construction, and open space on SFPUC property
- Approval of a resolution acknowledging City’s intention to fund affordable housing in the project

San Francisco Planning Commission

- Certification of the final SEIR
- Adoption of CEQA findings
- Approval of special use district design standards and guidelines
- Initiation and recommendation to the San Francisco Board of Supervisors to approve amendments to the general plan
- Initiation and recommendation to the San Francisco Board of Supervisors to approve planning code amendments adopting an SUD and associated zoning map amendments
- Approval of Design Standards and Guidelines
- Recommendation to the San Francisco Board of Supervisors to approve a development agreement

San Francisco Public Utilities Commission or General Manager

- Adoption of CEQA findings
- Actions and approvals related to a development agreement and ~~purchase and sale~~ an agreement for the sale of property under SFPUC jurisdiction, and various license agreements for use, construction, and open space on SFPUC property and other actions and approvals related to its jurisdictional authority
- Approval of an amended easement and access agreement with the San Francisco Community College District for roadway access and any joint development of streets, if applicable

San Francisco Department of Public Works

- Actions and approvals related to its jurisdictional authority

San Francisco Municipal Transportation Agency

- Actions and approvals related to a development agreement and approval of transit improvements, public improvements and infrastructure, including certain roadway improvements, stop controls, bicycle infrastructure and loading zones, to the extent included in the project

San Francisco Fire Department

- Actions and approvals related to its jurisdictional authority

San Francisco Department of Building Inspection

- Approval and issuance of demolition, grading, and site construction permits
- Nighttime construction permit, if required

San Francisco Department of Public Health

- Actions and approvals related to its jurisdictional authority

~~City College of San Francisco~~ Community College District

- Act as responsible agency under CEQA
- Approval of an amended easement and access agreement

5.C Revisions to Section 3.A.6, Approach to Cumulative Impact Analysis

- * To update the status of the potential City College east basin parking garage project and passage of San Francisco Proposition A bond measure on March 3, 2020, the SEIR text is revised on pp. 3.A-13 to 3.A-14 as follows:

At subsequent 2019 Board of Trustees meetings, City College staff presented a facilities planning update on a potential bond measure that would be anticipated to fund construction of the facilities master plan projects, shown under the “Bond Measure” column in Table 3.A-2. In that update, a number of the facilities master plan projects were included in the list of potential bond-funded improvements. However, the East Basin Parking Garage was no longer included, the Performing Arts and Education Center was replaced by a new Diego Rivera Theater and a smaller STEAM building (both on the east basin), and a Student Development Building was proposed at the location of the existing Creative Arts Extension Building. The bond measure passed on March 3, 2020. The various projects that could be funded through the bond are subject to approval by the City College Board of Trustees. To support the college’s anticipated increase in enrollment, the Balboa Reservoir project sponsor may fund a portion of a study addressing a potential City College garage on the east basin, if the college decides to consider pursuing such a project. A parking garage on the east basin would have independent utility from the Balboa Reservoir project—in other words, the east basin parking garage could move forward regardless of whether the Balboa Reservoir project on the west basin occurs. Consequently, this SEIR analysis need not address an east basin parking lot as part of the Balboa Reservoir project other than accounting for it as part of the cumulative analysis.

5.D Revisions to Section 3.B, Transportation and Circulation

- * Table 3.B-2 on draft SEIR p. 3.B-10 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

TABLE 3.B-2
VEHICULAR COUNTS AT STUDY INTERSECTIONS

Number	Intersection	Number of Vehicles ^{a,b}	
		A.M. Peak Hour	P.M. Peak Hour
1	Ocean Avenue/Miramar Avenue	1,833	1,876
2	Ocean Avenue/Lee Avenue	1,898	2,021
3	Ocean Avenue/Frida Kahlo Way/Geneva Avenue	2,090	2,293
4	Ocean Avenue/San Jose Avenue	1,376	1,413
5	Ocean Avenue/Plymouth Avenue	1,841	1,866
6	San Ramon Way/Southwood Drive/Plymouth Avenue	422 <u>268</u>	409 <u>226</u>
7	Greenwood Avenue/Plymouth Avenue	430	397
8	Geneva Avenue/San Jose Avenue	2,590	2,485
9	Judson Avenue/Frida Kahlo Way	1,030	1,040
10	Judson Avenue/Hazelwood Avenue	437	341
11	Judson Avenue/Genessee Street	851	780
12	Monterey Boulevard/Genessee Street	1,684	1,636
13	Cloud Circle (N)/Frida Kahlo Way	750	923
14	Cloud Circle (S)/Frida Kahlo Way	1,074	1,210
15	City College Upper Reservoir Lot (N)/Frida Kahlo Way	750	923
16	City College Upper Reservoir Lot (S)/Frida Kahlo Way	1,074	1,210
17	I-280 SB Off Ramp/Ocean Avenue	1,505	1,509
18	I-280 SB Ramps/Geneva Avenue	2,463	2,590
19	I-280 NB Ramps/Geneva Avenue	2,653	2,642
20	I-280 NB Ramps/Ocean Avenue	1,101	1,207
21	Ocean Avenue/Brighton Avenue	1,708	1,846
22	Ocean Avenue/Harold Avenue	1,905	1,981
23	Holloway Avenue/Lee Avenue	440	378

SOURCE: Quality Counts, 2018.

NOTES:

^a Vehicle volume (number of vehicles) reflects the sum of all turning movements at the intersection.

^b The weekday a.m. peak hour is the peak one hour (four consecutive 15-minute intervals) of vehicle traffic occurring between 7 a.m. and 9 a.m. The weekday p.m. peak hour is the peak one hour (four consecutive 15-minute intervals) of vehicle traffic occurring between 4 p.m. and 6 p.m.

- * **The text on draft SEIR pp. 3.B-22 to 3.B-23 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

Muni transit operations in the study area were evaluated using transit delay analysis. The transit delay analysis presents the delay associated with traffic congestion, transit reentry, and passenger boarding along the following ~~corridors and Muni lines~~ for the weekday a.m. and p.m. peak hours:

- ~~Frida Kahlo Way from Judson Avenue to Ocean Avenue (Line 43)~~
- ~~Ocean Avenue from Plymouth Avenue to San Jose Avenue (Lines K, 29, 49)~~
- ~~Geneva Avenue from City College Terminal to San Jose Avenue (Lines 8, 8BX, 43, 54)~~
- K/T Third/Ingleside:
 - Jules Avenue/Ocean Avenue to Balboa Park BART Station (outbound)
 - San Jose Avenue/Geneva Avenue to Dorado Terrace/Ocean Avenue (inbound)
- 29 Sunset
 - Plymouth Avenue/Ocean Avenue to Mission Street/Persia Avenue (outbound)
 - Mission Street/Persia Avenue to Plymouth Avenue/Ocean Avenue (inbound)
- 43 Masonic
 - Geneva Avenue/Howth Street to Foerster Street/Monterey Boulevard (inbound)
 - Gennessee Street/Monterey Boulevard to Geneva Avenue/Howth Street (outbound)
- 49 Van Ness/Mission
 - Frida Kahlo Way/CCSF South Entrance to Mission Street/Persia Avenue (inbound)
 - Mission Street/Ocean Avenue to Frida Kahlo Way/City College South Entrance (outbound)

The results of the transit delay analysis are summarized in **Table 3.B-8, ~~Existing Transit Delay~~ Existing Transit Travel Times**, and provided in Attachment C, Corridor Delay Analysis Synchro Worksheets, and Attachment D, Transit Reentry and Passenger Boarding Delay Analysis Calculations, of SEIR Appendix C2, Transit Assessment Memorandum. Transit ridership and capacity analysis are provided in Attachment F (transit ridership and capacity analysis) of SEIR Appendix C2 for informational purposes. Table 3.B-8 presents the estimated ~~seconds of delay a transit vehicle encounters~~ travel times during the a.m. and p.m. peak hours ~~along each of the study corridors.~~

TABLE 3.B-8
EXISTING TRANSIT DELAY

Corridor	Weekday a.m. Peak Hour (seconds of delay)		Weekday p.m. Peak Hour (seconds of delay)	
	Northbound/ Eastbound	Southbound/ Westbound	Northbound/ Eastbound	Southbound/ Westbound
Frida Kahlo Way	3	42	3	25
Ocean Avenue	140	132	143	133
Geneva Avenue	70	48	66	44

SOURCE: Kittelson & Associates Inc., 2018.

NOTES:

Transit delay includes corridor delay, transit reentry delay, and passenger boarding delay.

TABLE 3.B-8
EXISTING TRANSIT TRAVEL TIMES

Transit Line	Study Segment	Existing Transit Travel Time ^a	
		A.M. Peak Period	P.M. Peak Period
<u>K/T</u>	<u>Jules Ave/Ocean Ave to Balboa Park BART (outbound)</u>	<u>3:30</u>	<u>8:42</u>
	<u>San Jose Ave/Geneva Ave to Dorado Terr/Ocean Ave (inbound)</u>	<u>3:28</u>	<u>10:03</u>
<u>29</u>	<u>Plymouth Ave/Ocean Ave to Mission St/Persia Ave (outbound)</u>	<u>8:01</u>	<u>12:09</u>
	<u>Mission St/Persia Ave to Plymouth Ave/Ocean Ave (inbound)</u>	<u>7:10</u>	<u>9:55</u>
<u>43</u>	<u>Geneva Avenue/Howth Street to Foerster St/Monterey Blvd (inbound)</u>	<u>4:20</u>	<u>4:37</u>
	<u>Gennessee St/Monterey Blvd to Geneva Avenue/Howth Street (outbound)</u>	<u>4:16</u>	<u>4:23</u>
<u>49</u>	<u>Frida Kahlo Way/City College South Entrance to Mission St/Persia Ave (outbound)</u>	<u>5:39</u>	<u>10:04</u>
	<u>Mission St/Ocean Ave to Frida Kahlo Way/City College South Entrance (inbound)</u>	<u>7:18</u>	<u>11:25</u>

SOURCE: Kittelson & Associates, Inc. 2019; SFMTA Automatic Vehicle Location Data, 2019.

NOTES:

^a Kittelson staff collected transit travel time data along route segments via onboard surveys. Transit travel times were collected on Tuesday, April 2, 2019, during the weekday a.m. peak period (7 to 9 a.m.) and the weekday p.m. peak period (4 to 6 p.m.). Staff boarded a transit vehicle at the route start point and recorded the travel time between each stop and the dwell time at each stop. Onboard survey data was used to supplement and verify automatic vehicle location data provided by SFMTA.

As shown in Table 3.B-8, the highest transit delays most variability in transit travel times are experienced along Ocean Avenue between Plymouth Avenue and Judson Avenue in the westbound direction where there is a difference in travel times of over 6.5 minutes between the weekday a.m. and p.m. peak hours. This is primarily caused by the vehicular traffic at the Ocean Avenue/San Jose Avenue intersection during the weekday p.m. peak hour, which operates with an average intersection delay above 100 seconds.

Additionally, as a result of the high volume of vehicle traffic volumes in the curbside travel lane on westbound Ocean Avenue (between 900 and 930 vehicles per hour) transit vehicles ~~in this corridor~~ typically experience transit reentry delays of around 11 seconds.

- * **Footnote 96 on draft SEIR p. 3.B-52 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):**

⁹⁶ The threshold uses the adopted the Transit First Policy, City Charter section 8A.103(c)1, 85, percent on-time performance service standard for Muni, with the charter considering vehicles arriving more than four minutes beyond a published schedule time late.

- * **The text on draft SEIR pp. 3.B-73 to 3.B-74 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):**

The impact of the proposed project on transit delay (traffic congestion, transit reentry delay, and passenger boarding delay) was evaluated along the following ~~corridors and~~ Muni lines for the weekday a.m. and p.m. peak hours:

- ~~Frida Kahlo Way from Judson Avenue to Ocean Avenue (Line 43)~~
- ~~Ocean Avenue from Plymouth Avenue to San Jose Avenue (Lines K, 29, 49)~~
- ~~Geneva Avenue from City College Terminal to San Jose Avenue (Lines 8, 8BX, 43, 54)~~
- K/T Third/Ingleside:
- Jules Avenue/Ocean Avenue to Balboa Park BART Station (outbound)
 - San Jose Avenue/Geneva Avenue to Dorado Terrace/Ocean Avenue (inbound)
- 29 Sunset
 - Plymouth Avenue/Ocean Avenue to Mission Street/Persia Avenue (outbound)
 - Mission Street/Persia Avenue to Plymouth Avenue/Ocean Avenue (inbound)
- 43 Masonic
 - Geneva Avenue/Howth Street to Foerster Street/Monterey Boulevard (inbound)
 - Genessee Street/Monterey Boulevard to Geneva Avenue/Howth Street (outbound)
- 49 Van Ness/Mission
 - Frida Kahlo Way/CCSF South Entrance to Mission Street/Persia Avenue (outbound)
 - Mission Street/Ocean Avenue to Frida Kahlo Way/City College South Entrance (inbound)

The results of the transit delay analysis are summarized in **Table 3.B-18, Transit Delay Analysis**, ~~and Synchro travel time calculation worksheets presenting transit delay along the corridors are~~ provided in Attachment C, Corridor Delay Analysis Synchro Worksheets, ~~and Attachment D, Transit Reentry and Passenger Boarding Delay Analysis~~

Calculations⁷ of SEIR Appendix C2, Transit Assessment Memorandum and supplementary transit analysis is provided in the SEIR Appendix C4, Transit Delay Analysis and Capital Improvement Memorandum.

TABLE 3.B-18
TRANSIT DELAY ANALYSIS

Corridor	Weekday a.m. Peak Hour (seconds of delay)		Weekday p.m. Peak Hour (seconds of delay)	
	Northbound/ Eastbound	Southbound/ Westbound	Northbound/ Eastbound	Southbound/ Westbound
Transit Delay				
Existing Conditions				
Frida Kahlo Way	5	15	5	28
Ocean Avenue	121	143	124	144
Geneva Avenue	79	53	75	46
Existing plus Developer's Proposed Option				
Frida Kahlo Way	18	74	29	101
Ocean Avenue	187	182	182	244
Geneva Avenue	99	127	117	127
Existing plus Additional Housing Option				
Frida Kahlo Way	21	87	46	111
Ocean Avenue	183	207	208	272
Geneva Avenue	109	137	133	137

Corridor	Weekday a.m. Peak Hour (seconds of delay)		Weekday p.m. Peak Hour (seconds of delay)	
	Northbound/ Eastbound	Southbound/ Westbound	Northbound/ Eastbound	Southbound/ Westbound
Project-Related Increase in Delay				
Developer's Proposed Option				
Frida Kahlo Way	13	59	24	73
Ocean Avenue	66	39	58	100
Geneva Avenue	20	74	42	81
Additional Housing Option				
Frida Kahlo Way	16	72	41	83
Ocean Avenue	62	64	84	128
Geneva Avenue	30	84	58	91
SOURCE: Kittelson & Associates, Inc. 2018.				
NOTES:				
Transit delay includes corridor delay, transit reentry delay, and passenger boarding delay.				

TABLE 3.B-18
TRANSIT DELAY ANALYSIS

Transit Line	Study Segment	Transit Travel Time		Project-Related Change		Exceeds Four-Minute Threshold? ^a	
		A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period
Existing Conditions ^b							
K/T	Jules/Ocean to Balboa Park BART (outbound)	3:30	8:42	==	==	==	==
	San Jose/Geneva to Dorado/Ocean (inbound)	3:28	10:03	==	==	==	==
29	Plymouth/Ocean to Mission/Persia (outbound)	8:01	12:09	==	==	==	==
	Mission/Persia to Plymouth/Ocean (inbound)	7:10	9:55	==	==	==	==
43	Geneva/Howth to Monterey/Foerster ^c (inbound)	4:50 ^c	5:07 ^c	==	==	==	==
	Gennessee/Monterey to Geneva/Howth ^c (outbound)	4:27 ^c	4:46 ^c	==	==	==	==
49	Frida Kahlo/City College South to Mission/Persia (outbound)	5:39	10:04	==	==	==	==
	Mission/Ocean to Frida Kahlo/City College South (inbound)	7:18	11:25	==	==	==	==
Existing Conditions + Developer's Proposed Option							
K/T	Jules/Ocean to Balboa Park BART (outbound)	4:36	9:40	1:06	0:58	No	No
	San Jose/Geneva to Dorado/Ocean (inbound)	4:07	11:43	0:39	1:40	No	No
29	Plymouth/Ocean to Mission/Persia (outbound)	9:07	13:07	1:06	0:58	No	No
	Mission/Persia to Plymouth/Ocean (inbound)	7:49	10:35	0:39	1:40	No	No
43	Geneva/Howth to Monterey/Foerster ^c (inbound)	5:04 ^c	5:33 ^c	0:14	0:26	No	No
	Gennessee/Monterey to Geneva/Howth ^c (outbound)	5:37 ^c	5:50 ^c	1:10	1:04	No	No
49	Frida Kahlo/City College South to Mission/Persia (outbound)	6:45	11:02	1:06	0:58	No	No
	Mission/Ocean to Frida Kahlo/City College South (inbound)	7:57	13:05	0:39	1:40	No	No
Existing Conditions + Additional Housing Option							
K/T	Jules/Ocean to Balboa Park BART (outbound)	4:32	10:08	1:02	1:24	No	No
	San Jose/Geneva to Dorado/Ocean (inbound)	4:32	12:11	1:04	2:08	No	No
29	Plymouth/Ocean to Mission/Persia (outbound)	9:03	13:33	1:02	1:24	No	No

<u>Transit Line</u>	<u>Study Segment</u>	<u>Transit Travel Time</u>		<u>Project-Related Change</u>		<u>Exceeds Four-Minute Threshold?^a</u>	
		<u>A.M. Peak Period</u>	<u>P.M. Peak Period</u>	<u>A.M. Peak Period</u>	<u>P.M. Peak Period</u>	<u>A.M. Peak Period</u>	<u>P.M. Peak Period</u>
	Mission/Persia to Plymouth/Ocean (inbound)	8:14	12:03	1:04	2:08	No	No
43	Geneva/Howth to Monterey/Foerster ^c (inbound)	5:07 ^c	6:07 ^c	0:17	1:00	No	No
	Genessee/Monterey to Geneva/Howth ^c (outbound)	5:39 ^c	6:07 ^c	1:12	1:21	No	No
49	Frida Kahlo/City College South to Mission/Persia (outbound)	6:41	12:28	1:02	1:24	No	No
	Mission/Ocean to Frida Kahlo/City College South (inbound)	8:22	13:33	1:04	2:08	No	No

SOURCE: Kittelson & Associates, Inc. 2019; SFMTA Automatic Vehicle Location Data, 2019.

NOTES:

^a The threshold is calculated as the existing transit travel time plus four minutes.

^b Kittelson staff collected transit travel time data along route segments via onboard surveys. Transit travel times were collected on Tuesday, April 2, 2019, during the weekday a.m. peak period (7 to 9 a.m.) and the weekday p.m. peak period (4 to 6 p.m.). Staff boarded a transit vehicle at the route start point and recorded the travel time between each stop and the dwell time at each stop. Onboard survey data was used to supplement and verify automatic vehicle location data provided by SFMTA.

^c The Transit Travel Time column for existing conditions represents the 43 line between Geneva Avenue/Howth Street and Foerster Street/Monterey Boulevard (inbound) or Genessee Avenue/Monterey Boulevard (outbound), with collected transit travel time data along the route segment between Frida Kahlo Way/Geneva Avenue/Ocean Avenue and Foerster Street/Monterey Boulevard (inbound) or Genessee Avenue/Monterey Boulevard (outbound), plus the Synchro-estimated delay at Frida Kahlo Way/Geneva Avenue/Ocean Avenue. The Project-Related Change columns in Table 3.B-18 represent Synchro-estimated increase for the 43 line between Foerster Street/Monterey Boulevard and Geneva Avenue/Howth Street.

Developer's Proposed Option

As shown in Table 3.B-18, vehicle and transit trips generated by the Developer's Proposed Option would increase transit delay by a maximum of 73 seconds along Frida Kahlo Way (southbound direction, weekday p.m. peak hour), a maximum of 100 seconds along Ocean Avenue (westbound direction, weekday p.m. peak hour), and a maximum of 81 seconds along Geneva Avenue (westbound direction, weekday p.m. peak hour). 1 minute and 40 seconds along Ocean Avenue in the westbound direction during the weekday p.m. peak hour and a maximum of 1 minute and 6 seconds along Ocean Avenue in the eastbound direction during the weekday a.m. peak hour.

Based on an analysis of the project-related change in delay attributable to traffic congestion, transit reentry, and passenger boardings/alightings, the majority of the transit delay increase is attributable to the increase in passenger boarding delay resulting from the project-generated transit riders. The Developer's Proposed Option would not create additional transit reentry delay during the a.m. or p.m. peak hours.

As shown in Table 3.B-18, the Developer's Proposed Option would not result in transit delay greater than or equal to four minutes. Therefore, based on the established

thresholds of significance, the Developer's Proposed Option would result in a *less-than-significant* impact related to transit delay.

Additional Housing Option

As shown in Table 3.B-18, vehicle and transit generated by the Additional Housing Option would increase transit delay by a maximum of ~~83 seconds along Frida Kahlo Way, (southbound direction, weekday p.m. peak hour), a maximum of 128 seconds along Ocean Avenue (westbound direction, weekday p.m. peak hour), and a maximum of 91 seconds along Geneva Avenue (westbound direction, weekday p.m. peak hour).~~ 2 minutes and 8 seconds along Ocean Avenue in the westbound direction during the weekday p.m. peak hour and a maximum of 1 minute and 2 seconds along Ocean Avenue in the eastbound direction during the weekday a.m. peak hour.

Based on an analysis of the project-related change in delay attributable to traffic congestion, transit reentry, and passenger boardings/alightings, ~~t~~The majority of the transit delay increase is attributable to the increase in passenger boarding delay resulting from the project-generated transit riders. The Additional Housing Option would not create additional transit reentry delay during the a.m. or p.m. peak hours.

As shown in Table 3.B-18, ~~t~~The Additional Housing Option would not result in transit delay greater than or equal to four minutes.³ Therefore, based on the established thresholds of significance, the Additional Housing Option would result in a *less-than-significant* impact related to transit delay.

- * **The last sentence on draft SEIR p. 3.B-79 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

The Developer's Proposed Option would construct an up to 750~~650~~-space public parking garage to partially replace the existing 1,007-space surface parking lot on the project site.

- * **The following edits update draft SEIR pp. 3.B-95 to 3.B-98, including Mitigation Measure M-C-TR-4, Implement Measures to Reduce Transit Delay, to reflect the impact conclusion updates regarding the 49 Van Ness/Mission and transit capital improvements (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

Mitigation Measure M-C-TR-4: ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay.~~ The project sponsor, under either project option, shall ~~monitor cumulative transit travel times for the identified route segments of the K/T Third/Ingleside, 29 Sunset, 43 Masonic, and 49 Van Ness/Mission lines to determine if a route does not meet its performance standard. If applicable, the project sponsor shall implement feasible measures (as developed in consultation with SFMTA)~~

³—~~Ibid.~~

to reduce transit delay and meet the transit travel time performance standard for the identified segments of the K/T Third/Ingleside, 29 Sunset, and 43 Masonic.

Transit Travel Time Performance Standard Routes and Study Segments. Existing transit travel times and performance standards for the routes subject to this measure, including study segment and time periods, are shown in Table M-C-TR-4. The following routes and study segments shown in Table M-C-TR-4 represent routes and study segments most likely to have a cumulative impact to which the project would have a considerable cumulative contribution.

- K/T Third/Ingleside (outbound): Jules Avenue/Ocean Avenue to Balboa Park Bay Area Rapid Transit (BART)
- K/T Third/Ingleside (inbound): San Jose Avenue/Geneva Avenue to Dorado Terrace/Ocean Avenue
- 29 Sunset (outbound): Plymouth Avenue/Ocean Avenue to Mission St/Persia Avenue
- 29 Sunset (inbound): Mission St/Persia Avenue to Plymouth Avenue/Ocean Avenue
- 43 Masonic (outbound): Genessee Street/Monterey Boulevard to Geneva Avenue/Howth Street
- 43 Masonic (inbound): Geneva Avenue/Howth Street to Foerster Street/Monterey Boulevard

TABLE M-C-TR-4
TRANSIT TRAVEL TIME PERFORMANCE STANDARD

Transit Line	Study Segment	Existing Transit Travel Time ^a		Performance Standard ^b	
		A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period
K/T	Jules Ave/Ocean Ave to Balboa Park BART	3:30	8:42	7:30	12:42
	San Jose Ave/Geneva Ave to Dorado Terr/Ocean Ave	3:28	10:03	7:28	11:28
29	Plymouth Ave/Ocean Ave to Mission St/Persia Ave	8:01	12:09	12:01	16:01
	Mission St/Persia Ave to Plymouth Ave/Ocean Ave	7:10	9:55	11:10	15:10
43	Frida Kahlo Way/CCSF South Entrance to Foerster St/Monterey Blvd	4:20	4:37	8:20	8:37
	Genessee St/Monterey Blvd to Frida Kahlo Way/CCSF South Entrance	4:16	4:23	8:16	8:23
49	Frida Kahlo Way/CCSF South Entrance to Mission St/Persia Ave	5:22	10:04	9:22	14:04
	Mission St/Ocean Ave to Frida Kahlo Way/CCSF South Entrance	7:18	11:25	11:18	15:25

Transit Line	Study Segment	Existing Transit Travel Time ^a		Performance Standard ^b	
		A.M. Peak Period	P.M. Peak Period	A.M. Peak Period	P.M. Peak Period

SOURCE: Kittelson & Associates, Inc., 2019; SFMTA Automatic Vehicle Location Data, 2019.

NOTES:

- ^a Kittelson staff collected transit travel time data along route segments via onboard surveys. Transit travel times were collected on Tuesday, April 2, 2019, during the weekday a.m. peak period (7 to 9 a.m.) and the weekday p.m. peak period (4 to 6 p.m.). Staff boarded a transit vehicle at the route start point and recorded the travel time between each stop and the dwell time at each stop. Onboard survey data was used to supplement and verify automatic vehicle location data provided by SFMTA. Agencies may determine to update the existing baseline transit travel times closer to commencement of construction.
- ^b The performance standard is calculated as the existing transit travel time plus four minutes, or half the headway of a route with headways of less than eight minutes.

Monitoring and Reporting. The project sponsor shall retain a transportation consultant to monitor and report cumulative transit travel times to determine if a route exceeds its performance standard and the project's fair share contribution to such exceedance, if applicable. The transportation consultant shall be on a list of qualified consultants at the SFMTA or San Francisco Planning Department (agencies). The monitoring plan is subject to agencies' review and approval. All reporting documents are also subject to review and approval by the agencies. The agencies may modify the monitoring and reporting program to account for transit route or transportation network changes, or major changes to the project's development program.

Timing. The project sponsor shall retain a transportation consultant within one year of occupancy of one new major building⁴ at the City College of San Francisco Ocean Avenue campus (City College) and at least 750 units are occupied at the project site.

The transportation consultant shall submit its first transit travel time reporting document to the agencies within 18 months of occupancy of one new major building at the City College San Francisco Ocean Avenue campus (City College) and at least 750 units are occupied at the project site. Thereafter, the transportation consultant shall submit annual reporting documents until the project sponsor meets its terms for this measure.

Collection and Reporting Details. For each reporting document, the transportation consultant shall collect transit travel time data during the a.m. peak (7 to 9 a.m.) and p.m. peak (4 to 6 p.m.) periods during three consecutive, non-holiday weekdays (Tuesday, Wednesday or Thursday) when City College is in typical (i.e., non-finals or spring break week) session. The transportation consultant may use automatic vehicle location on the routes to average the transit travel time data for the peak hour within the peak period of each route in both the inbound and outbound directions along the study segment. Transit travel time surveys shall be conducted within the same month for each reporting period.

For the first reporting document, the transportation consultant shall collect and report additional data during the peak periods to determine the project sponsor's fair share impacts of the cumulative transit delay. The transportation consultant may use

⁴ A new major building is City College of San Francisco Ocean Avenue campus construction post 2019 that results in a cumulative net addition of more than 50,000 square feet to an existing building(s) or a new building(s), or a new or expanded parking facility of more than a 50,000 square feet.

~~methodologies such as cordons, intersection counts, or video cameras to determine traffic congestion and reentry delay attributable to the project and intercept surveys to determine passenger boarding/alighting delay attributable to the project. Agencies will determine if the collecting and reporting of this subsequent data is required for subsequent reporting documents (e.g., if a route exceeds or is close to exceeding the performance standard in a prior reporting document).~~

Implement Fair Share of Capital Improvement Measures. ~~If the agencies determine a route does not meet its performance standard and the project contributes greater than or equal to two minutes' delay to that route, the~~ The project sponsor shall implement contribute funds for the following capital improvement measures that reduce transit travel times. These measures are subject to agency approval and could include:

1. Signal Timing Modifications at Ocean Avenue/Brighton Avenue. The project sponsor shall fund the design and construction of signal timing modifications and restriping, as needed, at the Ocean Avenue/Brighton Avenue intersection. The existing traffic signal shall be modified to prohibit eastbound left turns and provide a protected green arrow signal phase for westbound left turns.
2. Signal Timing Modifications at Ocean Avenue/Plymouth Avenue. The project sponsor shall fund the design and construction of signal timing modifications and restriping, as needed, at the Ocean Avenue/Plymouth Avenue intersection. The existing traffic signal shall be modified to prohibit eastbound left turns and provide a protected green arrow signal phase for westbound left turns.
3. Bus boarding island on southbound Frida Kahlo Way. The project sponsor shall fund the design and construction of a bus boarding island on southbound Frida Kahlo Way, north of the Frida Kahlo Way/Geneva Avenue/Ocean Avenue intersection, and restriping, as needed.

The cost of these capital improvement measures is \$200,000 in 2020 dollars, and shall be considered the project's fair share toward mitigating this significant cumulative impact. This amount shall be increased by consumer price index per year. The fair share contribution, as documented by SFMTA⁵, shall not exceed this amount across all phases. Payment of the fair share contribution levels would mitigate the impacts of the estimated transit delay added by full development of the proposed project options.

If SFMTA adopts a strategy to reduce transit travel times along these routes that does not involve signal timing modifications or bus boarding islands, the project's fair share contribution shall remain the same, and may be used for other transit travel time saving strategies on these routes, as deemed desirable by SFMTA.

- ~~1. Expansion of measures already included in the project's transportation demand management (TDM) Plan (e.g., increases in tailored transportation marketing services, additional bicycle parking, etc.). The project sponsor shall pay the full cost of implementation.~~

⁵ Henderson, Tony, SFMTA, e-mail communication to Elizabeth White, San Francisco Planning Department, and Leigh Lutenski, Office of Economic and Workforce Development on March 30, 2020.

2. ~~Measures identified in the City's TDM Program Standards Appendix A (as such appendix may be amended by the Planning Department from time to time) that have not yet been included in the project's TDM Plan. The project sponsor shall pay the full cost of implementation.~~
3. ~~Other measures not included in the City's TDM Program Standards Appendix A that the agencies agree are likely to reduce transit travel times. These other measures may include off-site capital improvements such as, turn pockets, bus bulbs, queue jumps, turn restrictions, boarding islands, and/or transit signal priority projects. The project sponsor shall pay their fair share, calculated as the project's percent contribution to the increase in transit travel time between baseline and cumulative conditions, of the selected measures.~~

Term Condition A: ~~The project sponsor shall monitor, submit reporting documents, and implement their fair share portion of measures for each route until the agencies determine that three consecutive reporting documents demonstrate: (1) the route does not exceed its performance standard or (2) the project does not contribute greater than or equal to two minutes' delay to a route that exceeds its performance standard.~~

Term Condition B: ~~The project sponsor shall be subject to the term condition A for every new major building at City College or for every additional 250 occupied dwelling units at the project site. The agencies may waive term Condition B if past reporting documents demonstrate the project has no potential to contribute to greater than or equal to two minutes' delay to a route that exceeds or may exceed its performance standard.~~

~~In consideration of the uncertainty surrounding the development at City College's Ocean Campus, the uncertainty of the Balboa Reservoir Project's TDM measure effectiveness, and Implementation of these capital improvement measures would reduce transit delay for the identified segments of the K/T Third/Ingleside, 29 Sunset, and 43 Masonic. However, given the uncertainty of SFMTA approval of other measures under their jurisdiction, of these measures, and because SFMTA cannot commit funding to these capital improvements, the impact of the proposed project options would remain significant and unavoidable with mitigation, even with implementation of Mitigation Measure M-C-TR-4.~~

Significance after Mitigation: Significant and Unavoidable.

5.E Revisions to Section 3.C, Noise

The text on draft SEIR p. 3.C-23 is revised as follows to clarify nighttime noise generating activity (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

Construction activities would generally occur between the hours of 7 a.m. and 8 p.m., up to seven days a week. The project sponsor does not anticipate frequent or regular nighttime noise generating construction activity and would not occur during nighttime

hours. Consequently, construction activities would be consistent with San Francisco Police Code section 2908.

Construction-Related Noise Sources

Project implementation would result in operation of heavy equipment on the project site for the demolition of the west side berm, and north and east embankments, construction of new structures and associated infrastructure, and open space improvements. Construction activities would occur intermittently on the project site over the six-year construction duration and could expose nearby existing and future sensitive receptors to temporary increases in noise levels substantially in excess of ambient levels. The project sponsor does not anticipate frequent or regular nighttime noise-generating construction activity. ~~Construction activity is only proposed to occur during daytime hours and nighttime construction noise impacts would not occur and are not assessed herein. While certain~~ construction activities such as large concrete pours, may require earlier start or later finish times to accommodate such time-specific activities, and could include one concrete pour per building, which could occur a total of 12 times throughout the project construction period. ~~Such construction activities that extend beyond normal hours have not been specifically identified by the applicant and~~ would be subject to review, permitting, and approval by the San Francisco Department of Building Inspection.

The text on draft SEIR p. 3.C-25 is revised as follows to correct the location of this receptor (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

Archbishop Riordan High School would be the receptor nearest to the ~~eastern-northern~~ property line. Archbishop Riordan High School would be located approximately 80 feet from Phase 0 demolition activities which would last approximately two months.

The text on draft SEIR p. 3.C-29 is revised as follows to clarify the noise analysis under the compressed construction schedule (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

As stated in the footnote to Table 2-2, p. 2-38, the phasing of project implementation would be subject to changes due to market conditions and other unanticipated factors. Consequently, construction could be complete as early as 2024 or extend beyond 2027. If construction occurs over a shorter period than shown in Table 2-2 (e.g., Phases 1 and 2 occurring simultaneously following Phase 0), a relatively larger amount of construction would take place during a relatively shorter period of time, thereby increasing the typical daily construction activity.

Compression of the construction schedule from six to three years would increase the intensity of construction and may result in more individual pieces of equipment operating simultaneously than under the proposed six-year construction period of the project. Under the compressed scenario, Phase 0 would occur over a 12-month period, as

under the six-year construction scenario; therefore, the construction noise impacts for Phase 0 would be the same.

Under the compressed scenario, Phases 1 and 2 would be constructed simultaneously after Phase 0 and would involve more equipment operation but not at the same location, as Phase 1 and Phase 2 are in separate geographic areas of the project site. Consequently, construction noise impacts at Archbishop Riordan High School as assessed in Table 3.C-8 would increase by 3 dBA and only if development of Blocks G and TH2 would occur simultaneously (see Figure 2-18). All other Phase 1 development would be over 300 feet away, such that construction noise would be attenuated by distance so as not to contribute considerably to construction noise from concurrent development of Phase 2 area under the compressed schedule. Additionally, because construction noise analysis involves consideration of the simultaneous operation of the two noisiest pieces of equipment, the compressed construction scenario would not appreciably result in a change in the character of the significant and unavoidable construction noise impact identified. Therefore, due to the distances involved, the compressed construction scenario would only have a potential for a modest increase in noise levels over those predicted for the proposed schedule.

The peak volume of truck trips under the compressed schedule would also occur over four months in 2022 and would be 1.2 times greater than the six-year schedule due to the simultaneous construction of Phase 1 and 2. As indicated in Table 3.C-8 on SEIR p. 3.C-27, the noise contribution of truck trips would be much less than that of off-road construction equipment. There would not be a substantial increase in the severity of construction noise impacts under the compressed schedule compared to that of the proposed project. The same pieces of equipment would be operating under a compressed construction schedule. Therefore, the maximum noise level would not change based on the methodology above combining the operation of the noisiest pieces of equipment with each phase. Under the compressed construction schedule, the construction noise impact from off-road equipment would be *significant*.

The sixth bullet point of Mitigation Measure M-NO-1 on draft SEIR p. 3.C-30 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):

- Undertake the noisiest activities (e.g., demolition using hoe rams) ~~during times of least disturbance to surrounding residents and occupants to~~ (9 a.m. to 4 p.m.); and select or construct haul routes that avoid the North Access Road and the adjacent Archbishop Riordan High School and residential uses along Plymouth Avenue and Lee Avenue, such as the temporary or permanent relocation of North Street.

The second full paragraph on draft SEIR p. 3.C-31 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):

Significance after Mitigation: Significant and Unavoidable. Implementation of construction-related noise control measures in Mitigation Measure M-NO-1 would

reduce the project's temporary or periodic increases in ambient noise levels. However, given that there would still be periods of peak construction activity exceeding the "Ambient + 10 dBA" standard at the nearest sensitive receptor locations for occasional periods when activity would be conducted at the property lines nearest to receptors, these occurrences would occur in all three phases of construction over an extended period of up to six years.

Plywood barriers or moveable sound barrier curtains can provide, at best, 10 to 15 dBA of sound attenuation but would not be effective for elevated receptors in the 1100–1150 Ocean Avenue residences. The feasibility of implementing either a temporary or permanent North Street extension is unknown at this time, as it would require development of an agreement on timing and right-of-way acquisition with City College.

If construction were to be conducted under the compressed schedule and be complete as early as 2024, a relatively larger amount of construction would take place during a relatively shorter period of time, thereby increasing the typical daily construction activity. Therefore, in either case the construction noise impacts would be significant and unavoidable with mitigation.

The second paragraph of draft SEIR p. 3.C-32 is revised as follows to correct the vibration standard for older residential structures (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):

This analysis evaluates the significance of construction-related vibration on structures and people (receptors), specifically cosmetic damage effects on structures and sleep disturbance and associated health effects on people. For building damage, the threshold limit depends on the architectural characteristics of the potentially affected structure (see Table 3.C-6, p. 3.C-14), ~~but, for~~ For modern residential, industrial and commercial buildings, a standard of 0.5 in/sec PPV is applied, while for older residential structures, a standard of 0.3 in/sec PPV is applied. ~~Potential nighttime concrete pours would not involve the use of vibration-generating equipment.~~ The potential for sleep disturbance vibration effects are evaluated only when construction activities are proposed during the nighttime hours, which would not occur under the proposed project, therefore, there would be no sleep disturbance vibration impacts.

The fourth paragraph of SEIR p. 3.C-32 is revised as follows to correct the vibration standard for older residential structures (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):

As shown in Table 3.C-6, p. 3.C-14, depending on the type of vibration (transient versus continuous), groundborne vibration generated by project-related demolition and construction activities above ~~0.5-0.3~~ 0.5-0.3 in/sec PPV could cause cosmetic damage to new or older nearby structures. As shown Table 3.C-9, estimated vibration levels of PPV's would be ~~well~~ below the ~~0.5-0.3~~ 0.5-0.3 in/sec threshold and this impact would be *less than significant*.

5.F Revisions to Section 3.D, Air Quality

The background existing cancer risk and PM_{2.5} concentrations presented in the draft SEIR were based on the most recent San Francisco Citywide Health Risk Assessment database available at the time the notice of preparation (NOP) and draft SEIR were released. This assessment was conducted in 2012 and indicates that the project site is not located within an air pollutant exposure zone (APEZ). In February 2020, the city, in collaboration with the regional air district, completed a draft update to the Citywide Health Risk Assessment database in order to update the APEZ map, as required by Health Code article 38. The draft 2020 Citywide Health Risk Assessment database includes the following updates compared to the prior Citywide Health Risk Assessment database:

- Vehicle activity is based on an updated San Francisco Chained Activity Modeling Process (SF-CHAMP) model run for year 2020
- Vehicle emissions are updated for year 2020
- Vehicle emissions include re-suspended road dust, which was not included in the prior citywide health risk assessment
- Maritime emissions now also account for ferry emissions (emissions that were not included in the prior Citywide Health Risk Assessment database due to lack of available information at that time)
- Caltrain emissions have been updated
- Stationary source emissions permitted by the air district have been updated
- Updated citywide air dispersion modeling was conducted
- Cancer risk estimates have been updated based on updated methodologies from the Office of Environmental Health Hazard Assessment

Based on this draft updated database, the San Francisco Department of Public Health issued a draft updated APEZ map, issued a draft *San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, and initiated a 30-day public review period.⁶ The updated final APEZ map shows that the project site is not located within an APEZ, consistent with the draft SEIR.

Based on the updated final APEZ map⁷ and the draft *San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, the proposed project would result in a significant health risk impact to on- and off-site sensitive receptors during the project's construction activities without mitigation, consistent with what was presented in the draft SEIR. However, with implementation of Mitigation Measure M-AQ-2a (Construction Emissions Minimization) and M-AQ-4a (Install MERV 13 Filters at the Daycare Facility), this impact would be reduced to a less-than-significant level, also consistent with what was presented in the draft SEIR. Also consistent with the draft SEIR, the health risks to existing offsite sensitive receptors may exceed

⁶ San Francisco Department of Public Health, San Francisco Planning Department, and Ramboll, *Draft San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, February 2020

⁷ San Francisco Planning Department, San Francisco Property Information Map, <https://sfplanninggis.org/PIM/>.

the cancer risk thresholds under the worst-case three-year construction phasing scenario, and therefore this impact would be significant and unavoidable with mitigation. Specifically:

- For excess cancer risk from construction and operation emissions for both offsite and onsite receptors not in APEZ under existing conditions, the project's contribution is either less than the threshold of 10.0 cancers per 1 million and/or the project's contribution would not place any offsite or onsite receptor into a new APEZ.
- For excess cancer risk from construction and operation emissions for both offsite and onsite receptors in APEZ under existing conditions, the project's contribution is less than the threshold of 7.0 cancers per 1 million.
- For excess cancer risk from construction and operation emissions under the compressed construction scenario for offsite receptors in APEZ under existing conditions, this impact would be conservatively considered significant and unavoidable with mitigation.
- For PM_{2.5} concentrations from construction and operation emissions for both offsite and onsite receptors not in APEZ under existing conditions, the project's contribution is either less than the threshold of 0.3 μm^3 and/or the project's contribution would not place any offsite or onsite receptor into a new APEZ.
- For PM_{2.5} concentrations from construction and operation emissions for both offsite and onsite receptors in APEZ under existing conditions, the project's contribution is less than the threshold of 0.2 μm^3 .
- For PM_{2.5} concentrations from construction and operation emissions under the compressed construction scenario for offsite receptors in APEZ under existing conditions, this impact would be conservatively considered significant and unavoidable with mitigation.

Therefore, the following text in the draft SEIR has been revised to update references to, and data from, the updated citywide health risk modeling database. The revised text does not provide new information that would result in any new significant impact not already identified in the draft SEIR or a substantial increase in the severity of an impact identified in the draft SEIR that cannot be mitigated to less than significant level with implementation of mitigation measure(s) agreed to by the project sponsor. Therefore, recirculation pursuant to CEQA guidelines section 15088.5 is not required.

- * **To reflect the updated health risk analysis, the last sentence in the first paragraph on draft SEIR p. 3.D-1 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):**

Supplemental air quality information supporting the analysis in this section is provided in SEIR Appendix E, Air Quality Technical Memorandum, and Appendix I, Updated Health Risk Assessment Memorandum.

- * To reflect the updated APEZ map and the draft *San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, draft SEIR pp. 3.D-16 to 3.D-17, and footnote 239, is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

In an effort to identify areas of San Francisco most adversely affected by sources of TACs and elevated concentrations of particulate matter, the City and County of San Francisco partnered with BAAQMD to inventory and assess air pollution exposure from vehicles, stationary sources, and area sources within San Francisco. Citywide dispersion modeling was conducted using AERMOD²³⁸ to assess the emissions from the following primary sources: vehicles on local roadways, permitted stationary sources, port and maritime sources, and diesel emissions from Caltrain. Emissions of PM₁₀ (DPM is assumed equivalent to PM₁₀), PM_{2.5}, and total organic gases (TOGs) were modeled on a 20 by 20-meter receptor grid covering the entire city. The citywide modeling results represent a comprehensive assessment of existing cumulative exposures to air pollution throughout the city. The methodology and technical documentation for modeling citywide air pollution are available in the document entitled, ~~*The San Francisco Community Risk Reduction Plan: Technical Support Documentation*~~ *Draft San Francisco Citywide Health Risk Assessment: Technical Support Documentation*.²³⁹

Model results were used to identify areas in the city with poor air quality, which are designated as the *Air Pollutant Exposure Zone* (APEZ), based on the following health-protective criteria: (1) cumulative PM_{2.5} concentrations greater than 10 µg/m³ and/or (2) excess cancer risk from the contribution of emissions from all modeled sources greater than 100 per one million persons exposed. See below for evidence supporting these standards.

An additional health vulnerability layer was incorporated in the APEZ for those San Francisco ZIP codes in the worst quintile of Bay Area Health Vulnerability scores (ZIP Codes 94102, 94103, ~~94105~~94110, 94124, and ~~94130~~94134). In these areas, the standard for identifying areas as being within the zone were lowered to: (1) excess cancer risk from the contribution of emissions from all modeled sources greater than 90 per one million persons exposed and/or (2) cumulative PM_{2.5} concentrations greater than 9 µg/m³.

Lastly, all parcels within 500 feet of a major freeway were also included in the APEZ, consistent with findings in CARB's Air Quality and Land Use Handbook: A Community Health Perspective, which suggests air pollutant levels decrease substantially at approximately 500 feet from a freeway.²⁴⁰

Citywide modeling results identified that the project site is not located within the APEZ, including it is not located within a health vulnerable zip code. The closest parcels to the project site within the APEZ are those within 500 feet of I-280 bounded by Howth Street, Ocean Avenue, and Geneva Avenue, located approximately 1,300 feet to the southeast of the project site.

²³⁹ ~~BAAQMD, San Francisco Department of Public Health, and San Francisco Planning Department, and Ramboll, *The San Francisco Community Risk Reduction Plan: Technical Support Documentation, Draft San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, December 2012~~February 2020.

- * **To reflect the updated health risk analysis background values, draft SEIR p. 3.D-20 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

The project site is not located within an area with risk factors that meet the updated APEZ criteria. Background cancer risk values on the project site range from 8 to 22 in one million, with background values ranging from ~~43~~ to ~~139~~549 in one million within 3,280 feet (1,000 meters) of the site. Background PM_{2.5} concentrations range from 8.3 to 8.6 µg/m³ on the project site, with background values varying between ~~8.4~~7.8 and ~~11.3~~18.2 µg/m³ within 3,280 feet (1,000 meters) of the site. The nearest offsite receptors within an APEZ are located approximately 1,100 feet to the southeast and are so designated due to the proximity of I-280. Receptors within 3,280 feet (1,000 meters) of the project boundary are located both within and outside of the APEZ and impacts are assessed accordingly as discussed below in the “Approach to Analysis” section.

- * **The last paragraph on draft SEIR p. 3.D-36 and first two lines on p. 3.D-37 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

As part of this project, a health risk assessment was conducted for the proposed project to estimate health risks from exposures to TACs. The assessment examined sensitive receptors within 3,280 feet (1,000 meters) of the project boundary, used the ~~citywide Community Risk Reduction Plan (CRRP) model draft 2020 San Francisco Citywide Health Risk Assessment database~~ to identify existing background risk, included updated locations and emission rates of existing stationary sources provided by the BAAQMD, and updated cancer risk values based on the latest (2015) guidance by OEHHA.

- * **The third full paragraph and footnote 282 on draft SEIR p. 3.D-37 is revised as follows to update the new draft Citywide Health Risk Assessment references (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):**

The threshold of significance used to evaluate health risks from new sources of TACs associated with the project is based on the potential for the proposed project to substantially affect the extent and severity of the APEZ at sensitive receptor locations. The health protective standards used for determining the APEZ and evidence supporting these standards are discussed in the Setting section above and were developed in consultation with BAAQMD staff as part of the preparation of a ~~Community Risk Reduction Plan draft 2020 San Francisco Citywide Health Risk Assessment~~.²⁸² The project site is not within an identified health vulnerable ZIP code; therefore, the APEZ criterion for this location is based on: (1) cumulative PM_{2.5} concentrations greater than 10 µg/m³,

and/or (2) excess cancer risk from the contribution of emissions from all modeled sources greater than 100 per one million population.

²⁸² San Francisco has prepared a ~~Community Risk Reduction Plan~~ Citywide Health Risk Assessment. Extensive modeling has been conducted and is documented in ~~The San Francisco Community Risk Reduction Plan: Technical Support Documentation~~ the draft San Francisco Citywide Health Risk Assessment: Technical Support Documentation. This modeling provides the technical basis for development of the ~~Community Risk Reduction Plan~~ Citywide Health Risk Assessment.

- * The text on draft SEIR p. 3.D-39 and footnote 289 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

TAC Concentrations

Consistent with the ~~Community Risk Reduction Plan Health Risk Assessment (CRRP-HRA)~~ draft 2020 San Francisco Citywide Health Risk Assessment, the air toxics analysis evaluated health risks and PM_{2.5} concentrations resulting from the proposed project upon the surrounding community. For the proposed project, this would include construction emissions over the course of buildout, operational traffic (which was assessed using the ~~CRRP-HRA~~ draft 2020 San Francisco Citywide Health Risk Assessment modeling), operational heavy-duty delivery truck travel and idling, and stationary sources (the emergency generators). The methods used to evaluate emissions for the proposed project and cumulative health risk assessment are based on the most recent air district CEQA Guidelines and the most recent Air Toxics Hot Spots Program Risk Assessment Guidelines.²⁸⁷

The cancer risk analysis in the health risk assessment for the project is based on DPM concentrations from on- and off-road construction equipment, as well as the operational DPM concentrations from the emergency generators and delivery trucks. Concentrations of TACs from the proposed project construction emissions were estimated using the U.S. EPA's preferred atmospheric dispersion modeling system (AERMOD), as were project-related operational mobile sources (vehicle traffic and delivery vehicles) and stationary sources (emergency generators and delivery trucks). The most-recent version of the American Meteorological Society/U.S. EPA regulatory air dispersion model (AERMOD version 9.6.5) was used to evaluate ambient air concentrations of DPM and PM_{2.5} at on- and offsite receptors.²⁸⁸

AERMOD requires a number of inputs including meteorological data. For this project's health risk assessment, BAAQMD's Mission Bay meteorological data for 2008 were used, which aligns with the San Francisco ~~CRRP-HRA Methodology~~ draft 2020 San Francisco Citywide Health Risk Assessment.²⁸⁹ For detail with regard to terrain and land use considerations, emission rates, source parameters, and risk characterization methods applied in the assessment, please refer to Appendix E, Air Quality Technical Memorandum.

Sensitive Receptors

In order to evaluate health impacts to onsite and offsite receptors, receptors were placed at locations co-located with the receptors used in the ~~CRRP-HRA-draft 2020 San Francisco Citywide Health Risk Assessment~~ and within 3,280 feet (1,000 meters) of the project site. Sensitive receptors were modeled at a height of 6 feet (1.8 meters), above terrain height, a default breathing height for ground-floor receptors, consistent with the ~~CRRP-HRA analysis draft 2020 San Francisco Citywide Health Risk Assessment~~.

²⁸⁹ ~~BAAQMD, San Francisco Department of Public Health, and San Francisco Planning Department, and Ramboll, The San Francisco Community Risk Reduction Plan: Technical Support Documentation, Draft San Francisco Citywide Health Risk Assessment: Technical Support Documentation, December 2012~~February 2020.

- * The scenario descriptions are revised as follows to clarify the scenarios with overlapping construction and operation on draft SEIR p. 3.D-40 is revised as follows (deleted text is shown in ~~strike through~~ and new text is shown in double underline):

Scenario 3. Construction Plus Operation: offsite receptors (residents, daycare, and school) evaluated starting when construction commences and exposed to all construction emissions and 27 years of operational emissions.

Scenario 4. Construction Plus Operation: onsite receptors (residents and daycare) present at the project site once Phase 1 is complete evaluated starting when construction for Phase 1 concludes and exposed to all Phase 2 construction emissions and 30 years of operational emissions.

- * The last paragraph on draft SEIR p. 3.D-45 is revised as follows (deleted text is shown in ~~strike through~~ and new text is shown in double underline):

With regard to construction schedule and phasing, the analysis assumed that Phase 0 (site preparation and grading) would require a full year, followed by Phase 1 construction for 30 months, followed by Phase 2 construction for 30 months, for a full construction duration of six years. ~~This is the longest feasible timeline as anticipated by the project sponsor.~~

In response to the air district's request, acknowledging that the air district's emissions reduction grant program is evolving, and because individual emission reduction projects needed to support the ozone precursor offsets required by Mitigation Measure M-AQ-2d (Offset Construction Emissions for the Compressed Schedule) have not yet been identified, Mitigation Measure M-AQ-2d is revised as follows (deleted text is shown in ~~strike through~~ and new text is shown in double underline):

Mitigation Measure M-AQ-2d: Offset Construction Emissions for the Compressed Schedule. Under the compressed three-year construction schedule for either the Developer's Proposed Option or the Additional Housing Option, the project sponsor shall implement this measure. Prior to issuance of the final certificate of occupancy for the final

building associated with Phase 1, the project sponsor, with the oversight of the Environmental Review Officer (ERO), shall either:

1. *Directly fund or implement a specific offset project within San Francisco if available* to achieve the equivalent to a one-time reduction of 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option. To qualify under this mitigation measure, the specific emissions offset project must result in emission reductions within the San Francisco Bay Area Air Basin that would not otherwise be achieved through compliance with existing regulatory requirements. A preferred offset project would be one implemented locally within the City and County of San Francisco. Prior to implementing the offset project, it must be approved by the ERO. The project sponsor shall notify the ERO within six months of completion of the offset project for verification; or
2. *Pay mitigation offset fees to the Bay Area Air Quality Management District Bay Area Clean Air Foundation or other governmental entity or third party.* The mitigation offset fee, ~~currently estimated at approximately \$30,000 per weighted ton, plus an administrative fee of no more than 5 percent of the total offset,~~ shall fund one or more emissions reduction projects within the San Francisco Bay Area Air Basin. The fee will be determined by the ~~planning department~~ ERO, the project sponsor, and the ~~air district governmental entity or third party responsible for administering the funds,~~ and be based on the type of projects available at the time of the payment. This fee is intended to fund emissions reduction projects to achieve reductions of 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option, which is the amount required to reduce emissions below significance levels after implementation of other identified mitigation measures as currently calculated.

The agreement that specifies fees and timing of payment shall be signed by the project sponsor, the ~~air district governmental entity or third party responsible for administering the funds,~~ and the ERO prior to issuance of the first site permit. This offset payment shall total the predicted 2.0 tons per year of ozone precursors for the Developer's Proposed Option or 3.2 tons per year of ozone precursors for the Additional Housing Option above the 10-ton-per-year threshold after implementation of Mitigation Measures M-AQ-2a, M-AQ-2b, and M-AQ-2c.

The total emission offset amount ~~is presented above was~~ calculated by summing the maximum daily construction emissions of ROG and NO_x (pounds/day), multiplying by 260 work days per year, and converting to tons. The amount represents the total estimated construction-related ROG and NO_x emissions offsets required. No reductions are needed for operations or overlapping construction and operations.

The second paragraph on draft SEIR p. 3.D-54 is revised as follows to reflect changes in Mitigation Measure M-AQ-2d:

Mitigation Measure M-AQ-2d would offset emissions of ROG and NO_x that would exceed the respective thresholds of significance for these pollutants. Thus, these offsets, if implemented, would reduce impacts to less-than-significant levels. The measure allows the project sponsor to directly fund or implement an offset project; however, no such project has yet been identified. Additionally, implementation of the emissions reduction

project could be conducted by the ~~air district governmental entity or third party responsible for administering the funds~~ and is outside the jurisdiction and control of the City and not fully within the control of the project sponsor. Therefore, the residual impact of project emissions during construction is conservatively considered *significant and unavoidable with mitigation*, due to some limited uncertainty in its implementation. This finding does assume that the project sponsor would implement Mitigation Measures M-AQ-2a, M-AQ-2b, and M-AQ-2c, in addition to Mitigation Measure M-AQ-2d. Although the specific offset projects are not known, it is anticipated that implementation of this mitigation measure would not result in any adverse environmental effects.

The last paragraph on draft SEIR p. 3.D-54 is revised as follows to reflect changes in Mitigation Measure M-AQ-2d:

The Developer's Proposed Option would be *less than significant* under the assumed six-year construction schedule. The Additional Housing Option under the assumed six-year schedule would be reduced to *less than significant with mitigation* through the implementation of Mitigation Measure M-AQ-2a and M-AQ-2b. Given the potential that the project could be developed under an accelerated construction schedule of three years' duration, the potential exists that construction emissions of NO_x would exceed the daily and annual significance thresholds even with mitigation, which would be a *significant impact* (see Table 3.D-8b). Therefore, in the case of the Developer's Proposed Option or the Additional Housing Option under the compressed three-year construction schedule, the project sponsor would also be required to implement Mitigation Measure M-AQ-2c, which requires that all heavy-duty trucks greater than 19,500 pounds must have model year 2014 or newer engines, and Mitigation Measure M-AQ-2d, which requires the project sponsor to implement emission offsets. However, because implementation of the emissions offset project would be conducted by the ~~air district governmental entity or third party responsible for administering the funds~~ and would be outside the jurisdiction and control of the City and not fully within the control of the project sponsor, because no specific emission reduction project has been identified, and because the project may be constructed over a much shorter timeframe resulting in higher NO_x emissions than presented above, the impact with respect to criteria air pollutants is conservatively considered *significant and unavoidable with mitigation*. These conclusions are summarized in Table 3.D-9, Summary of Construction Criteria Pollutant Impacts (Impact AQ-2).

- * **To reflect the updated health risk analysis, the text on draft SEIR pp. 3.D-66 to 3.D-68 is revised as follows (deleted text is shown in ~~striketrough~~ and new text is shown in double underline):**

The maximum estimated excess lifetime cancer risk for each exposure scenario (see "Health Risk Assessment Methods," p. 3.D-38) for all sensitive receptor locations³⁰⁶ for receptors not in the APEZ under existing conditions is presented in Table 3.D-13a, Lifetime Cancer Risk for Receptors Not Located in the APEZ but Would Be Located in the APEZ with the Proposed Project – Developer's Proposed Option, and Table 3.D-13b, Lifetime Cancer

Risk for Receptors Not Located in the APEZ but Would Be Located in the APEZ with the Proposed Project – Additional Housing Option.

TABLE 3.D-13A
LIFETIME CANCER RISK FOR RECEPTORS NOT LOCATED IN THE APEZ BUT WOULD BE LOCATED IN THE APEZ WITH THE PROPOSED PROJECT – DEVELOPER'S PROPOSED OPTION

Scenario / Receptor Type	Lifetime Excess Cancer Risk (in One Million) ^{a,b}				
	Bkgd.	Unmitigated		Mitigated ^c	
		Project	Total	Project	Total
Significance Threshold	—	10.0 ^d	100.0	10.0 ^d	100.0
Construction					
Resident (offsite) ^{fe}	78.145.7	36.167.4	114.282.8	4.77.7	82.823.4
Resident (onsite) ^f	64.823.7	108.9	173.3432.6	9.5	74.233.2
Daycare (offsite) ^f	62.024.9	87.5	149.6409.4	11.6	73.633.5
Daycare (onsite) ^f	59.324.8	238.4	297.6260.2	20.9	80.142.7
School (offsite) ^e	28.047.5	12.9	40.830.3	1.5	29.549.0
Construction + Operations					
Resident (offsite) ^{fe}	52.945.7	61.867.5	114.883.3	7.98.4	60.823.9
Resident (onsite) ^f	64.823.7	110.3410.9	175.0434.6	11.4	75.935.4
Daycare (offsite) ^f	62.024.9	87.7	149.7409.6	11.8	73.833.6
Daycare (onsite) ^f	59.324.8	239.5	298.8264.3	22.0	81.343.8
School (offsite) ^e	28.047.5	13.1	41.130.6	1.7	29.749.2
Operations^e					
Resident (offsite) ^f	28.964.7	2.65.5	31.567.2	2.25.4	31.267.2
Resident (onsite) ^{ef}	45.348.2	14.8	60.133.0	14.7	60.032.9
Daycare (offsite) ^{ef}	62.044.3	0.74.2	62.742.5	0.70.7	62.722.6
Daycare (onsite) ^{fe}	50.849.4	7.0	57.826.4	6.9	57.726.3
School (offsite) ^{ef}	28.935.4	0.6	29.535.7	0.5	29.535.6

SOURCE: ESA, 2019, 2020; San Francisco Planning Department, *Citywide Health Risk Assessment*, 2020. See Appendix E, Air Quality Technical Memorandum and Appendix I, Updated Health Risk Assessment Memorandum.

NOTES:

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; µg/m³ = micrograms per cubic meter; **APEZ = Air Pollutant Exposure Zone**; Bkgd. = background value

^a **Bold values** = threshold exceedance

^b All receptors within 500 feet of I-280 also included in the APEZ, regardless of their cancer risk value, which may be below the APEZ criteria of 100 per million. This is consistent with CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, which suggests air pollutant levels decrease substantially at approximately 500 feet from a freeway.

^c Mitigation measures include: (1) M-AQ-2a: all off-road construction equipment was modeled with Tier 4 Final engine emission standards; and (2) M-AQ-4a: all emergency generators were modeled with Tier 4 engine emission standards.

^d The project-level threshold only applies when the background risk plus the project risk exceeds 100; otherwise, the threshold does not apply.

^e Note that for these receptors, the unmitigated cancer risk from the proposed project combined with the background cancer risk would be less than 100; therefore, the onsite-MEISR would not be placed in a new APEZ, and the significance threshold for the project contribution of 10.0 per 1 million would not apply.

^f Note that for these receptors, the mitigated cancer risk from the proposed project combined with the background cancer risk would be less than 100; therefore, the onsite-MEISR would not be placed in a new APEZ, and the significance threshold for the project contribution of 10.0 per 1 million would not apply.

TABLE 3.D-13B
LIFETIME CANCER RISK FOR RECEPTORS NOT LOCATED IN THE APEZ BUT WOULD BE LOCATED IN
THE APEZ WITH THE PROPOSED PROJECT – ADDITIONAL HOUSING OPTION

Scenario / Receptor Type	Lifetime Excess Cancer Risk (in One Million) ^{a,b}				
	Bkgd.	Unmitigated		Mitigated ^c	
		Project	Total	Project	Total
Significance Threshold	—	10.0 ^d	100.0	10.0	100.0 ^d
Construction					
Resident (offsite) ^{fe}	49.845.7	76.380.5	49.896.3	8.28.5	57.924.3
Resident (onsite) ^f	64.823.7	122.2122.6	186.9146.3	10.7	75.434.4
Daycare (offsite) ^f	62.021.9	101.7	163.7123.6	12.6	74.634.5
Daycare (onsite) ^f	59.321.8	267.7	326.9289.5	23.4	82.745.3
School (offsite) ^e	28.017.5	14.4	42.431.9	1.6	29.619.1
Construction + Operations					
Resident (offsite) ^{fe}	49.845.7	77.581.2	49.897.0	9.49.2	59.125.0
Resident (onsite) ^f	63.923.7	125.6	189.5149.3	13.4	77.337.1
Daycare (offsite) ^f	62.021.9	102.0	164.0123.8	12.8	74.834.7
Daycare (onsite) ^f	59.321.8	269.6	328.8291.4	25.3	84.547.1
School (offsite) ^e	28.017.5	14.8	42.832.3	1.9	29.919.4
Operations^e					
Resident (offsite) ^f	28.961.7	4.27.8	29.069.5	3.267.6	32.269.4
Resident (onsite) ^{ef}	45.318.2	25.1	70.443.2	24.9	70.243.1
Daycare (offsite) ^{ef}	62.041.3	1.21.8	63.243.0	1.1	63.123.0
Daycare (onsite) ^{ef}	50.819.4	11.8	62.631.2	11.7	62.531.1
School (offsite) ^{ef}	29.035.1	1.0	29.936.1	0.7	29.725.4

SOURCE: ESA, 2019, 2020; San Francisco Planning Department, *Citywide Health Risk Assessment, 2020*. See Appendix E, Air Quality Technical Memorandum and Appendix I, Updated Health Risk Assessment Memorandum.

NOTES:

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; µg/m³ = micrograms per cubic meter; APEZ = Air Pollutant Exposure Zone; Bkgd. = background value

^a **Bold values** = threshold exceedance

^b All receptors within 500 feet of I-280 also included in the APEZ, regardless of their cancer risk value, which may be below the APEZ criteria of 100 per million. This is consistent with CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, which suggests air pollutant levels decrease substantially at approximately 500 feet from a freeway.

^c Mitigation measures include: (1) M-AQ-2a: all off-road construction equipment was modeled with Tier 4 Final engine emission standards; and (2) M-AQ-4a: all emergency generators were modeled with Tier 4 engine emission standards.

^d The project-level threshold only applies when the background risk plus the project risk exceeds 100; otherwise, the threshold does not apply.

^e Note that for these receptors, the unmitigated cancer risk from the proposed project combined with the background cancer risk would be less than 100; therefore, the onsite-MEISR would not be placed in a new APEZ, and the significance threshold for the project contribution of 10.0 per 1 million would not apply.

^f Note that for these receptors, the mitigated cancer risk from the proposed project combined with the background cancer risk would be less than 100; therefore, the onsite-MEISR would not be placed in a new APEZ, and the significance threshold for the project contribution of 10.0 per 1 million would not apply.

- * To reflect the updated health risk analysis, the third paragraph on draft SEIR p. 3.D-69 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

For the offsite MEISR (daycare receptor), the mitigated lifetime excess cancer risk under proposed project conditions for the Developer's Proposed Option of 11.8 combined with the background cancer risk of ~~21.962.0~~ would equal ~~33.573.8~~, which is less than 100; the mitigated lifetime excess cancer risk under proposed project conditions for the Additional Housing Option of 12.8 combined with the background cancer risk of ~~21.963.0~~ would equal ~~34.774.8~~, which is also less than 100; therefore, under mitigated conditions, the offsite MEISR would not be placed in a new APEZ under either project option, and the significance threshold for the project contribution of 10.0 per 1 million would not apply. Consequently, implementation of Mitigation Measure M-AQ-2a alone would be sufficient to reduce this impact to a less-than-significant level, and the excess cancer risk impact on offsite receptors not located in the APEZ would be less than significant with mitigation.

- * To reflect the updated health risk analysis, the third paragraph on draft SEIR p. 3.D-70 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

Table 3.D-13a, p. 3.D-67, and Table 3.D-12b, p. 3.D-68, also show the cancer risk under the mitigated condition, which includes emission reductions quantified for Mitigation Measures M-AQ-2a, p. 3.D-48, and M-AQ-4a, p. 3.D-71. For the onsite MEISR (daycare receptor), the mitigated lifetime excess cancer risk under proposed project conditions for the Developer's Proposed Option of 22.0 combined with the background cancer risk of ~~21.859.3~~ would equal ~~43.881.3~~, which is less than 100; the mitigated lifetime excess cancer risk under proposed project conditions for the Additional Housing Option of 25.3 combined with the background cancer risk of ~~21.859.3~~ would equal ~~47.184.5~~, which is also less than 100; therefore, under mitigated conditions, the onsite daycare MEISR would not be placed in a new APEZ under either project option, and the significance threshold for the project contribution of 10.0 per 1 million would not apply. As shown in Table 3.D-13a and Table 3.D-12b, implementation of these mitigation measures would be sufficient to reduce this impact to a less-than-significant level, and the excess cancer risk impact on onsite receptors not located in the APEZ would be less than significant with mitigation.

- * To reflect the updated health risk analysis, draft SEIR pp. 3.D-73 to 3.D-75 is revised as follows (deleted text is shown in ~~strikethrough~~ and new text is shown in double underline):

TABLE 3.D-14A
LIFETIME CANCER RISK FOR RECEPTORS LOCATED IN THE APEZ – DEVELOPER’S PROPOSED OPTION

Scenario / Receptor Type ^d	Lifetime Excess Cancer Risk (in one Million) ^{a,b}				
	Bkgd.	Unmitigated		Mitigated ^c	
		Project	Total	Project	Total
Significance Threshold	—	7.0	—	7.0	—
Construction					
Resident (offsite)	<u>80.974.0</u>	43.44.2	<u>124.378.2</u>	<u>6.09.5</u>	<u>86.974.5</u>
Daycare (offsite)	<u>104.8</u>	37.3	<u>142.0</u>	<u>5.1</u>	<u>109.8</u>
School (offsite)	<u>145.536.6</u>	1.1	<u>146.737.7</u>	0.1	<u>145.736.7</u>
Construction + Operations					
Resident (offsite)	<u>80.974.0</u>	44.14.4	<u>125.078.4</u>	<u>6.71.4</u>	<u>87.658.0</u>
Daycare (offsite)	<u>104.8</u>	37.4	<u>142.1</u>	<u>5.2</u>	<u>109.9</u>
School (offsite)	<u>145.536.6</u>	1.3	<u>146.837.8</u>	0.3	<u>145.836.8</u>
Operations					
Resident (offsite)	<u>187.056.6</u>	<u>5.02.4</u>	<u>192.059.0</u>	<u>4.92.4</u>	<u>191.959.0</u>
Daycare (offsite)	<u>124.2</u>	<u>1.2</u>	<u>125.4</u>	<u>1.2</u>	<u>125.4</u>
School (offsite)	<u>145.536.6</u>	0.2	<u>145.836.8</u>	0.2	<u>145.736.8</u>

SOURCE: ESA, 2019, 2020; San Francisco Planning Department, *Citywide Health Risk Assessment, 2020*. See Appendix E, Air Quality Technical Memorandum and Appendix I, Updated Health Risk Assessment Memorandum.

NOTES:

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; µg/m³ = micrograms per cubic meter; APEZ = Air Pollutant Exposure Zone; Bkgd. = background value; n/a = Not applicable; i.e., for this receptor type, there are no receptors that are currently located in the APEZ.

^a **Bold values** = threshold exceedance

^b All receptors within 500 feet of I-280 also included in the APEZ, regardless of their cancer risk value, which may be below the APEZ criteria of 100 per million. This is consistent with CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective*, which suggests air pollutant levels decrease substantially at approximately 500 feet from a freeway.

^c Mitigation measures include: (1) M-AQ-2a: all off-road construction equipment was modeled with Tier 4 Final engine emission standards; and (2) M-AQ-4a: all emergency generators were modeled with Tier 4 engine emission standards.

^d Only receptor types that are already in the APEZ are shown in the table; there are no onsite residents, offsite daycare, and/or onsite daycare receptors in the modeling domain that are already located in the APEZ.

Offsite receptors considered in the health risk assessment include existing offsite receptors currently located in the APEZ due to their proximity to I-280 (within 500 feet) and Ocean Avenue. These tables do not show receptors types that are not already in the APEZ, including onsite residents, offsite daycare, and onsite daycare; risks to these receptors are discussed above. The majority of project-generated excess cancer risk at the MEISR would be attributable to construction emissions. For these receptor locations, the project would contribute cancer risks of up to 4.437.4 per million and 5.443.1 per million at offsite ~~resident~~daycare locations for the Developer’s Proposed Option and the

Additional Housing Option, respectively. The project's excess cancer risk contribution would ~~not~~ exceed the significance threshold of 7.0 in a million. Therefore, without mitigation, the impact with regard to increased cancer risk would be ~~less than~~ significant for offsite receptors located in the APEZ.

TABLE 3.D-14B
LIFETIME CANCER RISK FOR RECEPTORS LOCATED IN THE APEZ – ADDITIONAL HOUSING OPTION

Scenario / Receptor Type ^d	Lifetime Excess Cancer Risk (in one Million) ^{a,b}				
	Bkgd.	Unmitigated		Mitigated ^c	
		Project	Total	Project	Total
Significance Threshold	—	7.0	—	7.0	<u>7</u>
Construction					
Resident (offsite)	<u>80.974.0</u>	48.54.9	<u>129.478.9</u>	<u>6.30.6</u>	<u>87.374.6</u>
Daycare (offsite)	<u>104.8</u>	43.0	<u>147.7</u>	<u>5.5</u>	<u>110.2</u>
School (offsite)	<u>145.536.6</u>	1.3	<u>146.837.8</u>	0.1	<u>145.736.7</u>
Construction + Operations					
Resident (offsite) ^e	<u>80.9/83.974.0</u>	49.65.4	<u>130.579.4</u>	7.41.8	<u>91.258.5</u>
Daycare (offsite)	<u>104.8</u>	43.1	<u>147.8</u>	<u>5.6</u>	<u>110.4</u>
School (offsite)	<u>145.536.6</u>	1.5	<u>147.038.0</u>	0.3	<u>145.936.9</u>
Operations					
Resident (offsite)	<u>187.056.6</u>	<u>7.03.4</u>	<u>194.060.0</u>	<u>6.93.4</u>	<u>193.960.0</u>
Daycare (offsite)	<u>124.2</u>	<u>1.8</u>	<u>126.0</u>	<u>1.7</u>	<u>125.9</u>
School (offsite)	<u>145.536.6</u>	0.3	<u>145.936.9</u>	0.3	<u>145.836.9</u>

SOURCE: ESA, 2019, 2020; San Francisco Planning Department, *Citywide Health Risk Assessment*, 2020. See Appendix E, Air Quality Technical Memorandum and Appendix I, Updated Health Risk Assessment Memorandum.

NOTES:

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; µg/m³ = micrograms per cubic meter; APEZ = Air Pollutant Exposure Zone; Bkgd. = background value; n/a = Not applicable; i.e., for this receptor type, there are no receptors that are currently located in the APEZ.

^a **Bold values** = threshold exceedance

^b All receptors within 500 feet of I-280 also included in the APEZ, regardless of their cancer risk value, which may be below the APEZ criteria of 100 per million. This is consistent with CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, which suggests air pollutant levels decrease substantially at approximately 500 feet from a freeway.

^c Mitigation measures include: (1) M-AQ-2a: all off-road construction equipment was modeled with Tier 4 Final engine emission standards; and (2) M-AQ-4a: all emergency generators were modeled with Tier 4 engine emission standards.

^d Only receptor types that are already in the APEZ are shown in the table; there are no onsite residents, offsite daycare, and/or onsite daycare receptors in the modeling domain that are already located in the APEZ.

^e Under mitigated conditions, the offsite residential MEISR is a different receptor location than under unmitigated conditions. This is because the reduction in construction emissions from mitigation results in operational emissions being a relatively larger share of total emissions, and thus the mitigated offsite residential MEISR occurs during the project operations phase.

Although ~~Because~~ mitigation measures are ~~not~~ required to reduce the impact to offsite sensitive receptors located in the APEZ, Table 3.D-14a and Table 3.D-14b also show the cancer risk under the mitigated condition, which includes emission reductions quantified for Mitigation Measures M-AQ-2a, p. 3.D-48, and M-AQ-4a, p. 3.D-71, which are required to reduce impacts to receptors not in the APEZ under existing conditions and to reduce construction-generated emissions of criteria pollutants.

Construction emissions contribute over 90 percent of the unmitigated project's health risk at the MEISR (see Appendix E, Air Quality Technical Memorandum, for additional detail). Implementation of Mitigation Measure M-AQ-2a would reduce cancer risk at the offsite receptor locations currently located in the APEZ further below the significance thresholds. As shown in Table 3.D-14a and Table 3.D-14b, under mitigated conditions, the project would contribute cancer risks at the unmitigated MEISR of up to ~~1.45.2~~ per million and ~~1.95.6~~ per million at offsite ~~resident-daycare~~ locations for the Developer's Proposed Option and the Additional Housing Option, respectively. It is worth noting that under mitigated conditions, the offsite MEISR is a different receptor location than under unmitigated conditions; in other words, the greatest cancer risk for mitigated emissions occurs at a different location than greatest cancer risk under unmitigated conditions. This is because the reduction in construction emissions from mitigation results in operational emissions being a relatively larger share of total emissions, and thus the mitigated MEISR occurs during the project operations phase. The project would contribute cancer risks at the mitigated MEISR of up to ~~2.46.7~~ per million and ~~3.47.4~~ per million at offsite resident locations for the Developer's Proposed Option and the Additional Housing Option, respectively.

Although the cancer risk for the Additional Housing Option of 7.4 per million exceeds the significance threshold for the project's contribution of 7.0 per million, the project's contribution does not increase the severity of the cancer risk for this receptor, nor does the project expand the geography of the APEZ. The background cancer risk value at the offsite resident MEISR is 83.9, as presented in Table 3.D-14b. This value does not exceed the APEZ criterion of 100 per million. Therefore, this receptor does not technically meet the criteria for the APEZ. The reason this receptor is located in the APEZ is because the APEZ is defined at the parcel level, and there are one or more receptor points within the parcel where this receptor is located that exceed the APEZ criterion of 100 per million. In other words, if one receptor point within a given parcel meets the APEZ criteria, all receptor points within this parcel are also categorized as within the APEZ. The offsite resident MEISR receptor is located at the mixed-use apartment complex at 1150 Ocean Avenue, directly to the south of the project boundary. The entire two block area to the north of Ocean Avenue from Plymouth Avenue to Lee Avenue is categorized as a single parcel by the City. Because a few receptors located in this parcel do in fact meet the APEZ criteria (notably those receptors located directly adjacent to Ocean Avenue), all receptor points within this parcel are classified as within the APEZ. However, because neither the background cancer risk value of 83.9 nor the combined total cancer risk value of 91.2 (background of 83.9 plus the project's contribution of 7.4) at the offsite resident MEISR exceeds the APEZ criterion of 100 per million, the project would not increase the severity of the cancer risk for this receptor or expand the geography of the APEZ. In addition, the cancer risk values presented above are the result of many conservative assumptions and do not consider the effect of the building shell on outdoor TAC concentrations to the resulting indoor concentrations and the associated sensitive receptor exposure. Therefore, implementation of Mitigation Measure M-AQ-2a alone would be sufficient to reduce this impact to a less-than-significant level.

All of the other cancer risk values for both the Developer's Proposed Option and the Additional Housing Option are less than the significance threshold for the project's contribution of 7.0 per million. Consequently, implementation of Mitigation Measure M-AQ-2a alone would be sufficient to reduce this impact to a less-than-significant level, and the excess cancer risk impact on offsite receptors located in the APEZ would be less than significant with mitigation.

As discussed above, the project may be constructed over a total of three years instead of six years. If this were to occur, the excess lifetime cancer risk at offsite sensitive receptor locations would increase. While the total exposure to TACs remains the same in this compressed construction scenario, more exposure would occur when sensitive receptors are younger and, thus, more susceptible to TAC exposure. It is estimated that cancer risks could increase at least 30 percent for the offsite MEISR currently located in the APEZ under the three-year construction schedule, leading to mitigated cancer risks of ~~79~~ to ~~810~~ per million for the Developer's Proposed Option and ~~4011~~ to ~~4412~~ per million for the Additional Housing Option. Although the mitigated cancer risk for both the Developer's Proposed Option and the Additional Housing Option under the anticipated construction schedule would be less than ~~the threshold of 7.0 in a million~~ significant as discussed above, because the construction schedule is subject to change, this impact would be conservatively considered significant. Therefore, the excess cancer risk impact on offsite receptors would be significant and unavoidable with mitigation.

Onsite Receptors

There are currently no onsite receptors located in the APEZ under existing conditions. Therefore, no analysis was conducted.

PM_{2.5} Concentrations from Construction and Operation Emissions for Receptors Not in APEZ under Existing Conditions

Offsite Receptors

The maximum estimated annual average PM_{2.5} concentrations from all project sources at offsite receptor locations not in the APEZ under existing conditions are presented in Appendix E, Air Quality Technical Memorandum SEIR Appendix I, Updated Health Risk Assessment Memorandum, Tables ~~345~~ and ~~336~~. The project's emissions would combine with existing background concentrations and would exceed the APEZ criteria of either an annual average PM_{2.5} concentration of 10.0 µg/m³, or a total lifetime excess cancer risk of 100.0 per million,⁸ with the project contributing PM_{2.5} concentrations of up to 0.38 µg/m³ and 0.43 µg/m³ at offsite daycare locations for the Developer's Proposed Option and the Additional Housing Option, respectively. The project's annual average PM_{2.5} concentrations would exceed the significance threshold of 0.3 µg/m³. Therefore, without

⁸ The APEZ is defined for receptor locations that meet the criteria for *either* lifetime excess cancer risk *or* annual average PM_{2.5} concentrations. For example, if the lifetime excess cancer risk is 105 per million and the annual average PM_{2.5} concentration is 9.5 µg/m³, and the receptor would be in the APEZ even though the annual average PM_{2.5} concentration does not exceed the APEZ criteria of 10.0 µg/m³.

mitigation, the impact with regard to PM_{2.5} concentrations would be significant for offsite receptors not located in the APEZ.

Tables 315 and 336 in Appendix E, Air Quality Technical Memorandum new SEIR Appendix I, Updated Health Risk Assessment Memorandum, also show the annual average PM_{2.5} concentrations under the mitigated condition, which includes emission reductions quantified for Mitigation Measures M-AQ-2a, p. 3.D-48, and M-AQ-4a, p. 3.D-71. Mitigation Measure M-AQ-2a would reduce off-road PM_{2.5} exhaust emissions by 80 to 85 percent, and Mitigation Measure M-AQ-4a would reduce generator PM_{2.5} exhaust emissions by 93 percent. Construction emissions contribute over 90 percent of the unmitigated project's PM_{2.5} concentrations (see SEIR Appendix E1 for additional detail).

For the offsite MEISR (daycare), the maximum mitigated annual average PM_{2.5} concentrations under the Developer's Proposed Option of 0.04 µg/m³ combined with background annual average PM_{2.5} concentrations of 8.498.92 would equal 8.538.95, which is less than 10.0; and the maximum mitigated annual average PM_{2.5} concentrations under proposed project conditions for the Additional Housing Option of 0.04 µg/m³ combined with background annual average PM_{2.5} concentrations of 8.498.92 would equal 8.538.95, which is less than 10.0. Therefore, under mitigated conditions, the offsite MEISR would not be placed in a new APEZ under either project option, and the significance threshold for the project contribution of an annual average PM_{2.5} concentration of 0.3 µg/m³ would not apply. Consequently, implementation of Mitigation Measure M-AQ-2a alone would be sufficient to reduce this impact to a less-than-significant level, and the annual average PM_{2.5} concentration impact on offsite receptors not located in the APEZ would be less than significant with mitigation.

As noted above, the project may be constructed over a total of three years instead of six years. If this were to occur, the annual average PM_{2.5} concentrations at offsite sensitive receptor locations would increase. While the total PM_{2.5} emissions remain the same in this compressed construction scenario, annual average PM_{2.5} concentrations would increase because the construction duration would be shorter. It is estimated that annual average PM_{2.5} concentrations could increase at least 50 percent for the offsite MEISR currently located in the APEZ under the three-year construction schedule, leading to mitigated annual average PM_{2.5} concentrations of approximately 0.05 µg/m³ for the Developer's Proposed Option and approximately 0.06 µg/m³ for the Additional Housing Option. Therefore, the annual average PM_{2.5} concentration impact on offsite receptors not located in the APEZ would be less than significant with mitigation.

Onsite Receptors

The maximum estimated annual average PM_{2.5} concentrations from all project sources at onsite receptor locations are also presented in Tables 315 and 336 in Appendix E, Air Quality Technical Memorandum SEIR Appendix I, Updated Health Risk Assessment Memorandum. The project's emissions would combine with existing background concentrations and would exceed the APEZ criteria of an annual average PM_{2.5} concentration of 10 µg/m³, or a total lifetime excess cancer risk of 100 per million,¹² with the project

contributing PM_{2.5} concentrations up to ~~1.33~~1.32 µg/m³ for onsite residential receptors and 1.33 µg/m³ for onsite daycare receptors for the Developer's Proposed Option and 1.49 µg/m³ for onsite residential receptors and 1.50 µg/m³ for onsite daycare receptors for the Additional Housing Option. The project's annual average PM_{2.5} concentrations would exceed the significance threshold of 0.3 µg/m³. Therefore, without mitigation, the impact with regard to PM_{2.5} concentrations would be significant for onsite receptors not located in the APEZ.

As noted above, this analysis conservatively assumes that the daycare would be fully operational and occupied as part of Phase 1 and exposed to all Phase 2 construction TAC emissions. However, the daycare would be part of Block B in Phase 2 and will likely not be operational and occupied until the proposed projects is fully built-out in 2027 with the completion of Phase 2. This was assumed to provide a worst-case analysis of health risks to the onsite daycare receptor in the event that the daycare would be occupied in Phase 1 and exposed to all of Phase 2 construction TAC emissions. Likely, the daycare receptors would not be exposed to any construction emissions at the project site.

Tables ~~315~~ and ~~336~~ in ~~Appendix E, Air Quality Technical Memorandum~~ SEIR Appendix L, Updated Health Risk Memorandum, also shows the annual average PM_{2.5} concentrations under the mitigated condition, which includes emission reductions quantified for Mitigation Measures M-AQ-2a, p. 3.D-48, and M-AQ-4a, p. 3.D-71. For the onsite resident MEISRs, the maximum modeled mitigated annual average PM_{2.5} concentrations under proposed project conditions for the Developer's Proposed Option of 0.12 µg/m³ combined with background annual average PM_{2.5} concentrations of ~~8.488~~8.90 would equal ~~8.609~~9.02, which is less than 10.0; and the maximum mitigated annual average PM_{2.5} concentrations under proposed project conditions for the Additional Housing Option of ~~0.140~~0.13 µg/m³ combined with background annual average PM_{2.5} concentrations of ~~8.488~~8.90 would equal ~~8.629~~9.04, which is less than 10.0. Therefore, under mitigated conditions, the onsite MEISR would not be placed in a new APEZ under either project option, and the significance threshold for the project contribution of an annual average PM_{2.5} concentration of 0.3 µg/m³ would not apply. Consequently, implementation of these mitigation measures would be sufficient to reduce this impact to a less-than-significant level, and the annual average PM_{2.5} concentration impact on onsite receptors not located in the APEZ would be less than significant with mitigation.

It should be noted that if construction durations and phases are spread out over a longer period of time, this could result in increased PM_{2.5} concentrations to onsite receptors compared to what has been modeled. Under an extended construction schedule, onsite receptors could be exposed to construction for longer periods of time, which could result in a significant and unavoidable impact. However, it should also be noted that by the time the project buildings are constructed, it is likely that MERV 13 filtration would be required by the Building Code.⁹ This would presumably result in less than significant health risk impacts to new onsite sensitive receptors.

⁹ Currently being confirmed.

PM_{2.5} Concentrations from Construction and Operation Emissions for Receptors in APEZ under Existing Conditions

Offsite Receptors

The maximum estimated annual average PM_{2.5} concentrations from all project sources at offsite receptor locations in the APEZ under existing conditions are presented in Tables 357 and 378 in Appendix E, Air Quality Technical Memorandum SEIR Appendix I, Updated Health Risk Assessment Memorandum. For these receptor locations, the project would contribute PM_{2.5} concentrations of 0.020.64 µg/m³ and 0.030.72 µg/m³ at offsite resident locations for the Developer's Proposed Option and the Additional Housing Option, respectively. These values would not exceed the significance threshold of 0.2 µg/m³. Therefore, without mitigation, the impact with regard to PM_{2.5} concentrations would be less than significant for offsite receptors located in the APEZ.

~~However, Tables 357 and 378 in SEIR Appendix EI also show the annual average PM_{2.5} concentrations under the mitigated condition, which includes emission reductions quantified for Mitigation Measures M-AQ-2a, p. 3.D-48, and M-AQ-4a, p. 3.D-71. These mitigation measures are required to reduce the excess cancer risk impact. The annual average PM_{2.5} concentrations from the proposed project would be reduced as a result of these mitigation measures, as shown in Table 3.D-14a, p. 3.D-73, and Table 3.D-14b, p. 3.D-74. For these receptor locations, the project would contribute PM_{2.5} concentrations of 0.06 µg/m³ and 0.07 µg/m³ at offsite resident locations for the Developer's Proposed Option and the Additional Housing Option, respectively. These values would not exceed the significance threshold of 0.2 µg/m³. Consequently, implementation of Mitigation Measure M-AQ-2a alone would be sufficient to reduce this impact to a less-than-significant level, and Therefore, the PM_{2.5} concentration impact on offsite receptors located in the APEZ would be less than significant.~~

As noted above, the project may be constructed over a total of three years instead of six years. If this were to occur, the annual average PM_{2.5} concentrations at offsite sensitive receptor locations would increase, contributing further to the impact. While the total PM_{2.5} emissions remain the same in this compressed construction scenario, annual average PM_{2.5} concentrations would increase because the construction duration would be shorter. It is estimated that annual average PM_{2.5} concentrations could increase at least 50 percent for the offsite MEISR currently located in the APEZ under the three-year construction schedule, leading to mitigated annual average PM_{2.5} concentrations of approximately 0.050.09 µg/m³ for the Developer's Proposed Option and approximately 0.060.10 µg/m³ for the Additional Housing Option. Therefore, the annual average PM_{2.5} concentration impact on offsite receptors located in the APEZ would be less than significant with mitigation.

5.G Revisions to Chapter 5, Variants

- * The text in the second paragraph on SEIR p. 5-6 is revised as follows to update the mitigation measure title:

Thus, the operational-related mitigation measure identified for the Developer's Proposed Option would be applicable to Variant 1 (Mitigation Measure M-C-TR-4, ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~ [under Impact C-TR-4], p. 3.B-96).

The first paragraph on SEIR p. 5-9 for Variant 2: South Street Alignment and Aboveground Public Parking at North End of Site is revised as follows:

Variant 2 would have the same mix of land uses, square footages, and construction and operational characteristics as the Developer's Proposed Option, except the 750-space multilevel public parking garage would be constructed aboveground on Block G towards the north end of the site and would be wrapped by housing, or in dedicated public parking areas within several of the residential garages. South Street would be shifted south and occupy SFPUC's 80-foot-wide strip of land located along the southern edge of the site and south of Blocks A and B. As a result of this change in configuration, Blocks A, C, and D would have slightly different footprints. The maximum height (seven stories) would not change between the Developer's Proposed Option and Variant 2.

5.H Revisions to Chapter 6, Alternatives

- * The text in the last bullet on SEIR p. 6-3 is revised as follows to reflect changes to the mitigation measure:

Mitigation would require the project sponsor to ~~monitor transit travel times and~~ implement measures to meet the transit travel time performance standard; however, given the uncertainty regarding the effectiveness of TDM measures and if SFMTA would approve other measures under their jurisdiction, even with implementation of Mitigation Measure M-C-TR-4, this impact is conservatively considered to remain significant and unavoidable with mitigation. (Impact C-TR-4)

- * The text in the second paragraph under "Alternative Strategy to Address Transit Delay" on SEIR p. 6-6 is revised as follows to update the mitigation measure title:

As discussed under Impact C-TR-4, p. 3.B-94, given the uncertainty regarding the effectiveness of TDM measures and if SFMTA would approve other measures under their jurisdiction, even with implementation of Mitigation Measure M-C-TR-4, ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~, p. 3.B-96, the proposed project options and variants would result in a significant and unavoidable with mitigation cumulative impact with respect to transit delay.

- * **The text in the first paragraph on SEIR p. 6-13 is revised as follows to update the mitigation measure title:**

Therefore, the mitigation measure identified for the proposed project options and variants (Mitigation Measure M-C-TR-4, ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~, p. 3.B-96) would not be applicable.

- * **The text at the top of SEIR p. 6-21 is revised as follows to update the mitigation measure title:**

~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~, p. 3.B-96, as with the proposed project options and variants, Alternative B would result in a *significant and unavoidable with mitigation* cumulative impact with respect to transit delay.

- * **The text at the top of SEIR p. 6-39 is revised as follows to update the mitigation measure title:**

approve other measures under their jurisdiction, even with implementation of Mitigation Measure M-C-TR-4, ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~, p. 3.B-96, as with the proposed project options and variants, Alternative C would result in a *significant and unavoidable with mitigation* cumulative impact with respect to transit delay.

- * **The text under “Transportation and Circulation” on SEIR p. 6-45 is revised as follows to update the mitigation measure title:**

Project- and cumulative-level construction and operational transportation and circulation impacts would be the same as under the proposed project options. Cumulative operational-related mitigation measures identified for the proposed project options and variants would be applicable to Alternative D (i.e., Mitigation Measure M-C-TR-4, ~~Monitor Cumulative Transit Travel Times and Implement Measures to Reduce Transit Delay~~, p. 3.B-96). Alternative D impacts for cumulative transit delay would be *significant and unavoidable with mitigation* (Impact C-TR-4, p. 3.B-94).

Pages 1 and 2 of draft SEIR Appendix D2 are revised as follows:

Assumptions: PM peak hour traffic data from Kittleston

— 100 —

Assumptions: PM peak hour traffic data from I-780

[illegible]

Existing + Construction Trucks										CALCULATED NOISE LEVEL		Receptor	Adjusted	Distance	Distance						
ROAD SEGMENT	# TOTAL		VEHICLE TYPE %			VEHICLE SPEED				NOISE LEVEL (dBA)		Dist. from Roadway	Noise Level	from Roadway to 65 dBA	from Roadway to 55 dBA						
	Auto	MT	HT	Auto	K/H	MT	K/H	HT	K/H	Auto	MT	HT									
Galveston Peak													15 meters from								
from: to:	%	Auto	%	MT	%	HT							roadway centerline	Center (m.)	(dBA)	(ft)					
F. Kahlo Ocean	1201	98	1153	1	12.01	3	36.03	25	40	25	40	25	60.7	52.5	65.0	66.5	40	52.3	21.3	72.0	
F. Kahlo City Coll N	345	92	317.4	1	3.45	7	24.15	25	40	25	40	25	55.1	47.1	63.2	63.9	40	53.7	11.8	38.6	
Trucks Alone	22	0.1	0.022	0	0.022	100	21.96	25	40	25	40	25	40	13.5	25.2	62.8	62.8	30	59.8	9.1	28.8

Assumptions: PM peak hour traffic data from Kitelson

Existing																						
ROAD SEGMENT		TOTAL # VEHICLES	VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			CALCULATED NOISE LEVEL 15 meters from roadway centerline	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA
			Auto	MT	HT	Auto k/h	MT k/h	HT k/h	Auto	MT	HT											
Calverno Peak																						
from: Ocean S. Wood			% Auto	% MT	% HT																	
Plymouth	to:	177	97	171.69	2	3.54	1	1.77	25	40	25	25	40	52.4	47.2	51.9	55.5	Center (m.)	(dBA)	(ft)		
Plymouth	San Ramon Wild	-															40	51.5	1.8	8.0		
Assumptions: PM F																						

Existing + Developer's Project Alternative C															CALCULATED NOISE LEVEL			Receptor	Adjusted	Distance	Distance	
ROAD SEGMENT		TOTAL # VEHICLES	VEHICLE TYPE %				VEHICLE SPEED				NOISE LEVEL (dBA)			NOISE LEVEL	Dist. from Roadway	Noise Level	from Roadway to 65 dBA	from Roadway to 65 dBA				
			Auto	MT	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT	15 meters from							
Calverno Peak																						
from: to:			%	%	%	%	%	%	%	%					roadway center	Center (m.)	(dBA)	(m.)	(ft)			
Plymouth San Ramon Wild wd		222	97	215.34	2	4.44	1	2.22	25	40	25	40	25	40	53.4	48.2	52.3	56.8	40	52.6	2.3	7.5
Assumptions: PM peak hour traffic data from Kildason																						

Existing + Additional Housing Alternative C																					
ROAD SEGMENT	TOTAL		VEHICLE TYPE %			VEHICLE SPEED					NOISE LEVEL (dBA)			CALCULATED NOISE LEVEL 15 meters from roadway centerline	Receptor Dist. from Roadway	Adjusted Noise Level	Distance from Roadway to 65 dBA	Distance from Roadway to 65 dBA			
	# VEHICLES	Auto	MT	HT	Auto	k/h	MT	k/h	HT	Auto	MT	HT									
Cateno Peak																					
from: to:			%	Auto	%	MT	%	HT							roadway centerline	Gauger (m.)	(dBA)	(m.)	(ft)		
Plymouth San Ramo Wild wd	235	67	228.92	2	4.72	1	2.35	25	40	25	40	25	40	53.7	48.5	53.1	57.1	40	52.8	2.4	7.9
Assumption: PM peak hour traffic data from Kittson																					

Figure 2-12 Proposed Street Type Plan [Revised]

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Appendix C

Transportation Supporting Information

- C1 Travel Demand Memorandum
- C2 Transit Assessment Memorandum
- C3 Freight Loading Data
- C4 Transit Delay Analysis and Capital Improvements

C4 Transit Delay Analysis and Capital Improvements

Appendix I
Updated Health Risk
Assessment Memorandum