Attachment 1

CITY OF MOUNTAIN VIEW
RESOLUTION NO.
SERIES 2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW CERTIFYING THE MIDDLEFIELD PARK MASTER PLAN SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, ADOPTING CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS RELATED TO ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND ALTERNATIVES, AND ADOPTING A STATEMENT OF OVERRIDING CONSIDERATIONS, MITIGATION MEASURES, AND A MITIGATION, MONITORING, AND REPORTING PROGRAM

WHEREAS, in accordance with the California Environmental Quality Act (CEQA), California Public Resources Code (PRC) Section 21000, *et seq.*, and the CEQA Guidelines (PRC Section 15000, *et seq.*, collectively "CEQA"), the City of Mountain View ("City"), as lead agency, has prepared a Supplemental Environmental Impact Report ("SEIR") for the Middlefield Park Master Plan ("Project"); and

WHEREAS, the City of Mountain View prepared and circulated for public comment a Draft SEIR and gave all public notices in the manner and at the times required by law; and

WHEREAS, the City of Mountain View prepared, completed, and adopted in accordance with CEQA the East Whisman Precise Plan Final Environmental Impact Report (SCH No. 2017082051) ("Precise Plan EIR") (Citation 1), which evaluated the impacts of the East Whisman Precise Plan ("Precise Plan") that allows for up to 2 million square feet of net new office uses (and assumes conversion of approximately 2.2 million square feet of existing industrial and R&D space to office uses), 100,000 square feet of retail uses, 200 hotel rooms, and 5,000 multi-family residential units; and

WHEREAS, in connection with the adoption of a resolution approving said Precise Plan, the City Council adopted Resolution No. 18395 on November 5, 2019, setting forth certain findings pertaining to the Precise Plan EIR and adopting a mitigation monitoring and reporting program, all pursuant to the provisions of CEQA; and

WHEREAS, the Project was evaluated and analyzed under the Precise Plan EIR, and it was determined a supplemental environmental report to the Precise Plan EIR was required, as further explained in the Final SEIR, as defined below, for the Project; and

WHEREAS, the City circulated a Notice of Preparation ("NOP") for the SEIR for the Project in the manner and times required by law for review and comment by responsible and trustee agencies and other interested agencies, organizations, and individuals from October 1, 2021 through November 1, 2021 and held a public scoping meeting on October 14, 2021; and

WHEREAS, pursuant to PRC Sections 21161 and 211092 and CEQA Guidelines Sections 15085 and 15087, on April 26, 2022, a Notice of Completion ("NOC")/Notice of Availability ("NOA") document for a Draft SEIR for the Project was duly prepared and distributed; and

WHEREAS, the City duly prepared and circulated the Draft SEIR for the required 45-day public comment period, which commenced on April 26, 2022 and ended on June 10, 2022; and

WHEREAS, the City duly prepared responses to comments received on the Draft SEIR as reflected in the Final SEIR/Response to Comments document dated August 2022, which address all written and verbal comments on the environmental issues raised during the public review and comment period for the Draft SEIR, and was made available to all commenters and the public on August 19, 2022; and

WHEREAS, the Final SEIR/Response to Comments document dated August 2022, together with the Draft SEIR as well as all appendices attached thereto, collectively comprise the Final SEIR; and

WHEREAS, the Final SEIR, which includes the Draft SEIR (incorporated by reference) and the Response to Comments document on the Draft SEIR, was presented to the City Council on November 15, 2022, and the City Council has reviewed the Final SEIR on the Project and all associated staff reports, meeting minutes, testimony, and evidence constituting the record of proceedings, as referenced in the Statement of Overriding Considerations; and

WHEREAS, the Final SEIR identifies certain significant effects on the environment that would result from the implementation of the proposed project; and

WHEREAS, the Final SEIR identifies mitigation measures which, when implemented, will substantially lessen or avoid the significant effects on the environment caused by the proposed project, with the exception of the significant unavoidable impacts related to a conflict with the applicable air quality plan; generation of a cumulatively considerable net increase in operational reactive organic gas (ROG) emissions in a region that is considered nonattainment under an applicable Federal or State ambient air quality standards; and exposure of sensitive receptors to substantial pollutant concentrations during construction; and

WHEREAS the Final SEIR identifies and analyzes alternatives to the Project; and

WHEREAS, the Mitigation, Monitoring, and Reporting Program has been prepared pursuant to CEQA to monitor the changes to the Project, which the lead agency has adopted in order to mitigate or avoid significant effects on the environment; now, therefore, be it

RESOLVED: that the City Council of the City of Mountain View, having independently considered the Final SEIR and the potentially significant environmental effects of the Project as shown in the Final SEIR for the Middlefield Park Master Plan:

1. Certifies that the Final SEIR, attached hereto as Exhibit A, has been completed in compliance with CEQA and reflects the independent judgment and analysis of the City and has been presented to the City Council, which reviewed and considered the information in it, along with other relevant information in the Record of Proceedings, including, without limitation, public testimony, written correspondence, and staff reports and responses (including responses to comments on the Final SEIR received at or prior to the City Council public hearing) before approving the Project, and hereby finds that the Final SEIR constitutes an accurate, adequate, objective, and complete EIR.

2. Adopts the CEQA Findings of Fact and Statement of Overriding Considerations for the Project, attached hereto as Exhibit B, which findings are incorporated by reference herein.

3. Adopts the Mitigation, Monitoring, and Reporting Program (MMRP) for the Project, which incorporates the MMRP from the Precise Plan EIR, attached hereto as Exhibit C.

4. Adopts all of the feasible mitigation measures identified and described in the Final SEIR and determines that the Project, as mitigated, will avoid or reduce all of the significant adverse impacts to a less-than-significant level, with the exception of the significant unavoidable impacts related to a conflict with the applicable air quality plan; generation of a cumulatively considerable net increase in operational ROG emissions in a region that is considered nonattainment under an applicable Federal or State ambient air quality standards; and exposure of sensitive receptors to substantial pollutant concentrations during construction, which significant unavoidable impacts are considered acceptable because these unavoidable adverse environmental effects are outweighed by the benefits of the Project as set forth in the Statement of Overriding Considerations.

5. Finds that a reasonable range of potentially feasible alternatives were identified and evaluated in the Final SEIR and further finds that none of the alternatives identified and evaluated in the Final SEIR will achieve all of the Project objectives or to the same degree as the proposed Project and, otherwise, are infeasible for the reasons detailed more fully in Exhibit B, do not represent substantial environmental benefits over the proposed Project, and are, therefore, rejected as infeasible, within the meaning of CEQA, in favor of the proposed Project.

6. The City, in making its decision to certify the Final SEIR and approve the Project and as detailed more fully in Exhibit B, hereby recognizes that a range of technical and scientific opinions exist with respect to certain environmental issues. The City has acquired a comprehensive and well-rounded understanding of the range of these technical and scientific opinions by its review of the Final SEIR, information provided by the experts who prepared the Final SEIR, the City's staff and other consultants, other relevant materials in the Record of Proceedings, and its own experience and expertise in these matters. The materials reviewed by

the City include, without limitation, conflicting expert opinions and statements of facts as well as other comments on the environmental issues set forth in the Final SEIR. This comprehensive review has enabled the City to make its determinations after weighing and considering the various viewpoints on these important issues. As a result, the City has made determinations of significant effects based on substantial evidence and not public controversy or speculation. Accordingly, the City certifies that its findings and determinations are based on all of the evidence contained in the Final SEIR as well as the evidence and other information in the Record of Proceedings and hereby elects to rely on the opinions set forth in the Final SEIR and other relevant materials in the Record of Proceedings.

TIME FOR JUDICIAL REVIEW:

The time within which judicial review of this document must be sought is governed by California Code of Procedure Section 1094.6 as established by Resolution No. 13850 adopted by the City Council on August 9, 1983.

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LH/6/RESO
823-10-19-22r-1

Exhibits:
A. Final SEIR
B. CEQA Findings and Statement of Overriding Considerations
C. Mitigation, Monitoring, and Reporting Program
D. Errata Document dated October 10, 2022

Exhibit A

Middlefield Park Master Plan

Draft Supplemental Environmental Impact Report

SCH No.: 2021100026

Prepared by

City of Mountain View

In Consultation with

50 YEARS EST. 1972 DAVID J. POWERS & ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS & PLANNERS

April 2022

TABLE OF CONTENTS

Section 1.0 Summary v
Section 2.0 Introduction 1
2.1 Purpose of the Environmental Impact Report 1
2.2 EIR Process 3
2.3 Final EIR/Responses to Comments 4
Section 3.0 Project Information 5
3.1 Project Site Location 5
3.2 Project Description 5
3.3 Consistency with General Plan Designation and Zoning District 28
3.4 Project Objectives 31
3.5 Uses of the EIR 32
Section 4.0 New Significant Environmental Effects 34
4.1 Air Quality 36
Section 5.0 Previously Identified Effects 70
5.1 Aesthetics 71
5.2 Agriculture and Forestry Resources 76
5.3 Biological Resources 81
5.4 Cultural Resources 91
5.5 Energy 100
5.6 Geology and Soils 109
5.7 Greenhouse Gas Emissions 119
5.8 Hazards and Hazardous Materials 125
5.9 Hydrology and Water Quality 146
5.10 Land Use and Planning 158
5.11 Mineral Resources 163
5.12 Noise 165
5.13 Population and Housing 179
5.14 Public Services 182
5.15 Recreation 191
5.16 Transportation 195
5.17 Tribal Cultural Resources 213
5.18 Utilities and Service Systems 216
5.19 Wildfire 227

Section 6.0 Growth-Inducing Impacts 229
Section 7.0 Significant and Irreversible Environmental Changes 230
7.1 Irreversible Use and Irretrievable Commitments of Nonrenewable Resources 230
7.2 Commitment of Future Generations to Similar Uses 230
7.3 Irreversible Damage from Environmental Accidents 231
Section 8.0 Significant and Unavoidable Impacts 232
Section 9.0 Alternatives 233
9.1 Factors in Selecting and Evaluating Alternatives 233
9.2 Project Alternatives 235
Section 10.0 References 251
Section 11.0 Lead Agency and Consultants 258
11.1 Lead Agency 258
11.2 Consultants 258
Section 12.0 Acronyms and Abbreviations 260

Figures

Figure 3.2-1: Regional Map 9
Figure 3.2-2: Vicinity Map 10
Figure 3.2-3: Aerial Photograph of the MPMP and Surrounding Area 11
Figure 3.2-4: Conceptual Site Plan 12
Figure 3.2-5: Conceptual Residential Building Elevations 13
Figure 3.2-6: Conceptual Office Building Elevations 14
Figure 3.2-7: Conceptual Open Space Plan 16
Figure 3.2-8: Conceptual Circulation Plan 24
Figure 4.1-1: Locations of Off-Site Sensitive Receptors and Modeled Project Traffic 55
Figure 5.1-1: Transit Priority Area 73
Figure 5.4-1: Location of Buildings 45 Years and Older 94
Figure 5.12-1: Moffett Federal Airfield 2022 Noise Contours 168
Figure 5.16-1: Location of Existing Transit Facilities 202
Figure 5.16-2: Location of Existing Bicycle Facilities 204
Figure 9.2-1: Rearranged Project Alternative 238

Tables

Table 3.2-1: Proposed MPMP Buildings 7
Table 3.2-2: Construction Phasing for Proposed Project & District Systems Option 22
Table 3.2-3: Precise Plan Bicycle Parking Requirements 25
Table 3.3-1: Precise Plan Maximum Allowed Building Heights by Character Area 29
Table 3.3-2: Allowed and Proposed FAR by Precise Plan Character Area 30
Table 4.1-1: Health Effects of Air Pollutants 36
Table 4.1-2: BAAQMD Air Quality Significance Thresholds 40
Table 4.1-3: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day) 44
Table 4.1-4: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day) with MM AQ-1.1 46
Table 4.1-5: Project with District Utilities System Option Operational Period Emissions 48
Table 4.1-6: Comparison of Project Emissions to Air Basin ROG Emissions (tons/day) 51
Table 4.1-7: Project with District Utilities System Option Construction and Operational Community Risk Impacts at the Off-Site Receptors 56
Table 4.1-8: Bay Area 2017 Clean Air Plan Applicable Control Measures 59
Table 4.1-9: Cumulative Health Risk Impacts at the Off-Site MEI 66
Table 4.1-10: Impacts from Cumulative TAC Sources at the Project Site 67
Table 5.5-1: Existing and Project with District Utilities System Option Annual Energy Demand 106
Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings 129
Table 5.8-2: Phase II Subsurface Investigation Sampling Results and Environmental Safety Levels 132
Table 5.12-1: Groundborne Vibration Impact Criteria 166
Table 5.12-2: General Plan Outdoor Noise Environment Guidelines 169
Table 5.14-1: 2019-2020 School Enrollment and Capacity 185
Table 5.16-2: Maximum Vehicle Parking[1] 212
Table 9.2-1: Summary of Alternatives Development Assumptions 239
Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives 248

Appendices

Appendix A: Draft Middlefield Park Master Plan

Appendix B: NOP and Comments Received

Appendix C: Air Quality Report

Appendix D: Arborist Report

Appendix E: Historic Resources Survey Report and Peer Review Memorandum

Appendix F: Geotechnical Reports

Appendix G: Hazards and Hazardous Materials Reports

Appendix H: Multimodal Transportation Analysis

Appendix I: Utilities Impact Study

SECTION 1.0 SUMMARY

The City of Mountain View, as the Lead Agency, has prepared this Draft Supplemental Environmental Impact Report (EIR) for the Middlefield Park Master Plan project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As the CEQA Lead Agency for this project, the City of Mountain View is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts (including growth-inducing impacts and cumulative impacts), mitigation measures, and alternatives. It is not the intent of an EIR to recommend either approval or denial of a project.

This EIR tiers from the certified 2020 East Whisman Precise Plan Integrated Final EIR (Precise Plan EIR, State Clearinghouse [SCH] #2017082051) and 2012 Mountain View 2030 General Plan and Greenhouse Gas Reduction Program EIR (SCH# 2011012069), all of which are specifically incorporated by reference into this EIR.

Summary of the Project

The approximately 40-acre project site is located to the northeast of the Ellis Street and East Middlefield Road intersection, within the Mixed-Use and Employment Character Areas of the East Whisman Precise Plan (Precise Plan) and adjacent to the Valley Transportation Authority's (VTA) Middlefield Light Rail Station. The project site is currently developed with 23 office and light industrial buildings totaling approximately 684,645 square feet, as well as landscaping and surface parking lots. The project proposes to demolish the existing improvements and construct 1,317,000 square feet of office uses, up to 1,900 residential units, up to 30,000 square feet of ground floor retail space, and up to 20,000 square feet of community/civic uses.[1] The project would also dedicate approximately 7.28 acres for three new public parks and construct a 2.87-acre privately owned publicly accessible (POPA) park. The project would also include new vehicular, bicycle, and pedestrian circulation. As a project option, the applicant could develop a private district utilities system with underground utility lines to serve some buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. A more detailed project description is provided in Section 3.2 Project Description.

[1] The Master Plan project materials also collectively refer to the 30,000 square feet of ground floor retail space and 20,000 square feet of community/civic space as "Active Use" space.

Summary of Significant Impacts and Mitigation Measures

This section summarizes (1) new significant impacts and mitigation measures identified for the project, which were not previously disclosed in the Precise Plan EIR (identified as MM), and (2) impacts and mitigation measures previously disclosed in the Precise Plan EIR that are applicable to the project (identified as Precise Plan EIR MM). The impacts and mitigation measures refer to the Project (which assumes standard municipal utilities), the Project with District Utilities System Option (which assumes a private district utility system would be constructed as a project design option), or Both Options.

A detailed discussion of impacts and mitigation measures is provided in Sections 4.0 New Significant Environmental Effects and 5.0 Previously Identified Effects of this EIR.

Significant Impact	Mitigation Measures
Impact AQ-1: Both Project Options: The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])** **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])** **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**	**Precise Plan EIR MM AQ-3.1: Both Project Options:** Construction criteria pollutant and TAC quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through the following measures: • Construction equipment selection for low emissions; • Use of alternative fuels, engine retrofits, and added exhaust devices; • Low Volatile Organic Compounds (VOC) paints; • Modification of construction schedule; and • Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust. **MM AQ-1.1: Both Project Options:** Pursuant to Precise Plan EIR MM AQ-3.1, the project (under either option) shall implement the following measures during all phases of construction: • All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NO_x and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise: o If use of Tier 4 Final equipment is not commercially available, the project applicant shall use alternative equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control

Significant Impact	Mitigation Measures
	equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85-percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination). The project applicant shall provide to the City for review and approval documentation showing that engines that comply with Tier 4 Final off-road emission standards are not commercially available for the specific off-road equipment necessary during construction. For purposes of this mitigation measure, "commercially available" shall take into consideration the following factors: (i) potential significant delays to critical-path timing of construction and (ii) the geographic proximity to the project site of Tier 4 Final equipment. o Use of alternatively fueled equipment with lower NO_x emissions compared to traditional diesel fuel equipment that meets or exceeds the NO_x and PM reduction requirements of U.S. EPA Tier 4 Final engine emission standards, as required above. • Use electric equipment such as aerial lifts, air compressors, cement mortar mixers, concrete/industrial saws, cranes, and welders. Portable equipment shall be powered by grid electricity or alternative fuels (i.e., not diesel) instead of by diesel generators. • Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than two minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit. • Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment. Use low VOC coatings to reduce ROG emissions during construction. The project shall use low VOC coatings that are below current BAAQMD requirements (i.e., Regulation

Significant Impact	Mitigation Measures
	8, Rule 3: Architectural Coatings), for at least 80 percent of all residential and nonresidential interior paint and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 80 percent of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low VOC coatings to be used. Examples of "super-compliance" coatings are contained in the South Coast Air Quality Management District's website. **MM AQ-1.2: Both Project Options:** All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.
Impact AQ-4: Project with District Utilities Systems Option: The project with District Utilities Systems Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(New Impact [Less than Significant, Impact with Mitigation Incorporated])**	**MM AQ-4.1: Project with District Utilities System Option:** The project applicant shall develop an odor control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor control plan shall describe the design elements and best management practices built into the facility, including the following: • Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility; • Odor proofing of refuse containers used to store and transport grit and screenings or biosolids; and • Injection of chemicals to control hydrogen sulfide. The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues, as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint and corrective actions could include installing specific odor control technologies (e.g., odor control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's Designee) and BAAQMD prior to issuance of

Significant Impact	Mitigation Measures
	building permits for the CUP. In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to less than five per year, the plant shall cease operations. All wastewater generated by the project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility. **MM AQ-4.2: Project with District Utilities System Option:** Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.
Impact HAZ-2: Both Project Options: The project (under either option) would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Same Impact as Approved Project. **[Less than Significant Impact with Mitigation])**	**Precise Plan EIR MM HAZ-3.1:** Prior to the start of any redevelopment activity, a property-specific Phase I ESA shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents. At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soils, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the project-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall

Significant Impact	Mitigation Measures
	be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., EPA, RWQCB and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.
Impact NOI-2: Both Project Options: The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**	**Precise Plan EIR MM NOI-4.1:** Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where project construction is anticipated to include vibration-generating activities such as pile driving or use of vibratory rollers, in close proximity to existing structures, site specific vibration studies should be concluded to determine the area of impact and to identify appropriate mitigation measures which may include the following: • Identification of sites that would include vibration compaction activities such as pile driving and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-born vibration. Vibration levels should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task. • Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. • Construction contingencies would be identified for when vibration levels approached the limits. • At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may

Significant Impact	Mitigation Measures
	indicate the need for more or less intensive measurements. • When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures. • Conduct post-survey on structures when either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.
Impact UTL-1: Both Project Options: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Same Impact as Approved Project [Less than Significant Impact])**	**Precise Plan EIR MM UTL-1.1:** The City shall require, determined on a project-by-project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.

Summary of Project Alternatives

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify that the EIR should identify alternatives which "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The purpose of the alternatives analysis is to determine whether there are alternatives of design, scope, or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive (CEQA Guidelines Section 15126.6).

While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The project objectives are identified in Section 3.4 Project Objectives of this EIR. The alternatives are also evaluated for their consistency with the 10 Precise Plan Guiding Principles, which are listed in Section 9.1.4. A summary of the project alternative evaluated in this EIR is provided below. Refer to Section 9.0 Alternatives for the full discussion of each alternative.

No Project, No New Development Alternative

The CEQA Guidelines specifically require consideration of a "No Project" Alternative. The purpose of including a No Project Alternative is to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. The CEQA Guidelines specifically advise that the No Project Alternative shall address both the existing conditions and "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (Section 15126.6(e)(2).

Under the No Project, No New Development Alternative, the project site would remain as it is today, developed with a total of 684,645 square feet of office, R&D and light industrial uses. The No Project, No New Development Alternative would avoid the project's impacts (under either option) but would not meet any of the project objectives. This alternative would not meet any of the Precise Plan's guiding principles because it does not redevelop the site consistent with the Precise Plan.

No Project, Redevelopment Alternative

Given the site's land use designation, it is reasonable to assume that if the proposed project were not approved, an office development could be developed on the project site at the base FAR allowed with a minimum amount of retail. The No Project Redevelopment Alternative would include up to 696,285 square feet (0.4 FAR) of non-residential uses, including a minimum 5,000 square feet of retail required by the Precise Plan. The No Project Redevelopment Alternative would result in less or similar impacts as the proposed project, since it is less overall development and does not include residential development. In regards to the project objectives, the No Project Redevelopment Alternative would:

- Meet objectives e and g;
- Partially meet objectives a, b, c, and f; and
- Not meet objectives h and i.

In regards to the Precise Plan guiding principles, this alternative would:

- Aligns with principle 8, 9, and 10;
- Partially aligns with principles 3; and
- Not align with principles 1,2,6, and 7.
- Guiding principles 4 and 5 are not applicable based on the project location.

Mitigated 19% Reduced Development Alternative

The purpose of the Mitigated 19% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts with the incorporation of the air quality mitigation measures identified for the project (under either option). The Mitigated 19% Reduced Development Alternative assumes approximately 1,066,770 square feet of office uses, 1,539 residential units, 24,300 square feet of retail uses, 16,200 square feet of community/civic uses, and 7.8 acres of park land. The Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions (with mitigation) and lessen the project's mitigable construction criteria pollutant emissions and health impacts with implementation of the same mitigation measures identified for the project (under either option). All other impacts for this alternative would be the same or similar as the proposed project. In regards to the project objectives,

the Mitigated 19% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i; and
- Partially meet objective b and c.

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 8, 9, and 10 but alignment with 7 significantly reduces residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

31% Reduced Development Alternative

The purpose of the 31% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts without requiring mitigation. The 31% Reduced Development Alternative assumes approximately 908,730 square feet of office uses, 1,311 residential units, 20,700 square feet of ground floor retail space, 13,800 square feet of community/civic uses, and 6.6 acres of park land. The 31% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions (no mitigation required) and lessen the project's mitigable construction criteria pollutant emissions and significant, unavoidable construction health risk impacts with incorporation of the same mitigation measures as identified for the project (under either option). All other impacts would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 31% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i
- Partially meet objectives b and c

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 7, 8, and 10, but alignment with principle 7 significantly reduces residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

Rescheduled Construction Alternative

The purpose of this alternative is to avoid the project's significant, unavoidable construction health risk impact. The project would result in significant, unavoidable construction health risk impacts due to the location of Phase II construction activities (under either option) adjacent to the approved 400 Logue Avenue residential project's future sensitive receptors. Rescheduling Phase II construction activities to occur before the approved 400 Logue Residential project is occupied would ensure health risk impacts to these residents from the project (under either option) are reduced. The Rescheduled Construction Alternative would avoid the project's significant, unavoidable health risk impacts. All other impacts would be the same as the proposed project. The alternative would result in a period of vacant office buildings while residential units are constructed based on the Precise Plan, which requires new office uses built under the Jobs-Housing Linkage program to obtain occupancy only once the associated residential development obtains occupancy. Therefore, this alternative would meet all of the project objectives to the same extent as the proposed project, except for objective d.

In regards to the Precise Plan guiding principles, this alternative would:

- Consistent with principles 1, 2, 3, 6, 7, 8, 9, and 10.
- Guiding principles 4 and 5 are not applicable based on the project location

Areas of Concern

Environmental concerns expressed thus far from local residents, property owners, organizations, and/or agencies about the project include the following:

- Lighting impacts
- Impacts to groundwater resulting from construction dewatering
- Sunnyvale Golf Course as a barrier to the east
- Pedestrian safety near Middlefield Light Rail Station
- Project-generated traffic on roadway and freeway capacity
- Bicycle/Pedestrian as it pertains to transportation impacts
- Required connections to existing utilities infrastructure and needed improvements

SECTION 2.0 INTRODUCTION

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The City of Mountain View, as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the Middlefield Park Master Plan project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121[a]). As the CEQA Lead Agency for this project, the City of Mountain View is required to consider the information in the EIR, along with any other available information, in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, significant environmental impacts (including growth-inducing and cumulative impacts), mitigation measures, and alternatives. It is not the intent of an EIR to recommend approval or denial of a project.

This EIR is a Supplemental EIR to the certified 2020 East Whisman Precise Plan Integrated Final EIR (Precise Plan EIR, State Clearinghouse [SCH] #2017082051). The primary purpose of the Precise Plan was to increase the density of development and incorporate a more balanced mix of land uses within the East Whisman area in proximity to existing transit facilities and jobs. The East Whisman Precise Plan (Precise Plan) allows for up to two million square feet of net new office uses[2] (and assumes conversion of approximately 2.2 million square feet of industrial and R&D space to office uses), 100,000 square feet of retail uses, 200 hotel rooms, and 5,000 multi-family residential units.

In accordance with CEQA Guidelines Section 15163(a), the lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

(1) Any of the conditions described in Section 15162 (Subsequent EIRs and Negative Declarations) would require the preparation of a subsequent EIR, and
(2) Only minor alterations or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

Based on the analysis contained in this EIR, only the discussion of the project's significant air quality impacts is needed to supplement the discussion in the Precise Plan EIR. For this reason, the City has prepared a Supplemental EIR for the project that focuses on the project's air quality impacts.

[2] The Precise Plan EIR studied up to 2,300,000 net new square feet of office; however, the City Council approved 2,000,000 net new square feet with the Precise Plan.

2.1.1 Tiering of the Environmental Review

This document is a Supplemental EIR to the Precise Plan EIR and tiers from the Precise Plan EIR and Mountain View 2030 General Plan EIR (SCH #2011012069) (General Plan EIR). The CEQA Guidelines Section 15152 contains the following information on tiering an environmental document:

(a) "Tiering" refers to using the analysis of general matters contained in a broader EIR (such as one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the EIR or negative declaration solely on the issues specific to the later project.

(b) Agencies are encouraged to tier the environmental analysis which they prepare for separate but related projects including general plans, zoning changes, and development projects. This approach can eliminate repetitive discussions of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy or program of lesser scope, or to a site-specific EIR or negative declaration. Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration. However, the level of detail contained in a first tier EIR need not be greater than that of the program, plan, policy, or ordinance being analyzed.

2.1.2 Focus of the Supplemental EIR

Per CEQA Guidelines Section 15163, a Supplemental EIR need only contain the necessary information to make the previously certified EIR adequate for the project, effectively focusing on additional significant effects on the environment which were not addressed in the previously certified EIR. The City of Mountain View determined that the project's effects on the following environmental resources were previously addressed and adequately covered in the Precise Plan and General Plan EIRs:

- Aesthetics
- Agriculture and Forest Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

That is, the project would not result in new or substantially more severe significant impacts to those resources listed above when compared to those disclosed in the Precise Plan EIR. However, the City of Mountain View found that the project would result in new significant effects on air quality which were not previously disclosed in the Precise Plan EIR (i.e., the previously certified EIR). A discussion of the project's new significant air quality effects is included in Section 4.0 New Significant Environmental Effects and a discussion of the project's previously disclosed environmental effects is included in Section 5.0 Previously Identified Effects of this EIR.

2.2 EIR PROCESS

2.2.1 Notice of Preparation and Scoping

In accordance with Section 15082 of the CEQA Guidelines, the City of Mountain View prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to the public and local, state, and federal agencies on October 1, 2021. The standard 30-day comment period concluded on November 1, 2021. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project. The City of Mountain View also held a public scoping meeting on October 14, 2021 to discuss the project and solicit public input as to the scope and contents of this EIR. The meeting was held virtually. One verbal public comment was provided at the meeting requesting off-road pedestrian and bicycle connectivity from the project site to the City of Sunnyvale. Appendix B of this EIR includes the NOP and the written comments received on the NOP.

2.2.2 Draft EIR Public Review and Comment Period

Publication of this Draft EIR will mark the beginning of a 45-day public review period. During this period, the Draft EIR will be available to the public and local, state, and federal agencies for review and comment. Notice of the availability and completion of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP and posted on the City's website at www.mountainview.gov/CEQA. Additionally, consistent with Assembly Bill (AB) 819, which requires all CEQA environmental documents to be submitted electronically to the Office of Planning and Research's CEQAnet database, a copy of this Draft EIR will be sent to and available on the CEQAnet Webportal. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Lindsay Hagan, Deputy Zoning Administrator
Community Development Department
500 Castro Street, PO Box 7540
Mountain View, CA 94039-7540
Lindsay.Hagan@mountainview.gov

2.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City of Mountain View will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of:

- Revisions to the Draft EIR text, as necessary;
- List of individuals and agencies commenting on the Draft EIR;
- Responses to comments received on the Draft EIR, in accordance with CEQA Guidelines (Section 15088); and
- Copies of letters received on the Draft EIR.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the lead agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

2.3.1 Notice of Determination

If the project is approved, the City of Mountain View will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office and available for public inspection for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094[g]).

SECTION 3.0 PROJECT INFORMATION

3.1 PROJECT SITE LOCATION

The Middlefield Park Master Plan (MPMP) project site is located to the northeast of the Ellis Street and East Middlefield Road intersection, within the Mixed-Use and Employment Area North Character Areas of the East Whisman Precise Plan (Precise Plan). The project site totals approximately 40 acres and consists of 14 parcels (Assessor's Parcel Numbers [APNs]: 160-58-001, 160-58-016, 160-58-017, 160-57-004, 160-57-006, 160-57-007, 160-57-008, 160-57-009, 160-57-010, 160-57-011, 160-57-012, 160-57-013, 160-59-005, and 160-59-006). The project site is currently developed with 23 office and light industrial buildings totaling approximately 684,645 square feet, as well as landscaping and surface parking lots. The project site is not all contiguous and is generally bounded by the City and County of San Francisco property (often referred to as the San Francisco Public Utilities Commission [SFPUC] right-of-way or Hetch-Hetchy right-of-way) to the north, East Middlefield Road to the south, Ellis Street to the west, and the Sunnyvale Municipal Golf Course and State Route (SR) 237 to the east.

The project site is located adjacent to the Valley Transportation Authority's (VTA) Middlefield Light Rail Station and the VTA multi-use path is located on the west side of the light rail tracks within and to the south of the project site. The path connects from Pacific Drive to Middlefield Road and from Middlefield Road to the north property boundary of 475 Ellis Street. The Hetch-Hetchy/Transit Oriented Development (TOD) Trail is located approximately 65 feet west of the project site, across Ellis Street. A regional map and a vicinity map of the project site are shown on Figure 3.2-1 and Figure 3.2-2, respectively, and an aerial photograph of the project site and surrounding land uses is shown on Figure 3.2-3.

Additional construction staging (including construction parking) would occur on APNs 160-57-016 and 160-55-036 located at 405 Clyde Avenue and 580 Clyde Avenue, respectively (refer to Figure 3.2-2 and Figure 3.2-3).

3.2 PROJECT DESCRIPTION

Implementation of the proposed project would allow for the demolition of the existing improvements (i.e., approximately 684,645 square feet of office uses, related surface parking areas, and landscaping) and development of:

- Up to 1,317,000 square feet of office uses (resulting in a net increase of 632,355 square feet of office square footage compared to existing conditions),
- Up to 1,900 residential units (including up to 380 affordable units),
- Up to 30,000 square feet of ground floor retail space, and
- Up to 20,000 square feet of community/civic uses.

The proposed project would also include:

- Dedication of land for three new public parks totaling approximately 7.28 acres and a 2.87-acre POPA developed by the applicant. In total, up to 10.15 acres of publicly accessible park land would be provided within the project site;

- New vehicular circulation, including up to six private streets and an extension of Logue Avenue (an existing public street), new on-street and off-street bicycle and pedestrian improvements, and new landscaping and trees; and
- As a project option, the applicant could develop a private district utilities system with underground utility lines to serve some buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. If the District Utilities System Option is selected, one of the office buildings (Building O1) would contain a 45,000 square foot Central Utility Plant (CUP) and the system would require crossing the VTA light rail line and public streets to serve the project area.

In addition to the improvements described above, the project includes a Vesting Tentative Map to create up to 18 lots, up to 1,900 condominium lots, and up to 140 vertical lots within the project site, as well as a Development Agreement to grant implementation of entitlements over a 20-year period. The primary aspects of the project are described below and include the following:

- Buildings
- Parks and open space
- Utilities
- Emergency generators
- Green building and emission reduction features
- Site access, circulation, transit, and parking
- Transportation Demand Management (TDM)
- Construction activities and phasing
- Heritage trees and landscaping

3.2.1 Buildings

The project includes the following buildings:

- Five office building locations (see buildings O1 through O5 on Figure 3.2-4)[3]
- Two affordable residential building locations (see buildings R4 AFF and R6 AFF on Figure 3.2-4)
- Seven residential mixed-use building locations (see buildings R1 – R6 on Figure 3.2-4)[4]
- Two, shared district parking structures (see Figure 3.2-4)
- One community/civic building located within Ellis Park

The proposed site plan with the building locations is shown on Figure 3.2-4 and conceptual residential and office building elevations are shown on Figure 3.2-5 and Figure 3.2-6 below. A summary of the proposed buildings is included in Table 3.2-1. The maximum building heights would range from 16 to 125 feet. Parking for all of the office and residential buildings would be provided in surface, above ground, and/or below ground parking facilities. Buildings labeled AFF on Figure 3.2-4 indicate affordable residential buildings that could be constructed independently from the market rate buildings with the same number. For example, buildings R4 and R4 AFF are two separate buildings, located

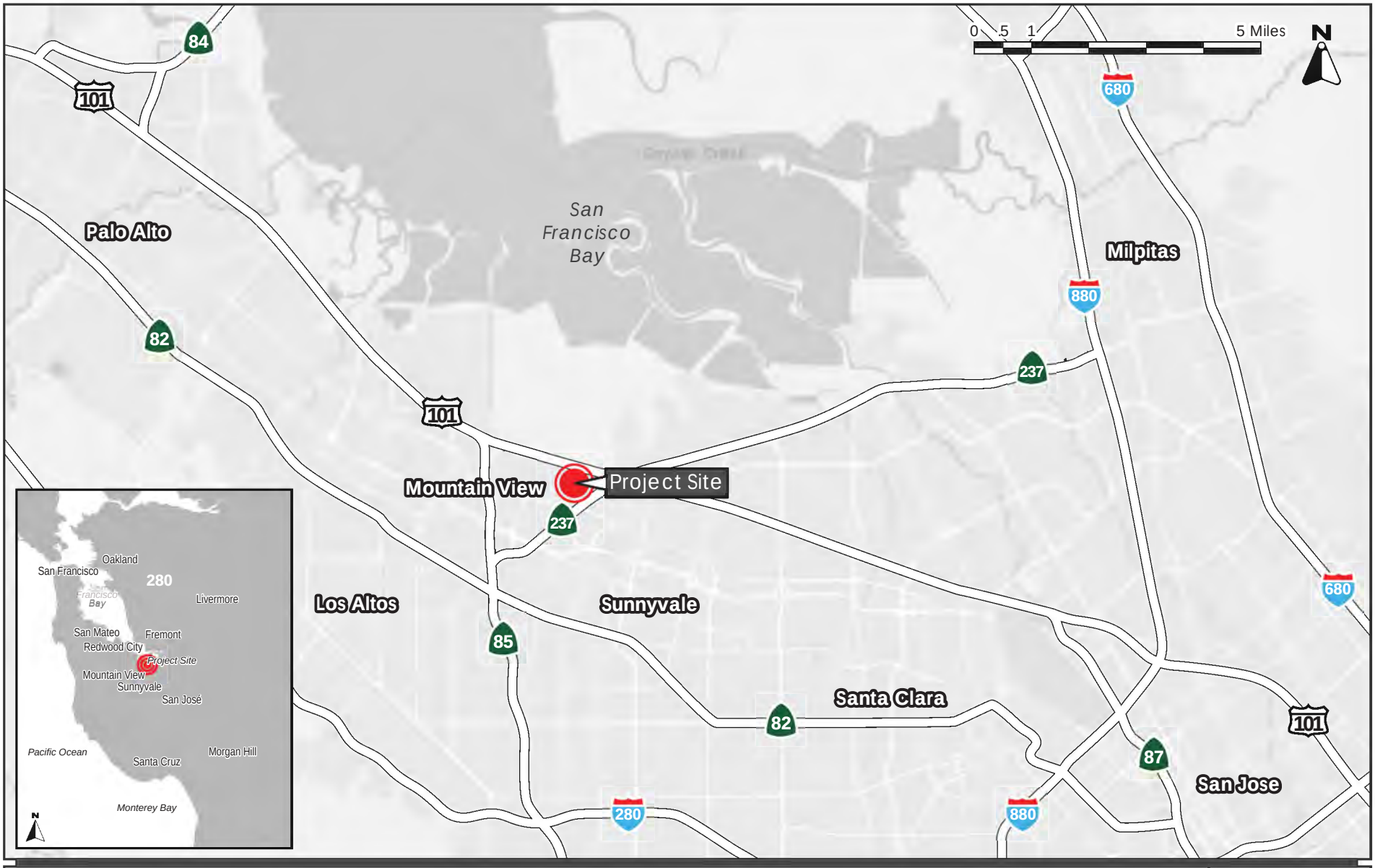
[3] Up to two buildings could be constructed on each building location for a total of up to 10 office buildings on-site.
[4] Up to two buildings could be constructed on each residential building location, excluding R6 AFF, for a total of up to 11 residential buildings.

within the same area shown on Figure 3.2-4.

Table 3.2-1: Proposed MPMP Buildings						
Building Number	**Uses**	**Gross Square Feet**	**Units**	**Maximum Building Height (feet)[5]**	**Vehicle Parking Provided[6]**	**Maximum Depth Excavation (feet)**
O1	Office	441,939	--	125	450 spaces (two levels below ground)	50
	Central Utility Plan	45,000				
O2	Office	190,000	--	95	250 spaces (one level above ground)	5
O3	Office	310,000	--	95	150 spaces (one level above ground)	5
O4	Office	292,212	--	95	150 spaces (one level above ground)	5
O5/P1	Office	82,849	--	65	1,334 spaces (one level below grade, four levels above ground)	5
	Parking Garage					
P2	Community/ Civic	4,000	--	65	315spaces (four levels above ground)	5
	Parking Garage					
R1	Residential	320,000	400	125	467 spaces (one below ground, one above ground)	20
	Retail	18,308	--			
R2	Residential	363,000	450	125	500 spaces (one level below ground, one level above ground)	20
	Retail	4,200	--			
	Community/ Civic	8,434	--			
R3	Residential	263,000	270	95	287 spaces (one level below ground, one level above ground)	20
	Retail	2,877	--			
	Community/ Civic	1,666	--			
R4 AFF	Residential (Affordable)	190,000	210	95	105 spaces (one level below ground and one level above ground)	20

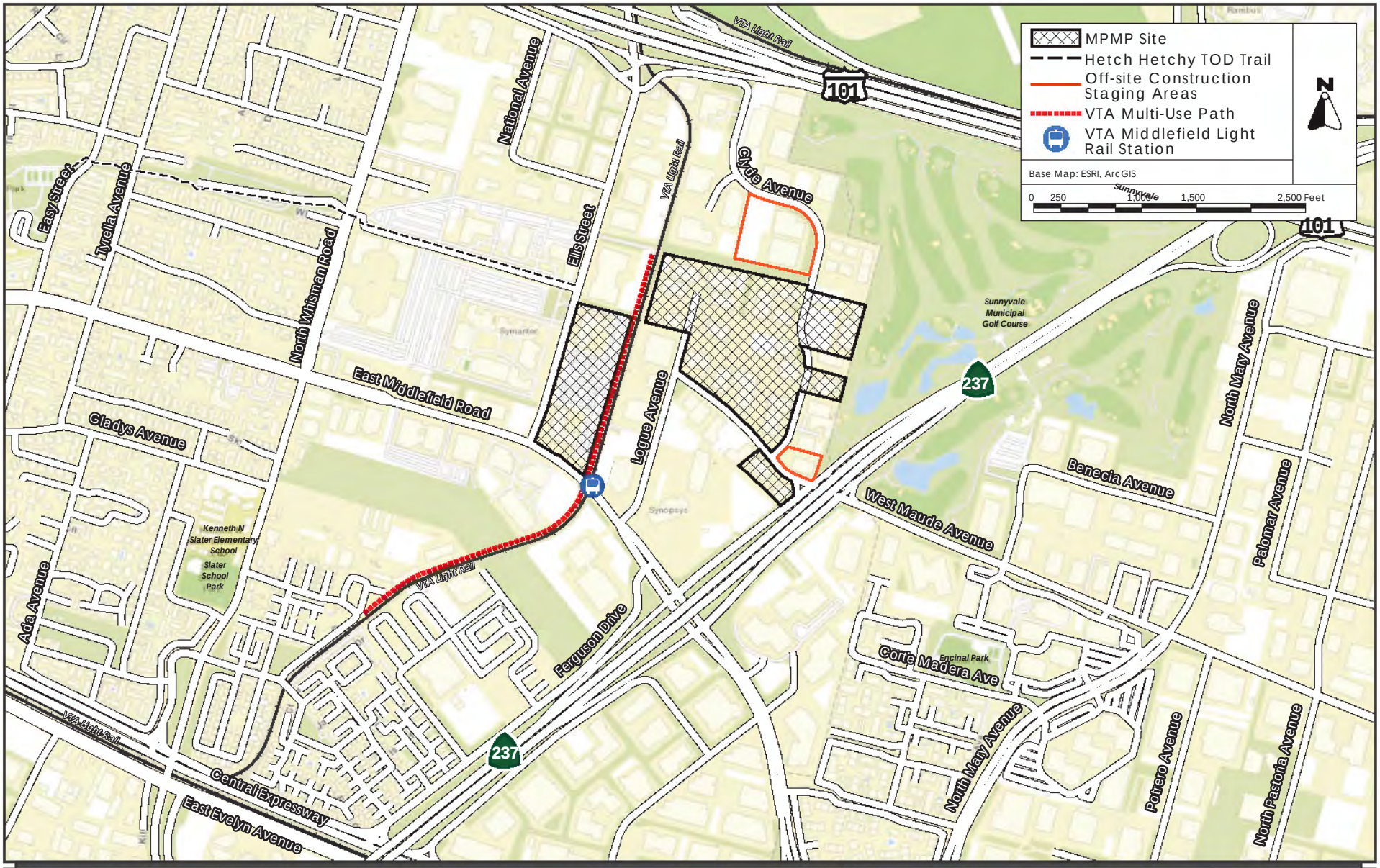
[5] All building heights would comply with the height limits of the Moffett Field Comprehensive Land Use Plan.
[6] Parking is identified as a maximum and may be less if the project parking program includes unbundled residential parking, shared parking, or other measures.

Table 3.2-1: Proposed MPMP Buildings						
Building Number	**Uses**	**Gross Square Feet**	**Units**	**Maximum Building Height (feet)[5]**	**Vehicle Parking Provided[6]**	**Maximum Depth Excavation (feet)**
R4	Residential	95,000	90	95	103 spaces (one level below ground, one level above ground)	20
	Retail	1,955	--			
	Community/ Civic	1,666	--			
R5	Residential	340,000	310	95	332spaces (one level below ground, one level above ground)	20
	Retail	2,660	--			
	Community/ Civic	3,234	--			
R6 AFF	Residential (Affordable)	155,000	170	95	85 spaces (one level below ground, one level above ground)	20
Ellis Park	Community/ Civic	1,000	--	16	N/A	3
Proposed Building Totals and Dwelling Units by Land Use						
--	Office	1,317,000	--	--	--	--
--	Community/ Civic	20,000	--	--	--	--
--	Residential	1,726,000	1,900	--	--	--
--	Retail	30,000	--	--	--	--



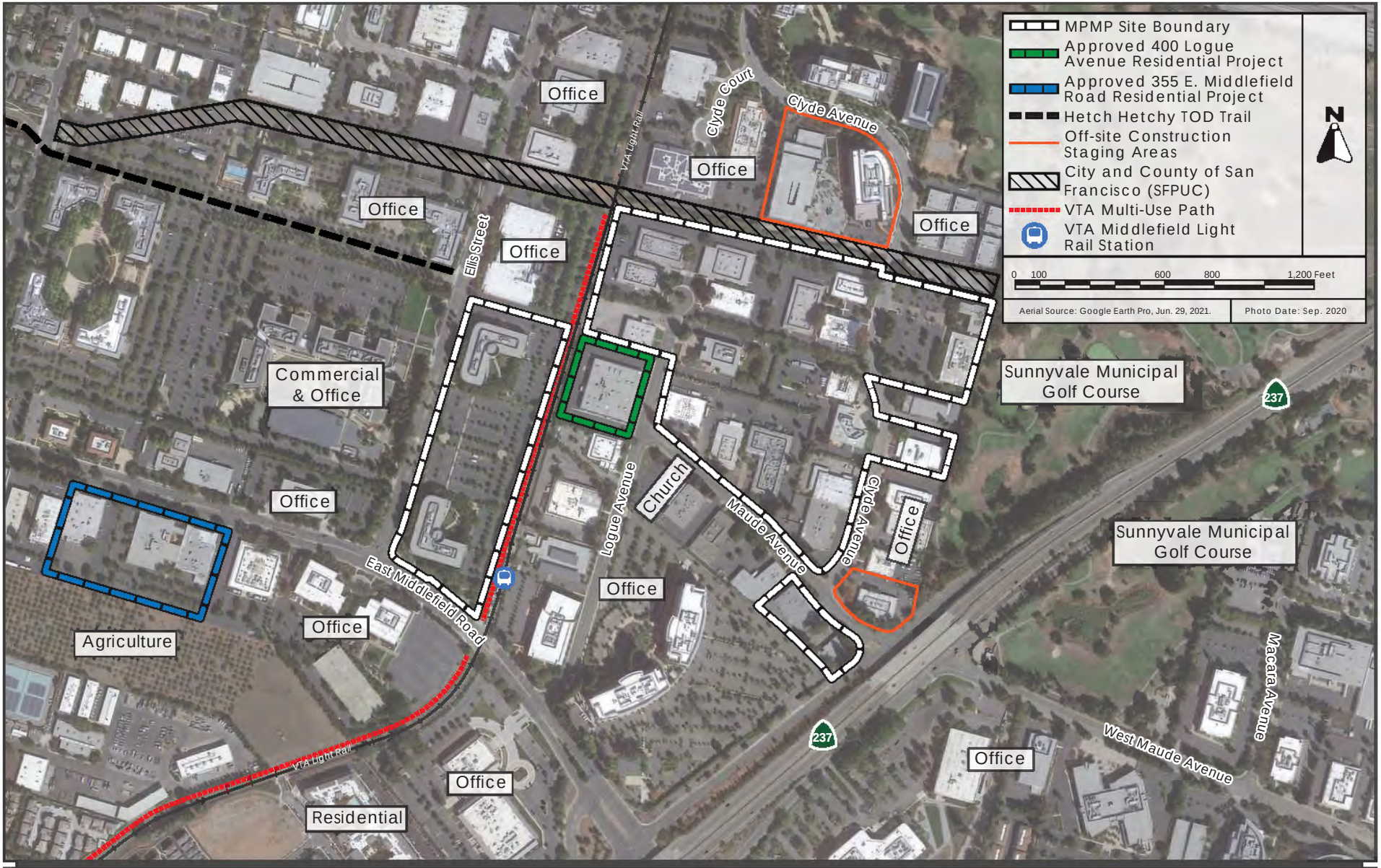
REGIONAL MAP

FIGURE 3.2-1



VICINITY MAP

FIGURE 3.2-2

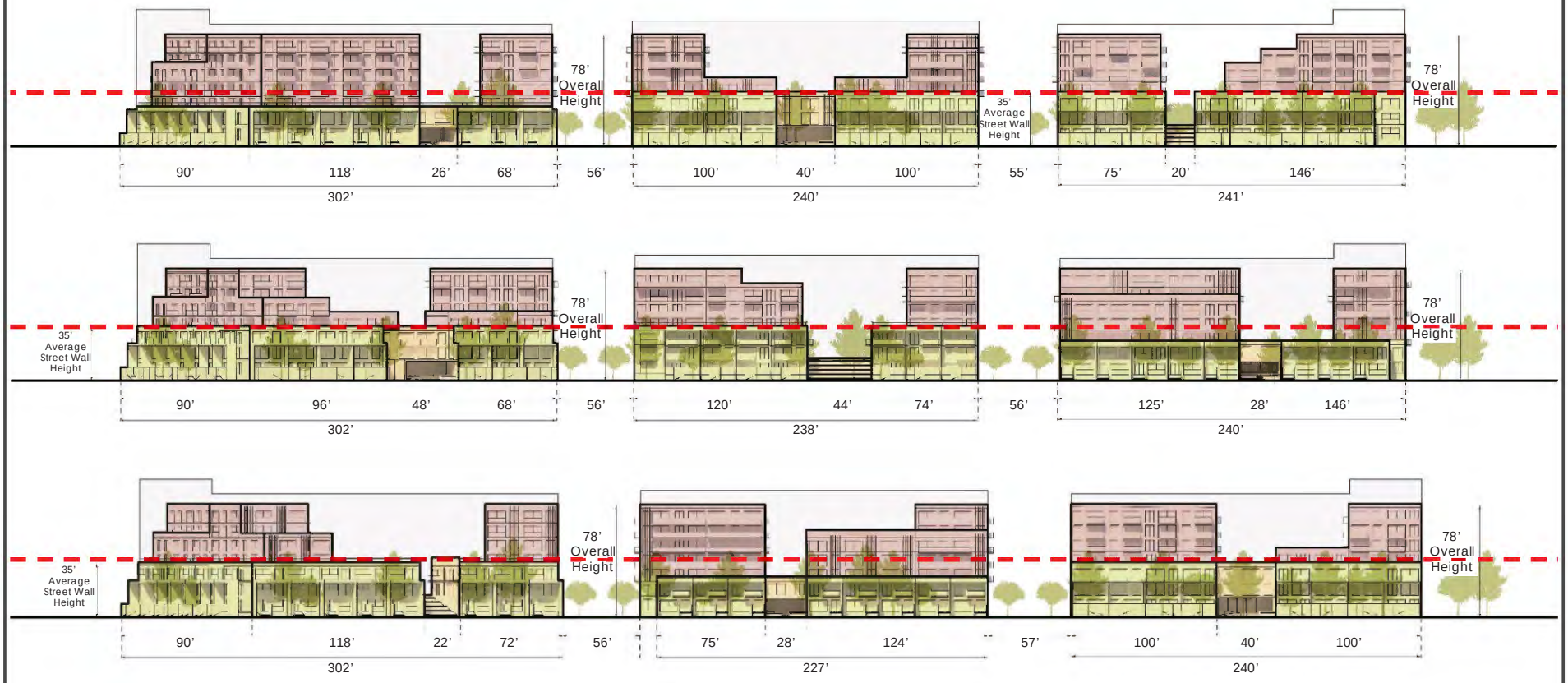


AERIAL PHOTOGRAPH OF THE MPMP SITE AND SURROUNDING AREA | FIGURE 3.2-3

Source: Google, LLC, January 2022.

CONCEPTUAL SITE PLAN

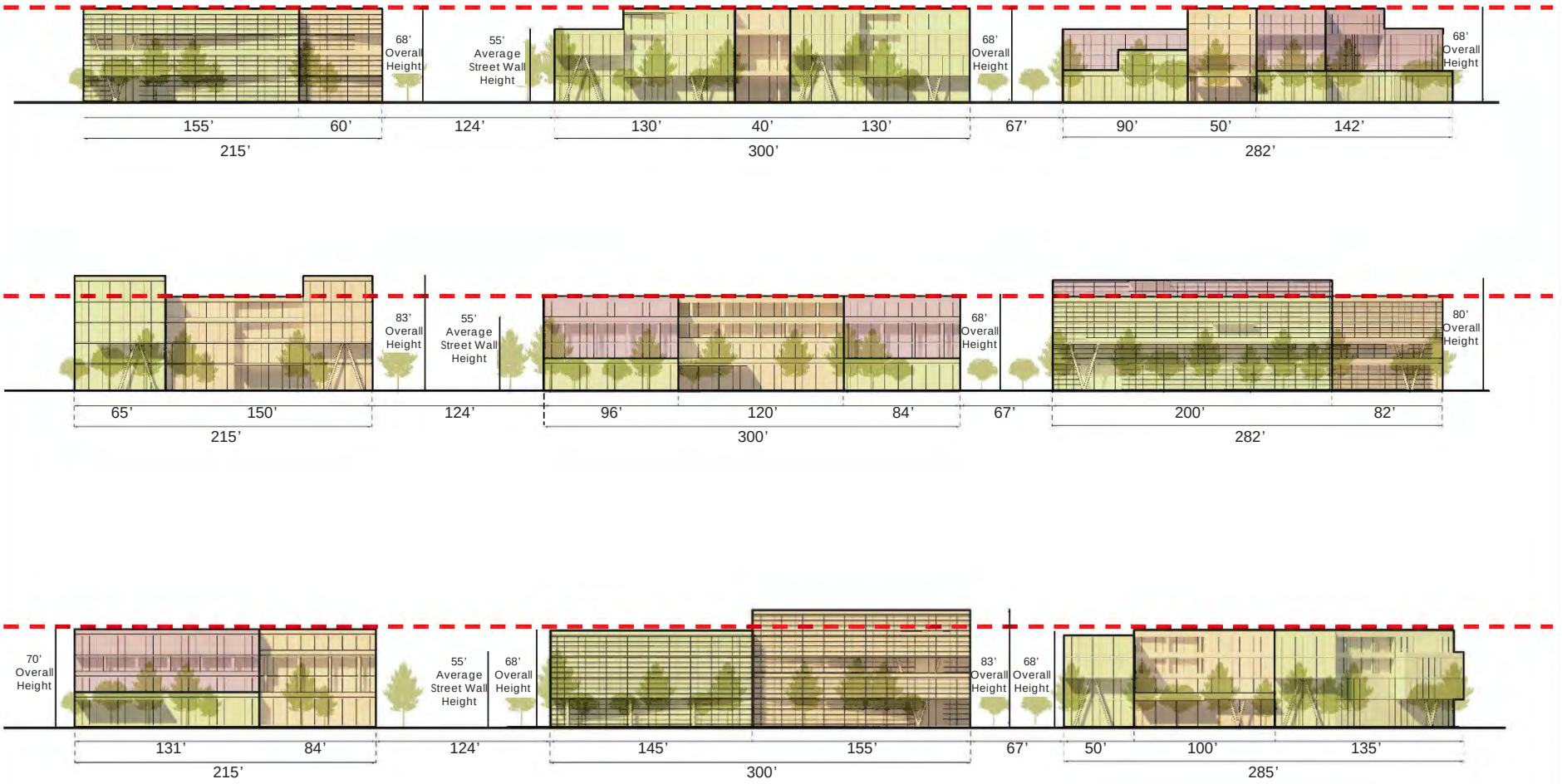
FIGURE 3.2-4



Source: Google, LLC, January 2022.

CONCEPTUAL RESIDENTIAL BUILDING ELEVATIONS

FIGURE 3.2-5



Source: Google, LLC, 2022.

CONCEPTUAL OFFICE BUILDING ELEVATIONS

FIGURE 3.2-6

3.2.2 Parks and Open Space

The MPMP project includes a network of privately-owned publicly accessible open space, dedicated public park land, and private open space. Four parks (Ellis Park, Maude Park, Canopy Walk, and Gateway Park, totaling up to 10.15 acres) are planned within the project site as described below and shown in Figure 3.2-7.

- Ellis Park would be up to 2.87-acres of POPA open space located adjacent to Buildings R1, R2, O1, and the light rail tracks. It would include a plaza area with outdoor seating, recreational amenities, flexible open area for temporary uses and events, as well as a landscaped multi-use path connecting to a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The recreational amenities may include bike parking, exercise equipment, communal/educational garden, sport courts, and a 1,000 square foot community room/restroom building. Ellis Park would be constructed by the project applicant concurrent with Buildings R1, R2, and O1.
- The project applicant would dedicate up to 7.28-acres to the City of Mountain View for the future development of the remaining public parks (Canopy Walk, Maude Park, and Gateway Park). Design-level details for Canopy Walk, Maude Park, and Gateway Park are unknown at this time; therefore, this document provides a programmatic analysis of these parks. Subsequent environmental review will be completed if required when the designs of these parks are known and proposed by the City.

The land dedicated to the City for Canopy Walk is anticipated to include a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The future overcrossing would provide connection to the Hetch-Hetchy/TOD Trail to the west, through the project site into Sunnyvale via Maude Avenue to the east. Design-level details of the bridge overcrossing are unknown at this time; therefore, this document provides a programmatic analysis of the overcrossing and subsequent environmental review will be required when design-level details are known and proposed by the City.

The MPMP also includes approximately 97,140 square feet (or 2.23 acres) of private open space around the buildings. The private open space areas would consist of landscaping and trees, some of which may be accessible to the public.

3.2.3 Utilities

Utilities for the proposed project would be provided by the City of Mountain View (for water, fire service water, wastewater, stormwater), Pacific Gas and Electric (PG&E) (for natural gas and electrical service) and/or Silicon Valley Clean Energy (SVCE) (for electrical service).[7] Additionally, as an option, the applicant is considering development of an independent private District Utility System to serve the proposed MPMP buildings and further the applicant's corporate sustainability goals. These two utility options are described in detail below and analyzed throughout this EIR.

[7] Electrical service for the proposed project and District Utilities System Option would be carbon free 100 percent renewable regardless of the service provider.

Source: Google, LLC, January 2022.

CONCEPTUAL OPEN SPACE PLAN

FIGURE 3.2-7

3.2.3.1 *Municipal Utilities*

The preferred option for the project is to connect to existing utility lines in Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue for water, fire service water, wastewater, and stormwater service. The project would connect to the existing electrical transmission infrastructure for electrical service. Ground floor retail areas of Buildings R1 and R2 would connect to existing PG&E natural gas lines in Ellis Street.[8] The remaining residential and commercial buildings on-site would be 100 percent electric. Based on the anticipated increase in load demand for the project, PG&E would install 12 kilovolt (kV) underground circuits to the project site via a connection at Ellis Street for distribution to the rest of the MPMP buildings. An existing private nitrogen gas line that runs through the north end of the project site would be relocated during project construction. Additionally, the project would include undergrounding of some existing electrical utility lines within the project boundaries. The City is currently analyzing the feasibility of extending the municipal recycled water system to the Precise Plan area. The feasibility report was not completed during the preparation of this EIR; therefore, recycled water is not included in the municipal utilities option for the project.

3.2.3.2 *District Utilities System Option*

Alternatively, the project could construct a private district utilities system with underground utility lines to serve buildings within the project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. Water and fire water service would be provided by the City. This option is being considered by the applicant to further their corporate sustainability goals and the applicant considers this option to be more efficient than business-as-usual municipal utilities systems.

Operation of the CUP would be in addition to continued operation of the City's existing utilities systems because the City must ensure the existing utilities systems can accommodate the proposed development in the event the district utilities system is offline and to plan for citywide service-capacity needs. Therefore, this EIR evaluates the proposed district utilities system facilities as "additive" to existing utility operations, rather than as a replacement for such existing utilities.

The district utilities system components are described below.

Central Utility Plant

The District Utilities System Option includes an approximately 45,000-square foot CUP, which would provide wastewater treatment, recycled water production, heating, and cooling for most of the buildings within the project site.[9] The CUP would be located within Building O1 either at ground level or in one of the below ground parking levels. Cooling towers would be constructed on the rooftop of Building O1 to provide the additional heat rejection for the CUP. The air source heat pumps installed initially on the rooftops at R1/R2 in Phase I would be relocated to the rooftop of O1 in Phase II and would be 10 feet in height. The rooftop open cooling towers would be approximately 20 feet in height. The construction phases are discussed in Section 3.2.6.

[8] Per City Code Chapters 8, 14, and 24, an exception to the City's Reach Code is required to include natural gas for retail uses.
[9] Building R4 AFF and R6 AFF would be served by municipal utilities under the District Utilities System option.

Wastewater Treatment Plant and Recycled Water Generation

The CUP would include a wastewater treatment plant that would have capacity to treat an average wet weather flow of up to 250,000 gallons of wastewater per day. The proposed wastewater treatment plant would only treat wastewater generated by the connected buildings on-site. It is estimated full build out of the MPMP would generate approximately 263,200 gallons per day of wastewater, which is 13,200 gallons per day more than the treatment capacity of the proposed wastewater treatment plant.[10]

When the treatment plant has reached its daily capacity, or in the event the on-site treatment plant is offline, the excess wastewater generated by the project would be discharged to the City's municipal wastewater conveyance system and treated at the Palo Alto Regional Water Quality Control Plant (PARWQCP) via existing sanitary sewer lines located in Ellis Street. Solids produced by the wastewater treatment plant on the project site would either be regularly hauled to an appropriate processing facility in sealed containers or combined with excess wastewater generated by the project and discharged through the City's municipal wastewater conveyance system.

Wastewater generated by the project would be discharged from each building by a pump station and conveyed via gravity sanitary sewer lines within the site to the proposed CUP/wastewater treatment plant within Building O1. Once at the wastewater treatment plant, wastewater would undergo a multi-step treatment process including screening, primary filtration, secondary biological treatment, tertiary filtration, and disinfection to remove solids, pollutants, and harmful pathogens.

Recycled water produced by the wastewater treatment plant would achieve recycled water standards as described under Title 22 of the California Code of Regulations and would be used for non-potable demands on-site including toilet flushing, cooling, and irrigation. Excess recycled water generated at the CUP would be stored in multiple tanks totaling 125,000 gallons capacity within the basement of Building O1 and could be made available to adjacent properties outside of the project site or open spaces within the project site in order to further reduce potable water use.

Appropriate measures and technology solutions would be designed and implemented to ensure objectionable odors generated by the wastewater treatment plant are within the regulatory compliance limits and do not impact the public. Odor controls would be designed using the best available technology and consistent with regulatory requirements. The most odorous processes, which result in the production of hydrogen sulfide and ammonia, would be enclosed and critically controlled. The project would also include regular monitoring of complaints and reporting on the success of odor controls to regulatory agencies. Specific solutions to odor complaints may include:

- Active ventilation (foul air blowers) to odor control units (e.g., carbon absorption, biofiltration, or ammonia scrubbers);
- House odorous processes in a ventilated enclosure;
- Wastewater screenings[11] and grit would be washed, dewatered, and compacted before being stored in enclosed, odor-proof refuse containers;
- Haul any stored residuals off-site at regular intervals; and

[10] Schaaf & Wheeler. *Middlefield Master Plan Utility Impact Study*. April 18, 2022.
[11] Wastewater screenings refers to inert materials that are present within raw wastewater and are removed in the early stages of the wastewater treatment process.

- Ferrous chloride injection for hydrogen sulfide removal in primary sedimentation tanks to provide chemically enhanced primary treatment as needed for odor control at specific wastewater treatment processes.

Buildings would be served by the on-site wastewater treatment plant and have a back-up connection to the City's municipal wastewater conveyance system, which could be used as a primary connection should future owners or building occupants choose not to operate the on-site wastewater treatment plant, or as back-up if the treatment plant is temporarily down for repairs or servicing.[12] The proposed sanitary sewer network would rely on a low-pressure sewer system independent from the stormwater and rainwater collection systems, to prevent infiltration and inflow. Wastewater would be collected at each building either via gravity sanitary sewer lines or a low-pressure sewer network and routed to the wastewater treatment plant within the CUP. The wastewater treatment plant would be installed in Phase II of construction. During Phase I of construction, a temporary connection to the municipal sewer system would be required and utilized.

Building Heating and Cooling

Heating and cooling for all buildings on-site would be provided by geothermal energy and a combination of heat recovery chillers, air source heat pumps, and cooling towers. The geothermal system would include tubing installed within dedicated bores under the various buildings and connected to pipes in the district utility distribution system, through which water circulates below the ground surface (bgs). Because ground temperatures remain relatively stable throughout the year, water within the pipes underground is warmer or cooler than the average air temperature. Therefore, when water is circulated in the pipes from beneath the ground and throughout the building, it provides a passive warming or cooling effect in the building. The ASHP would be located on the roof of Building O1 and would distribute hot or chilled water to the various buildings. Heat recovery chillers would be located in a mechanical room within Building O1.

Construction of the geothermal system would include drilling and installation of the vertical geo bores beneath each of the proposed buildings and connection of the distribution system. It is estimated that approximately 2,820 vertical bores of six inches in diameter, spaced 18 feet apart, would be drilled approximately 85 to 110 feet bgs of each proposed building.

Temporary ASHP units would be installed on the rooftop of Buildings R1 and R2 to provide temporary heating and cooling for these buildings prior to construction of the CUP (which is to be constructed in Phase II). Those temporary ASHP units would then be transferred to the rooftop of Building O1 during Phase II of construction.

[12] For the EIR analysis, Buildings R4 AFF and R6 AFF are assumed to be served by the City's municipal wastewater conveyance system to ensure impacts to the City's system were considered. In the event these buildings would be served by the on-site wastewater treatment plant, additional environmental review may be required.

Microgrid System

The proposed buildings would be all electric – no natural gas would be used, with the potential exception of Buildings R1 and R2 where natural gas connections would be provided in the ground floors for commercial/restaurant uses.[13]

It is estimated the project would use a total of approximately 35.7 million kilowatt (kWh) of electricity per year.[14] Approximately 20 percent (or 7.2 million kWh per year) of the electricity demand for the proposed project would be generated on-site by rooftop photovoltaic panels located on each of the proposed buildings under the project without District Utilities System Option. Under the District Utilities System Option, a greater rooftop surface area would be available for photovoltaic panels because mechanical equipment for building heating and cooling which is traditionally located on the roof would be located in the CUP under this project option, allowing for greater solar generation on-site. Under the project with District Utilities System Option, approximately 30 percent (or 10.7 million kWh per year) of the electricity demand for the proposed project would be generated on-site by rooftop photovoltaic panels located on each of the proposed buildings. The project's remaining electricity demand (under either option) would be supplied by the PG&E distribution network. Solar energy generated on-site would be stored within on-site battery storage units. The battery units would be located within the CUP or distributed in battery rooms at each building. If in the CUP, batteries would be located either in the basement of Building O1 or in an enclosure adjacent to the building at grade. The battery storage units would be pad-mounted and seismically restrained on the finished grade/floor per manufacturer recommendations and include proper catchment systems designed for protection from coolant leakage and fire.[15]

District Distribution System and Building Connections

In order to transport wastewater, recycled water, hot and chilled water, and electricity to each of the buildings and parks in the Master Plan, a district distribution system consisting of underground cabling and a series of below ground insulated pipes ranging from four to 16 inches in diameter, would be constructed. These cables and pipes may be direct buried or buried within an encasement (referred to as a utilidor) and would require undercrossing the right-of-way and property owned by public agencies such as the City of Mountain View and the VTA. The underground cabling and pipes would connect and provide service between the buildings, CUP, and microgrid system. Additionally, each building would include a connection room with pumping and energy transfer equipment for the thermal network as well as break-out tank and backflow preventers for the recycled water supply. Each connection room would also include metering and control equipment to track overall consumption, monitor efficiency, and enable integrated control.

[13] Per City Code Chapters 8, 14, and 24, all new construction buildings are required to be electric. Natural gas may be used for commercial spaces with specialized equipment that cannot operate with electric service (e.g., a restaurant with a pizza oven) subject to City approval.

[14] Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California*. April 19, 2022.

[15] Battery space selection and design shall be coordinated with the City Fire Marshall for fire hazard protection.

3.2.4 Emergency Generators

The project would include 11 emergency back-up generators located within the basements of Buildings R1, R3 through R5, R4 AFF, R6 AFF and O1 through O5. The back-up generator in Building R1 would provide back-up power to Buildings R1 and R2. All generators would be diesel powered. The six generators located within the proposed residential buildings would have a power rating of 500 kW and the generators within the proposed office buildings would have a power rating of 900 kW.

3.2.5 Green Building and Emissions Reduction Features

Consistent with the Development Standards and Bonus Floor Area Ratio (FAR) Standards for non-residential development projects within the Precise Plan area, the proposed office buildings would meet the intent of Leadership in Energy and Environmental Design (LEED) Platinum. Residential buildings requesting Bonus FAR would achieve the equivalent of a GreenPoint rating of 120 points or better and must use submetering per unit, or other appropriate technology, to track individual energy use for each residential unit. All new buildings are required to install dual plumbing for potable and recycled water use, per the City's current codes. In addition to the Green Building standards required by the Precise Plan, the preferred project (i.e., the project without the District Utilities System Option) would also incorporate the following green building features:

- **Photovoltaic System:** At least 50 percent of the rooftops of each building within the project site would be equipped with rooftop photovoltaic systems. It is estimated that approximately 20 percent of the project's electricity demand would be provided by solar power generated on-site.
- **Water Efficient Landscaping:** Water efficient irrigation systems would support native, drought tolerant plants compatible with recycled water through the project site.

If the District Utilities System Option is selected, the project would include the following additional green building measures:

- **Geothermal System:** The project would include a district thermal system which would provide heating and cooling to the proposed buildings via a closed loop system to optimize efficiency as described in 3.2.3.2 above.
- **Microgrid System:** Each building would be equipped with a rooftop photovoltaic system. Solar energy generated on-site would be transported via electric lines below ground to the battery units in Building O1. It is estimated that approximately 30 percent of the project's electricity demand would be provided by the microgrid system.
- **Water Efficient Building Systems:** The project would include an on-site wastewater treatment plant which would supply recycled water to the project. All buildings would be dual plumbed and served by recycled water supplies for mechanical operations, irrigation, and toilet flushing.

3.2.6 Construction Activities and Phasing

Construction activities associated with the project would include demolition, site preparation, grading and excavation, building construction, architectural coatings, paving, and landscaping. The build out of the MPMP project would occur over four phases and take a total of approximately 8.5 years.[16] During this time, construction activities would occur between 7:00 a.m. and 6:00 p.m., Monday through Friday, and Saturday and Sunday only with written approval of the Chief Building Official per City Code (Chapter 8).[17] As noted in Table 3.2-2, the maximum depth of excavation required would range from five to 50 feet bgs for the proposed buildings and 85 to 110 feet bgs for geothermal bores under the District Utilities System Option. The geothermal bores would be drilled using the mud rotary drilling technique.[18]

Approximately 749,425 cubic yards of soil would be exported from the site to accommodate the proposed below ground parking, building foundations and footings, and utilities. If the District Utilities System Option is selected, the project would require export of up to an additional approximately 40,000 cubic yards of soil. Construction staging and parking would primarily occur on-site and on two adjacent parcels (APNs: 160-57-016 and 160-55-036) located at 405 Clyde Avenue and 580 Clyde Avenue. A summary of the proposed phasing is shown in Table 3.2-2 below.

Table 3.2-2: Construction Phasing for Proposed Project & District Systems Option

Phase	Buildings to be Constructed	Estimated Start Date	Estimated End Date
I	R1, R2, R6 AFF, and the southern half of Ellis Park	11/1/2022	05/01/2025
II	O1[1], O2, and northern half of Ellis Park	11/01/2024	07/13/2029
III	R3, R4, R4 AFF, and R5	01/01/2026	02/01/2030
IV	O3, O4, O5, P1, and P2	04/01/2026	04/19/2031

[1] If the District Utilities System Option is constructed, the CUP would be constructed with Building O1. The geothermal and wastewater treatment plant would be delivered to the site pre-manufactured and would be assembled within Building O1.

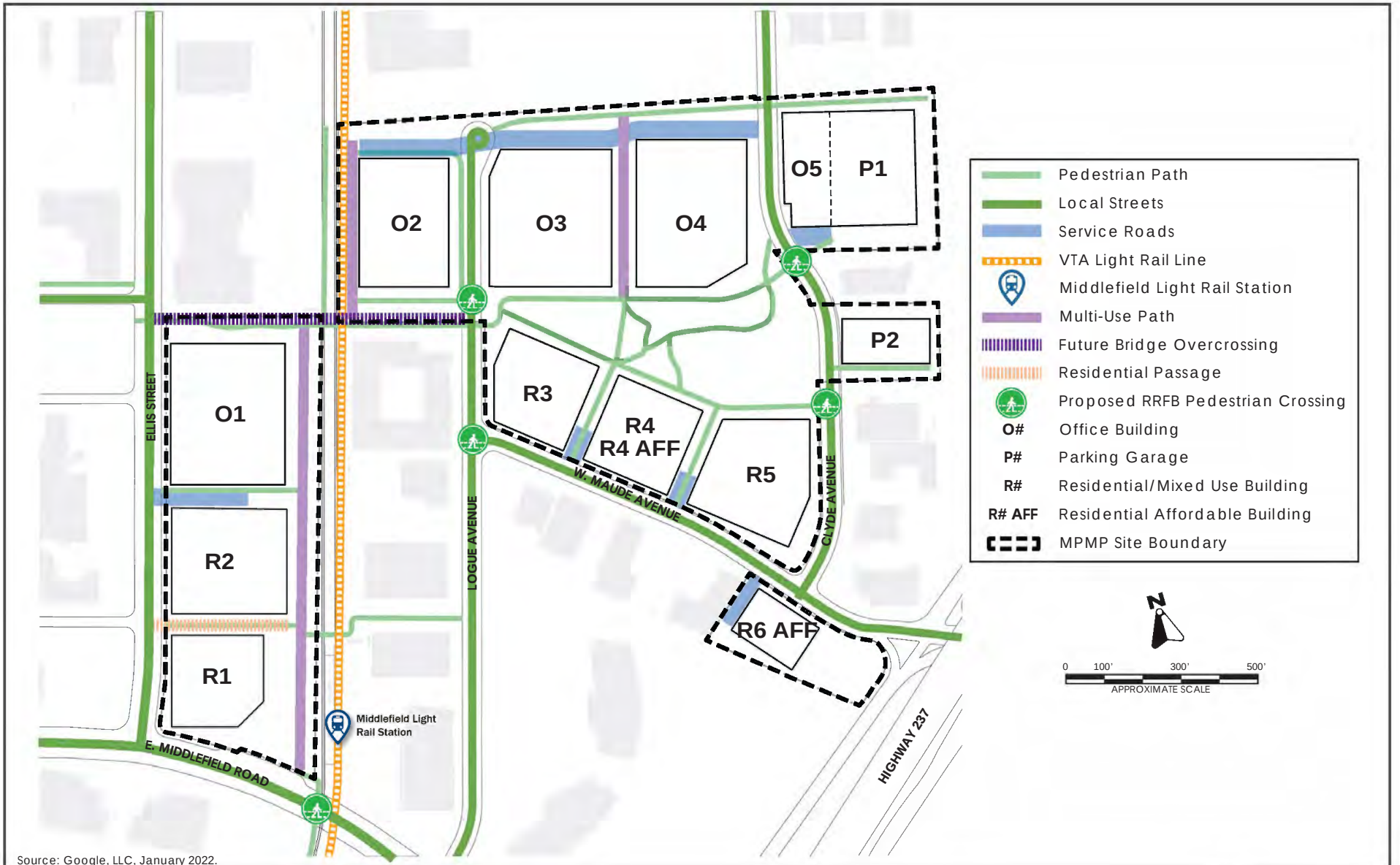
[16] While construction activities would take a minimum of 8.5 years to complete, the project includes a Development Agreement that allows the applicant to act on project entitlements for up to 20 years. The EIR analyses, including the construction air quality and noise analyses, conservatively assumes approximately 8.5-year construction period.
[17] City of Mountain View. City Code Chapter 8, Article VI, Section 8.70. Accessed October 26, 2021.
[18] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021. Page 3.

3.2.7 Site Access, Circulation, Transit, and Parking

A site access and circulation map is shown on Figure 3.2-8. Vehicle access to the project site would be provided via driveways on Ellis Street, East Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue. Six separate private service roads for direct parking access, delivery/service trucks, garbage and recycling collection trucks, shuttle buses, and emergency vehicles are proposed throughout the project site and would be accessible via two points on Ellis Street (a private service street to access O1 and R2 and a driveway to access R1 and R2 parking), two service streets on Maude Avenue, two service streets off Logue Avenue (one north of Building O2 and one north of Building O3 that would provide connection to Clyde Avenue), and one service street off Clyde Avenue for Building O5/P1. Parking garages at P2 and R6 AFF would have private driveways with direct access from the adjacent public street to the respective parking and service collection areas.

Pedestrian and bicycle access to and around the site would be provided via a network of new multi-use paths throughout the site. Wider paths for pedestrian and bicycle access to the site would be provided in the form of shared facilities and sidewalks on the six new private service streets, new multi-use paths and greenways in between buildings where no service street is located, and improved and new sidewalks and bike lanes along existing public streets (as shown on Figure 3.2-8). Additionally, the project would include:

- Dedication of park land for a future bicycle and pedestrian bridge overcrossing of the light rail line to allow the expansion of a park trail network;
- Installation of new midblock crossings and modifications to existing midblock crossings;
- Improvements to an existing bus stop on Middlefield Road adjacent to the Light Rail Station including:
    - A new midblock pedestrian crossing to connect the north and south ends of an existing VTA multi-use path along the west side of the light rail tracks;
    - A new bus shelter and bench;
    - A driveway with bollards to restrict access to emergency vehicles;
    - A 120-foot in-lane bus stop or bus duck-out (out-of-lane) stop (to be decided)*;*
    - A raised protected bike lane along the bus stop or buffered on-street bike lane (to be decided)*;*
    - A bus island for loading/unloading passengers (to be decided); and
    - Maintaining the existing stop location or shifting the stop westward toward Ellis Street intersection (to be decided);
- Construction of wider sidewalks with landscaping along project frontages and new private service streets; and
- Bicycle improvements including construction of Class II buffered on-street bike lanes on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, and a Class IV protected bike lane along Middlefield Road in front of the project.



Source: Google, LLC, January 2022.

CONCEPTUAL CIRCULATION PLAN

FIGURE 3.2-8

The midblock crossing on Middlefield Road near the Middlefield Light Rail Station would require separate approval by the California Public Utilities Commission in coordination with the VTA. The project would include a total of 4,528 spaces within the proposed office, parking structure, and residential mixed-use buildings.[19] Refer to Table 3.2-1 above for a breakdown of the parking spaces by building/parking structure. Short and long-term bicycle parking would also be provided within or adjacent to the entrances of each office and residential building and would meet the Precise Plan bicycle parking requirements (refer to Table 3.2-3).

Table 3.2-3: Precise Plan Bicycle Parking Requirements

Land Use	Short-Term	Long-Term
Residential	1 space per 10 units	1 space per unit
Office	1 space per 20,000 square feet or minimum 4 spaces, whichever is greater	1 space per 2,000 square feet or minimum 4 spaces, whichever is greater
Neighborhood Commercial Uses (Retail/Community/Civic Uses)	4 per 5,000 square feet or minimum 2 spaces, whichever is greater	1 per 5,000 square feet or minimum 2 spaces, whichever is greater

Source: City of Mountain View. *East Whisman Precise Plan.* November 2019. P. 90.

3.2.8 Heritage Trees and Landscaping

The project site contains 1,032 trees, 310 of which are Heritage trees as defined in the City Code.[20] Of the total trees, 32 are City street trees and 35 are off-site trees in close proximity of the project. There are a total of 77 tree species on-site (refer to Appendix D for additional details regarding tree species, size, and health). Implementation of the project would result in the removal of up to 823 existing trees (approximately 80 percent of the trees), including up to 310 Heritage trees. The project would plant a minimum of 620 new trees throughout the project site and along the project frontages on East Middlefield Road, Clyde Avenue, Maude Avenue, Logue Avenue, and Ellis Street, which is a minimum replacement of two new trees to be planted for every one Heritage tree removed in accordance with Section 32.35 of the City Code. Some of the tree species to be planted include alder, oak, and sycamore trees. In addition to new trees, the project includes new landscaping consisting of native and/or drought-tolerant plants. If the District Utilities System Option is selected, the landscaping for privately-owned parcels within the project site would be irrigated using recycled water (not potable water); however, some potable water would be used until the recycled water infrastructure is constructed in Phase II.

[19] Parking is identified as a maximum and may be less if the project parking program includes unbundled residential parking, shared parking, or other measures.

[20] A Heritage Tree is defined as any one of the following: 1) a tree which has a trunk with a circumference of 48 inches or more measured at 54 inches above natural grade; 2) a multi-branched tree which has major branches below fifty-four (54) inches above the natural grade with a circumference of 48 inches measured just below the first major trunk fork; 3) a quercus (oak), sequoia (redwood), or cedrus (cedar) tree with a circumference of 12 inches or more when measured at 54 inches above natural grade; 4) a tree or grove of trees designated by resolution of the city council to be of special historical value or of significant community benefit. Source: City of Mountain View. *City Code Chapter 32 Article II.* May 24, 2021.

3.2.9 Transportation Demand Management

The Precise Plan requires office and R&D projects with new construction or additions greater than 10,000 square feet and all new development subject to parking maximums (including residential) shall provide a TDM plan with programs and measures to reduce vehicle trips. Pursuant to the Precise Plan, the proposed project is required to incorporate the following TDM measures:

Nonresidential TDM Requirements

- **TDM Plan Site Requirements:** The following site design features shall be in the project to adhere to the required trip cap:
    - Priority parking for carpools and vanpools.
    - Bicycle parking and shower and changing facilities as defined by Chapter 3 of the Precise Plan.
    - Maximum parking and carshare parking as defined by Chapter 3 of the Precise Plan.
    - Site design that supports alternative modes, such as orienting building entrances toward sidewalks, transit stops, and bicycle facilities.
- **TDM Plan Operational Requirements:** The TDM plan shall include the following minimum operational measures though other measures may be needed to achieve the required trip caps:
    - The property owner shall join the Mountain View Transportation Management Association (MVTMA). Tenants may join in lieu of property owners, but if a tenant is unable to maintain membership, the property owner shall be responsible.
    - Monetary incentives for alternative modes, such as subsidized transit passes, bike-share or carpools for office employees.
    - Monetary incentives for alternative modes, such as subsidized transit passes or bike-share and/or unbundled parking for residents.
- **TDM Plan Alternative Requirements:** The TDM plan may include other measures to reach required trip targets, including but not limited to:
    - Shared bicycles if a bikeshare service is not available nearby
    - Parking cash-out, paid parking, or other parking monetization
    - Guaranteed ride home program
    - Telecommute support
    - Alternative work schedules
- **Parking Rationale:** The TDM plan shall demonstrate the parking provided is adequate to serve the needs of the development and shall consider the project's trip-reduction measures.
- **Implementation:** The TDM plan shall identify how the required measures would be implemented and describe other measures proposed to meet or exceed trip reduction goals.
- **Trip Cap:** The Precise Plan established a long-term vehicle trip cap across the entire East Whisman area of 0.83 a.m. and 0.72 p.m. peak-hour trips per 1,000 net new square feet across all office and R&D sites.[21] This area wide trip cap is implemented through a site-specific trip

[21] The Precise Plan identifies an area-wide average of 0.95 a.m. and 0.88 p.m. peak-hour trips per 1,000 square feet of office and R&D sites to minimize vehicle trips into and out of East Whisman gateways. The 600 Ellis Street transportation analysis, prepared by Fehr Peers dated September 2020, analyzed the combination of existing (legacy)

cap, as established through the Precise Plan's Office Trip Cap Phasing Program and Administrative Guidelines. The proposed project would implement a trip cap of 1,097 a.m. peak hour trips and 952 p.m. peak hour trips.

- **Monitoring and Enforcement:** Annual monitoring of the TDM plan shall be conducted through a third party and paid for by the property owner or their representative. It shall include driveway counts and a survey of employee travel modes.

Residential TDM Requirements

- **TMA Membership:** New residential developments with at least 100 units shall become Mountain View TMA members.
- **TDM Plan Site Requirements**: New residential development shall include the following TDM site measures:
    - Maximum parking and carshare parking as defined by Chapter 3 of the Precise Plan
    - Bicycle parking as defined by Chapter 3 of the Precise Plan
    - Residential projects over 100 units shall provide a shared, common, collaborative workspace available to residents and their guest, which can be offered in partnership with nearby residences or businesses.
    - Site design that supports alternative modes, such as orienting building entrances toward sidewalks, transit stops, and bicycle facilities
    - Accessible, secure storage space for grocery and package delivery shall be provided in multifamily development.
- **TDM Plan Operational Requirements:** The TDM plan shall include the following operational measures, or equivalent:
    - Property managers or homeowner associations (HOAs) shall provide access to shared bicycles if bikeshare service is not available nearby.
    - Property managers or HOAs shall provide local transportation information to all residents through a website, leasing office, or initial leasing information.
    - Property managers or HOAs shall support Safe Routes to Schools programs including facilitating parent gatherings and coordination of walking schools buses and/or bike trains.
    - Monetary incentives for alternative modes, such as subsidized transit passes or bike-share for residents and/or unbundled parking.
- **Parking Rationale:** The TDM plan shall demonstrate the parking provided is adequate to serve the needs of the development and shall consider the project's trip-reduction measures.
- **TDM Monitoring:** Annual TDM monitoring shall be conducted by a third party and paid for by the property owner or their representative. It shall include parking counts to measure the peak parking demand and resulting parking rate. The monitoring results shall be submitted to the City.

office development not subject to TDM requirements and future new office development that would be subject to TDM requirements in order to refine the trip generation rate necessary for future new office development to be compliant with the gateway trip cap volumes. The resulting trip cap for new office development is 0.83 a.m. and 0.72 p.m., which includes the incorporation of TDM measures required by the Precise Plan.

In addition to TDM measures required in the Precise Plan, the project would implement the following measures:

- **Design Elements:** The project would fund and construct (or some combination of both) area bicycle and pedestrian network improvements on project site street frontages along Ellis Street, East Middlefield Road, and Logue, Maude, and Clyde Avenues. The mixed-use character of the project would reduce the need for vehicle trips due to increased employment and housing opportunities within a half-mile of the existing Middlefield light rail station combined with potential on-site food, retail, services, and recreation opportunities.
- **Operational Elements:** The project would include commuter shuttle services for office uses, carshare services, first-mile/last-mile micro mobility services, an on-site transportation coordinator, flexible work schedules for employees, marketing and information for the proposed TDM program, pre-tax commuter benefits, biking incentives, bike buddy program, bike loaner program, rideshare matching services, and an expanded carpool matching program. Additional measures such as unbundled residential parking and shared parking may also be considered.

3.3 CONSISTENCY WITH GENERAL PLAN DESIGNATION AND ZONING DISTRICT

3.3.1 General Plan

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan. The General Plan High-Intensity Office designation supports major commercial operations, such as corporations, financial and administrative offices, high-technology industries, and other scientific facilities, as well as supporting retail and other service uses. The General Plan East Whisman Mixed-Used designation promotes a mix of offices, neighborhood-serving commercial, multi-family residential, lodging, and small businesses in the core of the East Whisman area.

3.3.2 Zoning

The project site is zoned P-41 East Whisman Precise Plan (EWPP, Precise Plan). Most of the project site is within the Precise Plan's Mixed-Use Character Area, which is defined as a transit-oriented district with a mix of neighborhood commercial, residential, and office uses where the highest intensity buildings are located near the Middlefield light rail station. This designation allows a mix of low, moderate, and high-intensity uses of office, R&D, multi-family residential, hotel, and retail services. The eastern edge of the project site (east of Clyde Avenue) is located within the Employment Character Area North and is intended for a mix of moderate and higher-intensity office uses with some opportunities for hotels and neighborhood commercial uses off of Ellis Street.

The project proposes to construct approximately 632,355 square feet of net new office space, up to 1,900 new residential units, up to 30,000 square feet of new retail space, and up to 20,000 square feet of community/civic space, representing 31.6 percent of the two million net new square feet of planned office development, 38 percent of the planned 5,000 residential units, and 50 percent of the planned 100,000 net new square feet of neighborhood commercial space previously identified in the adopted Precise Plan. The project proposes the type and scale of development envisioned in the Precise Plan for the Mixed-Use and Employment Character Areas and would be required to comply with the applicable standards and guidelines in the Precise Plan.

Per the Precise Plan, the maximum building heights allowed on the project site ranges across the low, moderate, and high intensity subareas. The Precise Plan provides some additional height allowances, which the project is incorporating (see Table 3.3-1 below).

Table 3.3-1: Precise Plan Maximum Allowed Building Heights by Character Area

Character Areas	Low Intensity Subarea	Medium Intensity Subarea	High Intensity Subarea
Mixed-Use Character Area			
Max. Building Height[1]	N/A	75 feet	95 feet
Max. Building Height with Park Dedication[2]		90 feet	110 feet
Max. Building Height with Park Dedication and Ground-Floor Neighborhood Commercial[3]		95 feet	115 feet
Max. Building Height in High-Rise Core[4]	N/A		135 feet
Employment Character Area North			
Max. Building Height[1]	60 feet	N/A	N/A
Max. Building Height with Ground-Floor Neighborhood Commercial[3]	65 feet		

[1] Up to an additional 10 feet is permitted for architectural features for rooftop amenities (with a provisional use permit) or at key corners. Elevator overruns may be allowed additional height for rooftop access.

[2] Up to 10-15 feet of additional height for one typical additional story is permitted if land is dedicated for a public park or other public facilities.

[3] Up to 5 feet of additional height is allowed for buildings with ground-floor neighborhood commercial uses

[4] Residential/Mixed-Use in High-Intensity Subarea can propose up to 135 feet in height, inclusive of all additional height allowances/exceptions. No building height can exceed 182 feet above mean sea level per the adopted Moffett Field Comprehensive Land Use Plan (CLUP).

Source: City of Mountain View. East Whisman Precise Plan. November 5, 2019. Pgs. 57 – 59.

The Precise Plan establishes a "base" FAR allowance per subarea for residential/mixed-use and non-residential uses, in addition to a maximum FAR. The "base" FAR for the project site varies from 0.40 for non-residential development to 1.0 for residential/mixed-use development. The maximum FAR allowed ranges from 0.5 to 1.0 for non-residential development and 2.5 to 3.5 for residential/mixed-use development. Any FAR above the "base" is considered "bonus" FAR and subject to additional green building requirements, community benefit requirements, and compliance with the Jobs-Housing Linkage Program as outlined in the Precise Plan.

Table 3.3-2: Allowed and Proposed FAR by Precise Plan Character Area				
Precise Plan Subarea	**Allowed Non-Residential FAR**	**Proposed Non-Residential FAR[1]**	**Allowed Residential/Mixed-Use FAR**	**Proposed Residential/Mixed-Use FAR[2]**
Mixed-Use Character Area				
High-Intensity Subarea	Base: 0.4 Max: 1.0	1.0	Base: 1.0 Max: 3.5	1.66
Medium-Intensity Subarea	Base: 0.4 Max: 0.75	0.75	Base: 1.0 Max: 2.5	1.12
Low-Intensity Subarea	N/A		N/A	
Employment Character Area North				
Low-Intensity Subarea	Base: 0.4 Max: 0.5	0.39	N/A	

[1] Nonresidential FAR includes all building square footage above-grade, excluding above-grade parking, and including the CUP in the project with district utility system option.

[2] Residential/Mixed-Use FAR includes all building square footage above grade, including above-grade parking.

Source: City of Mountain View. *East Whisman Precise Plan*. November 5, 2019. Pp. 68, 72.

The project proposes non-residential FARs ranging from 0.39 to 1.0 and residential/mixed-use FARs ranging from 1.12 to 1.66 with maximum building heights of 16to 125 feet. The project's cumulative combined FAR is 1.46 over the 40-acre project site. The project is proposing to use "bonus" FAR for both residential and non-residential development as permitted in the Precise Plan.

3.4 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of the objectives of the project. The objectives for this project are as follows:

a) Develop the project area with residential and office uses at an increased density and FAR (consistent with the Character Areas development targets in the Precise Plan) near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit.
b) Redevelop the project site with approximately 1,900 new residential units to better balance the City's jobs-housing ratio.
c) Provide approximately 1.3 million square feet of office uses consistent with the Precise Plan and the following General Plan policies:
    - *LUD 3.1: Land use and transportation*. Focus higher land use intensities and densities within a half-mile of public transit service, and along major commute corridors;
    - *LUD 3.8*: *Preserved land use districts*. Promote and preserve commercial and industrial districts that support a diversified economic base;
    - *LUD 9.2: Compatible transit-oriented development*. Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations; and
    - *LUD 14.3: Business attraction*. Attract innovative and emerging technology businesses.
d) Develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan's Jobs-Housing Linkage Program.
e) Implement a robust TDM plan with trip-reduction measures and on-site amenities that promote walking, bicycling, use of shuttles, transit and other transportation alternatives, consistent with the requirements of the Precise Plan.
f) Support VTA's investment in light rail transit by providing transit-oriented residential and commercial development that facilitates pedestrian and bicycle access to and ridership of transit.
g) Implement sustainable building practices promoting energy and water efficiency consistent with the Precise Plan.
h) Dedicate up to approximately seven acres of land to the City for the creation of new public parks to serve the existing uses, the proposed project, and the broader community.
i) Support both Precise Plan goals and City Council and staff guidance through the delivery of people-centric community benefits that help people live, work, play, and stay in Mountain View, including measures that support:
    - Housing opportunities and anti-displacement;
    - Retention and growth of small businesses and workforce development;
    - Safe and expanded connections for pedestrians and bicyclists, while consolidating infrastructure for vehicles; and
    - Quality open space for recreation, relaxation, and entertainment.

3.5 USES OF THE EIR

This EIR provides decision makers in the City of Mountain View and the general public with environmental information to use in considering the proposed project. It is intended that this EIR be used for the discretionary approvals necessary to implement the project, as proposed. These discretionary actions may include, but are not limited to, the list below. This list also includes ministerial permits and approvals.

Agency	Permit/Review Required
City of Mountain View	Discretionary Approvals of: • A Master Plan • A Vesting Tentative Map • Provisional Use Permits • Planned Community Permits • Development Review Permits • Heritage Tree Removal Permits • Change of Use Permits • A Development Agreement Ministerial Approvals of: • Demolition Permits • Grading Permits • Building Permits • Fire/Environmental Protection Permits • Offsite Improvement Plans (including work within the right-of-way, Excavation and Encroachment Permits or Agreements) • Wastewater Discharge Permits (for discharge of domestic wastewater from the onsite treatment plant)
Bay Area Air Quality Management District (BAAQMD)	Permit to construct and authority to operate backup diesel generators, district water reuse facility, and any other stationary sources of emissions.
California Department of Transportation (Caltrans)	Encroachment Permit if within Caltrans right-of-way.
Federal Aviation Administration (FAA)	Determination of No Hazard and/or execution of an avigation easement as deemed necessary.
Federal Energy Regulatory Commission	Potential approval of elements of proposed microgrid distribution network and on-site generation and storage facilities.
US Environmental Protection Agency (EPA)	Review of site contamination related to the Middlefield Ellis-Whisman Superfund Site or other site contamination oversight, including any required remediation actions or protective measures for new construction.
Santa Clara County Department of Environmental Health (DEH)	Review and permits may be required if wells or soil borings are required (for environmental clean-up, for example) or if abandoned wells or septic tanks are proposed to be destroyed during construction of the project.

Agency	Permit/Review Required
San Francisco Regional Water Quality Control Board (RWQCB)	• Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with construction activity. Notice of Intent for construction activities Stormwater Pollution Prevention Plan (SWPPP) for on-site stormwater management and pollution prevention, discharge permit for discharge of municipal wastewater from on-site wastewater treatment plant, industrial discharge permit for discharge of residuals from the on-site wastewater treatment plant, approval of dual plumbed buildings for indoor recycled water use, approval of Title 22 Engineering Report for Recycled Water, Waste Discharge requirements for Water Reclamation Facility and recycled Water Use. • Lead on the permitting process for the onsite wastewater treatment plant and will approve the Title 22 Engineering Report for Recycled Water. • Waste Discharge Requirements for Water Reclamation Facility and Recycled Water Use. • Review of site contamination related to the Hewlett-Packard and E/M Lubricants TCE groundwater plume. This oversight may be deferred to another agency by the RWQCB.
State Water Resources Control Board – Division of Drinking Water	• Approval for dual plumbed buildings in indoor recycled water use • Review of Title 22 Engineering Report for Recycled Water
City of Sunnyvale	Encroachment Permits or Agreements for work within Sunnyvale's public right-of-way
PG&E	Agreement for microgrid system (Project with District Utilities System Option only)
Valley Transportation Authority (VTA)	Review and approval of encroachment of utilities under the VTA light rail lines, inspection of bus stop modifications on Middlefield Road, and applicable permits for the proximity of construction activity to the light rail station, including safety upgrades.
Valley Water (SCVWD)	Approvals of proposed geobores. Review and approval may be required if wells are required or if abandoned wells are proposed to be destroyed during construction of the project.
California Public Utilities Commission (CPUC)	Approval of permits (potential GO-88B process) for the midblock crossing of Middlefield Road at Middlefield Light Rail Station, and safety upgrades. **S**ome approvals may be in tandem with VTA approval.

SECTION 4.0 NEW SIGNIFICANT ENVIRONMENTAL EFFECTS

As noted in Section 2.0 Introduction above, the proposed project would implement a large portion of the East Whisman Precise Plan, which was analyzed in a Program EIR that was certified by the City in 2019.

Per Section 15162 of the CEQA Guidelines, where an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines that substantial changes are proposed in the project which will involve new or more severe impacts; new circumstances involve new or more severe impacts; or new information of substantial importance is available, requiring new analysis or verification.

Section 15163 of the CEQA Guidelines provides that the lead agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

The existing conditions and overall amount and location of development in the Precise Plan remains the same with the proposed project as analyzed in the Precise Plan EIR. Therefore, the cumulative, growth inducing, and irreversible impacts remain the same with the proposed project as disclosed in the Precise Plan EIR. This section includes a discussion of the additional significant effects of the project on air quality which were not previously disclosed in the Precise Plan EIR. The discussion for air quality includes the following subsections:

Environmental Setting – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.

Impact Discussion – This subsection includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts. The impact discussions apply to both the project with and without the District Utilities System Option, unless expressly stated otherwise.

- **Project Impacts** – This subsection summarizes the impact conclusions from the Precise Plan EIR and discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact AIR-1 answers the first checklist question in the Air Quality section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM AIR-1.3 refers to the third mitigation measure for the first impact in the Air Quality section.

- **Cumulative Impacts** – This subsection discusses the project's cumulative air quality impacts. "Cumulative impacts," as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant, effects taking place over a period of time. CEQA Guideline Section 15130 states an EIR should discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." The discussion does not need to be in as great detail as is necessary for project impacts, but is to be "guided by the standards of practicality and reasonableness." The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

  The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130[b]). To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document (CEQA Guidelines Section 15130[b][1]). For cumulative air quality impacts, a list of past, present and future projects was used to assess the potential for new cumulative impacts and the project's contribution to existing cumulative air quality impacts.

  The analysis must determine whether the project's contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3). The cumulative impacts discussion for each environmental issue accordingly addresses the following issues: 1) would the effects of all of past, present, and probable future (pending) development result in a significant cumulative impact on the resource in question; and, if that cumulative impact is likely to be significant, 2) would the contribution from the proposed project to that significant cumulative impact be cumulatively considerable.

The impact discussions for all other environmental resources are included in Section 5.0 Previously Identified Effects, because no new or substantially more severe impacts associated with those environmental resources were identified beyond those previously analyzed in the Precise Plan EIR.

4.1 AIR QUALITY

The following discussion is based, in part, on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. This report is attached as Appendix C.

4.1.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for air quality has not substantially changed since the certification of the Precise Plan EIR.

4.1.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed based on six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[22] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health effects are summarized in Table 4.1-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.1-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

[22] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$).

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or in the deepest regions of the lungs (most susceptible to injury).[23] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.1.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead. The national ambient air quality standards (NAAQS or "national standards") are classified as either primary or secondary. Primary standards are meant to provide public health protection, including protecting the health of

[23] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed August 19, 2021. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. California has adopted its own air quality standards, known as the California ambient air quality standards (CAAQS or "state standards"). California's ambient standards are at least as protective as the NAAQS and often more stringent. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel-fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[24]

[24] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to air quality. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 20.5	**Truck access.** Plan industrial and commercial development to avoid truck access through residential areas and minimize truck travel on streets designated primarily for residential access by the General Plan.
NC 20.6	**Air quality standards.** Protect the public and construction workers from construction exhaust and particulate emissions.
INC 20.7	**Protect sensitive receptors.** Protect the public from substantial pollutant concentrations.
INC 20.8	**Offensive odors.** Protect residents from offensive odors.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. P. 137

East Whisman Precise Plan

The Precise Plan contains guiding principles, guidelines, and design standards that relate to air quality by encouraging increased density and a mix of uses near transit stations, improved pedestrian and bicycle facilities, and aggressive vehicle trip reductions for new and existing office development that also reduce air pollutant emissions by reducing vehicle miles traveled.

4.1.1.3 *Existing Conditions*

The project site is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. The Bay Area, as a whole, does not meet state or federal ambient air quality standards for ground level O_3, and $PM_{2.5}$, nor does it meet state standards for PM_{10}. The Bay Area is considered in attainment or unclassified for all other pollutants.[25]

The nearest sensitive receptors to the project site are residences located approximately 700 feet southwest of the site in the P-37 South Whisman Precise Plan area. There are also residences located approximately 1,000 feet southeast, to the east of SR 237 from the project site in the City of Sunnyvale

[25] "Attainment" status for a pollutant means a given air district meets the standard set by the EPA and/or CARB.

(refer to Figure 3.2-3). The future residents of the recently approved 400 Logue Avenue Residential project, adjacent to the project site, would be considered sensitive receptors when that development is occupied.[26] It is anticipated that the planned residences at 400 Logue would be occupied by late 2024.[27] Additionally, future residents would be located in the approved 355 East Middlefield Road Residential project approximately 650 feet southwest of the project site.[28]

4.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on air quality, would the project:

1) Conflict with or obstruct implementation of the applicable air quality plan?
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
3) Expose sensitive receptors to substantial pollutant concentrations?
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgement on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Mountain View has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.1-2 below.

Table 4.1-2: BAAQMD Air Quality Significance Thresholds

Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Annual Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	40
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	

[26] The 400 Logue Residential project (PL-2019-406) was approved by the Mountain View City Council on June 22, 2021.
[27] City of Mountain View. *400 Logue Avenue Residential Project Consistency Checklist.* May 2021.
[28] The 355, 364, 401, 415 E. Middlefield Residential Project (PL-2018-206) was approved by the Mountain View City Council on October 13, 2020.

Table 4.1-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Annual Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	100 per million	
Incremental Annual $PM_{2.5}$	0.3µg*/m_3	0.8 µg/m_3 (average)	
Note: µg = micrograms			

4.1.2.1 *Project Impacts*

Impact AQ-1:	**Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

The Precise Plan EIR concluded the Precise Plan would not conflict with 2017 CAP or interfere with its implementation because the plan includes implementing policies and measures consistent with the 2017 CAP and would not increase vehicle-miles traveled (VMT) at a rate faster than population growth.[29] The project is consistent with the Precise Plan.

The BAAQMD CEQA Air Quality Guidelines set forth separate criteria for determining project-level consistency with the 2017 CAP. In general, a project is considered consistent with the 2017 CAP if the project:

a) Supports the primary goals of the 2017 CAP;
b) Includes relevant control measures; and
c) Does not interfere with implementation of the 2017 CAP control measures.

The project's consistency with the 2017 CAP based on the above criteria is discussed below.

Support of Primary 2017 CAP Goals

As discussed in Section 4.1.1.2 Regulatory Framework, the goals of the 2017 CAP include 1) protecting public health by progressing towards attaining air quality standards and eliminating health risk and 2) protecting the climate. If a project exceeds the BAAQMD thresholds of significance, its emissions are considered to result in significant adverse air quality impacts to the region's existing air

[29] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 46-49.

quality conditions. Similarly, if the project exceeds the BAAQMD community health risk threshold of significance, the project would result in a community health risk. A project exceeding either of these BAAQMD thresholds is considered to be inconsistent with the 2017 CAP, even if the project meets the CAP goals. An analysis of the project's construction and operational air pollutant emissions is provided below, as well as a discussion of the project's community health risk.

Construction Period Emissions

The Precise Plan EIR disclosed that future development under the Precise Plan would result in short-term emissions from construction activities.[30] During construction, fugitive dust (the dominant source of PM_{10} and $PM_{2.5}$ emissions) is generated when wheels or blades disturb surface materials. Uncontrolled dust from construction can become a nuisance and potential health hazard to those in the vicinity. Off-road construction equipment is often diesel-powered and can be a substantial source of NO_x emissions, in addition to PM_{10} and $PM_{2.5}$ emissions. Worker commute trips and architectural coatings are dominant sources of ROG emissions.

Fugitive Dust

The Precise Plan EIR concluded the construction of future development projects under the Precise Plan would result in less than significant impacts from fugitive dust with the implementation of the below BAAQMD best management practices, which the City requires as a standard condition of approval (Impact AQ-2 in the Precise Plan EIR).[31]

Standard Condition of Approval

COA AQ-1.1: Both Project Options: Basic Air Quality Construction Measures. The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by BAAQMD or the contractor as appropriate, such as:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

[30] City of Mountain View. *East Whisman Precise Plan, Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 49.
[31] Ibid. Pp. 49-50.

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of Mountain View regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations

The project (under either option) would implement the above standard condition of approval and, therefore, result in the same less than significant impact for construction fugitive dust as disclosed in the Precise Plan EIR.

Criteria Air Pollutants

The Precise Plan EIR concluded construction of future projects under the Precise Plan could exceed BAAQMD thresholds for criteria pollutants and result in a significant impact (Impact AQ-3 in the Precise Plan EIR).[32] The Precise Plan EIR identified mitigation measure MM AQ-3.1 to reduce the impact to a less than significant level.

East Whisman Precise Plan EIR Mitigation Measure

Precise Plan EIR MM AQ-3.1: Both Project Options: Construction criteria pollutant and TAC quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through the following measures:

- Construction equipment selection for low emissions;
- Use of alternative fuels, engine retrofits, and added exhaust devices;
- Low Volatile Organic Compounds (VOC) paints;
- Modification of construction schedule; and
- Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust.

[32] Ibid. Pp 50.

Consistent with Precise Plan EIR MM AQ-3.1, a project-specific air quality analysis was prepared (refer to Appendix C). The following discussion summarizes the findings and conclusions of this project-specific air quality analysis.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 and CARB's Emission Factor 2021 (EMFAC2021) model were used to estimate annual emissions from construction activities. Construction emissions were modeled based on equipment list and schedule information provided by the applicant for the project with District Utilities System Option. The construction schedule assumes the project (under either option) would be built over a period of approximately 8.5 years, or an estimated 2,652 construction workdays. Details about the equipment list, construction schedule, modeling, data inputs, and assumptions are included in Appendix C. Table 4.1-3 shows the estimated daily air emissions from construction of the project with District Utilities System Option. The emissions for the project without the district utilities system are less than shown in Table 4.1-3 since all aspects of the two project options are the same except the option with district utilities system, which includes additional construction of the CUP, district heating and cooling system, and district distribution system.

Table 4.1-3: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day)

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2022-2023 (366 construction workdays)	7.85	**66.67**	3.42	2.94
2024 (314 workdays)	3.33	24.37	1.42	0.99
2025 (313 workdays)	45.56	54.17	2.55	2.08
2026 (313 workdays)	13.53	**112.61**	5.43	4.45
2027 (313 workdays)	17.16	**71.98**	3.78	2.81
2028 (314 workdays)	**82.76**	47.15	2.76	1.85
2029 (313 workdays)	5.22	22.64	1.51	0.83
2030 (313 workdays)	1.34	8.25	0.49	0.22
2031 (93 workdays)	1.25	7.86	0.46	0.21
BAAQMD Thresholds	*54*	*54*	*82*	*54*
Exceed Thresholds?	**Yes**	**Yes**	**No**	**No**

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above, the emissions would be similar and exceed the BAAQMD thresholds of significance for ROG and NO_x. Assumes 2,652 construction workdays.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-3 above, project construction would exceed BAAQMD significance thresholds for ROG in construction year 2028 and for NO_x emissions in construction years 2022-2023, 2026, and

2027. Pursuant to Precise Plan EIR mitigation measure MM AQ-3.1, the project (under either option) would implement the below new project mitigation measure to reduce its construction criteria air pollutant emissions of ROG and NO_x to a less than significant level.

New Project Mitigation Measure:

MM AQ-1.1: Both Project Options: Pursuant to Precise Plan EIR MM AQ-3.1, the project (under either option) shall implement the following measures during all phases of construction:

- All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NO_x and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise:
    - If use of Tier 4 Final equipment is not commercially available, the project applicant shall use alternative equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85-percent reduction in particulate matter exhaust in comparison to uncontrolled equipment; alternatively (or in combination). The project applicant shall provide to the City for review and approval documentation showing that engines that comply with Tier 4 Final off-road emission standards are not commercially available for the specific off-road equipment necessary during construction. For purposes of this mitigation measure, "commercially available" shall take into consideration the following factors: (i) potential significant delays to critical-path timing of construction and (ii) the geographic proximity to the project site of Tier 4 Final equipment.
    - Use of alternatively fueled equipment with lower NO_x emissions compared to traditional diesel fuel equipment that meets or exceeds the NO_x and PM reduction requirements of U.S. EPA Tier 4 Final engine emission standards, as required above.
- Use electric equipment such as aerial lifts, air compressors, cement mortar mixers, concrete/industrial saws, cranes, and welders. Portable equipment shall be powered by grid electricity or alternative fuels (i.e., not diesel) instead of by diesel generators.
- Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than two minutes, except as provided in exceptions to the applicable state regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit.
- Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.
- Use low VOC coatings to reduce ROG emissions during construction. The project shall use low VOC coatings that are below current BAAQMD requirements (i.e., Regulation 8, Rule 3: Architectural Coatings), for at least 80

percent of all residential and nonresidential interior paint and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the project's operational lifetime. At least 80 percent of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low VOC coatings to be used. Examples of "super-compliance" coatings are contained in the South Coast Air Quality Management District's website.[33]

With implementation of the above mitigation measure, modeling indicates that on-site construction ROG emissions would be reduced by 70 percent and NO_x emissions would be reduced by 62 percent, resulting in less than significant impacts for each criteria pollutant as shown on Table 4.1-4. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact with Mitigation Incorporated)]**

Table 4.1-4: Project with District Utilities System Option Daily Construction Period Emissions (Pounds Per Day) with MM AQ-1.1

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
2022-2023 (366 construction workdays)	2.94	15.95	0.76	0.43
2024 (314 workdays)	2.04	10.89	0.71	0.32
2025 (313 workdays)	10.54	16.08	0.78	0.43
2026 (313 workdays)	5.81	31.59	1.60	0.86
2027 (313 workdays)	6.53	25.74	1.66	0.79
2028 (314 workdays)	19.39	21.49	1.52	0.67
2029 (313 workdays)	3.31	15.07	1.15	0.48
2030 (313 workdays)	1.09	6.24	0.46	0.19
2031 (93 workdays)	1.01	5.93	0.43	0.18
BAAQMD Thresholds	*54*	*54*	*82*	*54*
Exceed Thresholds?	**No**	**No**	**No**	**No**

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above, the emissions would be similar and exceed the BAAQMD thresholds of significance for ROG and NO_x. Assumes 2,652 construction workdays.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

[33] South Coast Air Quality Management District. "Super-Compliant Architectural Coatings." Accessed December 20, 2021. http://www.aqmd.gov/home/rules-compliance/compliance/vocs/architectural-coatings/super-compliant-coatings

Operational Period Emissions

The Precise Plan EIR disclosed the implementation of the Precise Plan would result in long-term pollutant emissions from building operations (including operation of stationary sources like emergency backup diesel generators) and vehicle use.[34] The BAAQMD CEQA Air Quality Guidelines do not have numeric thresholds related to direct and indirect regional criterial air pollutant emissions resulting from plan implementation; rather, BAAQMD only requires emission computations for project-level analysis. For this reason, the Precise Plan EIR stated future projects under the Precise Plan would be reviewed against BAAQMD operational criteria pollutant thresholds when proposed.

A project is now proposed; therefore, the operational emissions of the project were modeled and compared to BAAQMD thresholds. Operational criteria pollutant emissions associated with the project (under either option) would be generated primarily from vehicles driven by future employees, residents, customers, and vendors to and from the project site and from consumer products. The project (under either option) proposes 11 emergency diesel generators (including seven 500 kW generators for the residential buildings and four 900 kW generators for the office buildings). The generators would be tested periodically and would power the buildings in the event of a power failure. It is assumed the generators would operate primarily for testing and maintenance purposes.

CalEEMod and EMFAC2021 were used to estimate emissions from the project with district utilities system operation assuming full build out of the proposed MPMP. The estimated net annual and daily operational period emissions from the project with District Utilities System Option compared to BAAQMD thresholds of significance are summarized in Table 4.1-5. Existing uses on the project site currently generate operational emissions. These emissions are estimated based on the earliest possible date in which they could cease operations and subtracted from the project's emissions at the earliest date in which the project (under either option) would be constructed and operational (2032) to arrive at the project's net emissions. Any emissions associated with build out later than 2032 would be lower than current emissions due to assumed efficiencies from improved vehicle fuel efficiency, energy efficient appliances, and mechanical systems over time. The emissions for the project without the district utilities system are less than shown in Table 4.1-5 for NO_x, $PM_{2.5}$ and PM_{10} emissions since all aspects of the two project options are the same except the option with district utilities system, which includes the operation of the CUP, district heating and cooling system, and district distribution system. ROG emissions would be the same as shown in Table 4.1-5 because the addition of the CUP in the district utility system would not result in greater ROG emissions since ROG emissions are primarily from area and mobile sources. The modeling assumptions, data inputs, and results are described further in Appendix C of this EIR.

[34] Ibid. P. 51.

Table 4.1-5: Project with District Utilities System Option Operational Period Emissions				
Scenario	**ROG**	**NO_x**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
Tons Per Year				
2032 Project Emissions	19.47	9.37	8.44	2.84
2021 Existing Use Emissions	(6.57)	(3.43)	(1.89)	(0.53)
Net Annual Emissions	**12.90**	1.47	4.58	1.70
BAAQMD Thresholds	*10*	*10*	*15*	*10*
Exceed Threshold?	**Yes**	No	No	No
Pounds Per Day				
2032 Daily Project Operational Emissions*	**70.69**	8.03	25.11	9.29
BAAQMD Threshold	*54*	*54*	*82*	*54*
Exceed Threshold?	**Yes**	No	No	No

Note: *Assumes 365-day operations, **Bold** text denotes an exceedance of BAAQMD significance thresholds. The emissions for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the operation of the CUP, district heating and cooling system, and district distribution system. While the emissions of the project without the district utilities system would be less than shown above for NO_x PM_{10}, and $PM_{2.5}$ and the same as shown above, for ROG emissions. Thus, ROG emissions for the project (under either option) would still exceed the BAAQMD thresholds of significance for ROG.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-5 above, operational criteria pollutant emissions associated with the proposed project (under either option) would exceed BAAQMD significance thresholds for ROG. The greatest sources for operational ROG emissions are area emissions (e.g., architectural coatings and consumer product use), which represent 64 percent of total ROG emissions, and mobile emissions, which represent 36 percent of total ROG emissions. This is a new impact that was not previously disclosed in the Precise Plan EIR.

To reduce the impact from area ROG emissions from architectural coatings, the project would be required to use super compliant VOC coatings pursuant to MM AQ-1.1 above and pursuant to the Precise Plan EIR MM AQ-3.1. While it is feasible and enforceable for the City to require super compliant VOC coatings be applied initially, the City cannot ensure that future occupants or tenants would use super compliant VOC coatings during reapplication for the lifetime of the project. In addition, there is no feasible mitigation measure to ensure consumer products (such as inks, coatings, and adhesives) used by future residents and tenants would be low in VOCs. The project's mobile ROG emissions from office, commercial, and residential uses would be reduced to the maximum extent feasible through the TDM measures proposed by the project and required per the Precise Plan as described in Section 3.2.9 Transportation Demand Management.[35] The reduction in mobile ROG

[35] As discussed in Appendix H, the project's VMT is consistent with the assumptions in the Precise Plan EIR. Per City direction and in accordance with Precise Plan policies, a 46 percent VMT reductions for office uses resulting from

emissions is already reflected in the project emissions in Table 4.1-5. For these reasons, operational ROG emissions from the project (under either option) are conservatively assumed to be significant and unavoidable. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Health Effects Associated with Significant Operational ROG Emissions

Emissions of ROG (as well as NO_x) from individual sources (such as the project under either option) throughout the Bay Area contribute to high O_3 levels in the region and as stated in Section 4.1.1.3 Existing Conditions, the project region is in nonattainment for O_3. O_3 is an oxidant that is harmful to public health at high concentrations. O_3, at high levels, can damage the tissues of the lungs and respiratory tract. High concentrations of O_3 irritate the nose, throat, and respiratory system and constrict the airways. O_3 also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high O_3 levels can make people more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. O_3 can also have negative cardiovascular impacts, including chronic hardening of the arteries and trigger heart attacks. Children are most at risk, as they tend to be active and outdoors in the summer, when O_3 levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to O_3's effects. Healthy adults working or exercising outdoors during high O_3 levels can be affected.

Because emissions in one part of the region can impact air quality miles downwind, efforts to reduce O_3 levels focus on reducing emissions of ROG and NO_x throughout the region. The relationship between ROG and NO_x in O_3 formation is complex; the ratio between the precursor pollutants influences how O_3 forms. Modeling suggests that large reductions in ROG and NO_x emissions will be needed to achieve the O_3 reductions required to attain the current health-based ozone standards. A certain amount of O_3 formation occurs naturally, even in the absence of anthropogenic emissions of ROG and NO_x.

CARB reports statistics for O_3 monitoring in the San Francisco Bay Area. Over the last three years in San José,[36] maximum one-hour average O_3 levels are 0.106 parts per million (ppm).[37] Eight-hour maximum O_3 levels over this same period were 0.085 ppm. Both levels exceed the ambient air quality standards of 0.09 ppm for the one-hour standard and 0.070 ppm for the eight-hour period. For measuring compliance with the O_3 NAAQS, CARB reports a 2020 Design Value of 0.060 ppm for the 8-hour standard and 0.086 ppm for the 1-hour standard, which are both below the NAAQS. Throughout the Bay Area, the eight-hour standard was exceeded somewhere within the Air Basin on six days in 2018, nine days in 2019, and nine days in 2020. The eight-hour design value for the standard is reported by CARB as 0.069 ppm. The less restrictive one-hour standard was exceeded on two to six days per year and a state standard designation of 0.10 ppm was assigned to the basin.[38]

implementation of the proposed TDM program were accounted for in Trip Cap Requirement. An additional nine and 30 percent VMT reductions for residential and commercial uses, respectively, were accounted for in transit and pass-by reductions. See Appendix H for further details.

[36] San Jose station is the closes monitoring station to the project site. Source: BAAQMD. *2021 Air Monitoring Network Plan.* July 1, 2021. Page 17. https://www.baaqmd.gov/~/media/files/technical-services/2020-network-plan-draft-202100526-pdf.pdf?la=en

[37] California Air Resources Board. "iADAM Air Quality Data Statistics (2018-2020), Top 4 Summary: Select Pollutant, Years, & Area." Accessed April 20, 2022. https://www.arb.ca.gov/adam/topfour/topfour1.php

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

No development project by itself would be sufficient in size to result in regional nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulative adverse air quality impacts and, while its emissions may be individually limited, it could be cumulatively considerable when taken in combination with past, present, and future development projects.[39] The thresholds for criteria air pollutants are based on levels at which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. Therefore, if a project leads to a significant impact individually, the project would also be considered to contribute significantly to the cumulative impact.

A project-level air quality analysis of criteria air pollutants is based on significance thresholds that were set at emission levels tied to the region's attainment status.[40] Locally, the significance thresholds applied in this EIR are emission levels above which stationary air pollutant sources permitted by the BAAQMD (typically, industrial facilities, refineries, and the like) must offset their emissions through purchase of emissions "offsets" from other facilities that have reduced emissions, either through installation of emissions controls or removal of an emissions source. Such offset levels allow for regional development while keeping the cumulative effects of new sources at a level that will not impede attainment of the NAAQS. Therefore, a CEQA air quality analysis of criteria air pollutants is essentially an analysis of regional, cumulative air quality impacts and a given project's contribution to those impacts.

The ambient air quality standards are expressed in terms of the concentrations of individual pollutants within the air. Compliance with the ambient air quality standards indicates that regional air quality can be considered protective of public health, with certain exceptions, it is not readily feasible to calculate an individual project's effect on ambient O_3 concentrations given current environmental science modeling tools. Some pollutants are directly emitted from projects and their effects on ambient air quality can be modeled. An example is carbon monoxide, or CO, which is emitted directly as vehicle exhaust.

O_3, however, is a regional pollutant for which project-specific concentration modeling is not reliable given current air quality modeling limitations. Because of the complexity of ozone formation and given the state of modeling available, it is infeasible to reliably convert specific mass emissions levels (i.e., weight) of NO_X or ROG emitted in a particular area (or by a particular project) to a particular concentration of ozone in that area in a manner that yields meaningful results.[41] Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone.[42,43] Furthermore, available models are designed to determine regional, population-wide health impacts and cannot accurately quantify ozone-related

[39] Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines, May 2017*. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.
[40] San Joaquin Valley Air Protection Control District. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.
[41] Ibid.
[42] South Coast Air Quality Management District. Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno. 2014
[43] Ibid.

health impacts caused by NO_X or ROG emissions at the local level or individual project level. Consequently, there is not a reliable way to connect the proposed project's exceedances of ROG emissions to increases in ozone concentrations and, thus, meaningfully determine specific human health impacts related to those increases in ozone concentrations.

Project-level mass (weight) emission thresholds have been established for ozone precursors (NO_X and ROG) and other criteria pollutants precisely because it is not possible to readily convert mass emissions at the project-level to pollutant concentrations. As explained by BAAQMD, the CEQA significance thresholds established for the ozone precursors ROG and NOx were tied to BAAQMD's offset requirements for ozone precursors based on the Bay Area being in non-attainment with the federal ozone standard; this approach is considered appropriate "to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevention of a regionally cumulative significant impact (e.g. worsened status of non-attainment)."[44] Therefore, attainment can be considered protective of public health, thus providing a strong link between a mass emission threshold and avoidance of health effects. For PM_{10} and $PM_{2.5}$, BAAQMD established CEQA significance thresholds based on the federal New Source Review program for new stationary sources of pollution, which contains stricter thresholds than does BAAQMD's offset program for these pollutants. "These thresholds represent the emission levels above which a project's individual emissions would result in a considerable adverse contribution to the [San Francisco Bay Area Air Basin]'s existing air quality conditions."[45] As with ROG and NO_X discussed above, these thresholds likewise provide a connection between a mass emission threshold and avoidance of health effects.

Nevertheless, the proposed project's ROG emissions that exceed significance thresholds are evaluated to determine whether these emissions would contribute to new or exacerbated air quality violations in the air basin by contributing to more days of ozone exceedance or result in air quality index values that are unhealthy for sensitive groups and other populations. Although the project would exceed the ROG thresholds even after mitigation, the exceedance is minor at 12.9 tons per year versus the threshold of 10 tons per year. To evaluate the project's effects on O_3 levels in the region, the project's operational ROG emissions were compared to regional emissions that lead to elevated concentrations of O_3 (refer to Table 4.1-6 below).

Table 4.1-6: Comparison of Project Emissions to Air Basin ROG Emissions (tons/day)

Bay Area Air Basin ROG Emissions in 2020	203
Bay Area Air Basin ROG Emissions in 2030[1]	200
Project Operational Emissions in 2032[1]	0.03[2]

[1] Closest year of analysis to project operational year of 2032 under either option

[2] Converted from 12.90 tons per year

Sources: 1) Bay Area Air Quality Management District. *Spare the Air Cool the Climate Final 2017 Clean Air Plan.* April 2017. and 2) Illingworth & Rodkin, Inc. *Air Quality Analysis for Middlefield Park Master Plan. Mountain View, California.* April 19, 2022.

[44] Bay Area Air Quality Management District. *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October 2009*. Accessed April 20, 2022. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en.

[45] *Ibid*.

As shown from the data in Table 4.1-5, operational emissions from the project (under either option) in 2032 (the soonest year the project would be fully operational) exceed the single-source threshold of 10 tons per year by 2.9 tons per year. As shown in Table 4.1-6, the project's total emissions represent 0.02 percent of the regional inventory.[46] This is a conservative estimate because the estimated emissions do not reflect the reduction in emissions from future occupants or tenants using super compliant VOC coatings during reapplication for the lifetime of the project (see last bullet in mitigation measure (MM AQ-1.1 above). Therefore, although the project may increase O_3 levels, the increase will be minimal given the scale of the project's ozone precursor emissions, and the health impacts caused by the project's ROG emissions (under either option) are also likely minimal. Further, given available modeling tools, it is not possible to accurately delineate a direct link between the project's O_3 precursor emissions and health effects predicted for the region by BAAQMD resulting from elevated O_3 levels caused by the project.

To further convey the potential community-wide health impacts from the project's ROG emissions exceeding the BAAQMD threshold, a comparative example from another project EIR in the South Bay is provided. The Downtown West Mixed-Use master plan development with up to 7.3 million square feet of office uses, 5,900 residential units, 500,000 square feet of commercial uses, 300 hotel rooms, 800 rooms of limited term corporate accommodations, 100,000 square feet of event/conference space, a 130,000 square foot CUP, 100,000 square feet of logistics center uses, 15 acres of parkland/open space, and transportation and parking improvements is estimated to result in a total of 69 tons per year of net new construction and operational ROG emissions in 2032 (the soonest year the project would be fully operational).[47] In terms of geographical context, the proposed project is within 10 miles of the Downtown West Mixed-Use Plan project in a location with similar dispersion conditions that are characteristic of the southern Bay Area. The Downtown West Mixed-Use Plan project would generate five times more ROG emissions than the project (under either option) evaluated in this EIR. That EIR attempted to model the health effects from ROG emissions and found approximately 0.03 additional respiratory-related hospital admissions, 0.05 additional mortalities, and less than 0.36 additional asthma-related emergency room visits in the region could be attributed to project-related increases in ambient air concentrations.[48] Due to this nominal increase in incidence of health effects from the increase in emissions from the Downtown West Mixed-Use Plan project, the Downtown West Mixed-Use Plan EIR concluded that project would have a very small impact on community-wide health effects.[49]

The proposed project with District Utilities System Option in this EIR includes approximately 17 percent of the office uses, 32 percent of the residential uses, six percent of the commercial/retail uses, 66 percent of the parks/open space uses, 34 percent of the CUP space, and none of the hotel, corporate accommodations, entertainment, or logistics uses included in the Downtown West Mixed-Use Plan project. Therefore, the proposed project (under either option) operational emissions would result in lesser health effects than the health effects disclosed for the Downtown West Mixed-Use Plan project.

Based on the discussion above, the project (under either option) would not cause measurable increases to regional (ozone) air pollutant levels or health effects associated with the project's ROG emissions

[46] 0.03 tons per day (project emissions) / 200 tons per day (air basin emissions in 2030) = 0.00015 or 0.02 percent
[47] City of San José. *Downtown West Mixed-Use Plan, Draft Environmental Impact Report* (SCH# 2019080493). October 2020. P. 3.1-114.
[48] Ibid. P. 3.1-117.
[49] Ibid. P. 3.1-120.

to materially change. The emissions of ROG are, however, considered significant and unavoidable.

Community Health Risk

Project impacts related to increased community risk can occur by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or, as discussed in Section 4.1.2.2 Cumulative Impacts, by significantly exacerbating existing cumulative TAC impacts. The project (under either option) would introduce new sources of TACs during construction and operation.

As noted in Section 3.2 Project Description, the project (under either option) would be constructed over approximately 8.5 years in four overlapping phases. For this reason, the health risk impacts of overlapping project construction and operational emissions are analyzed to represent air quality impacts during earlier phases of construction and during phases of construction when some buildings would be occupied while others are being constructed. The operational emissions are also analyzed separately to represent health risk from the project after construction has been completed.

The Precise Plan EIR concluded that the health risks would be mitigated to less than significant levels with the implementation of the City's standard conditions of approval for fugitive dust and Precise Plan EIR MM AQ-3.1, both of which are listed above.[50]

Overlapping Project Construction and Operation Emissions

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC, and would pose a health risk to nearby receptors. The primary health risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. The greatest TAC of concern generated during construction that could lead to cancer risk is DPM, which is used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole.

The project (under either option) would include operation of stand-by generators powered by diesel engines and cooling towers and would generate traffic consisting of light-duty vehicles, all of which would produce TAC and criteria air pollutant emissions during project operations. Operational emissions of DPM, TACs, $PM_{2.5}$ and PM_{10} from project-generated traffic on local roadways and operation of the proposed emergency generators were modeled using the U.S. EPA AERMOD dispersion model. The cooling towers are not powered by a diesel engine; therefore, no DPM emissions would be produced from operation of the cooling towers.

Pursuant to Precise Plan EIR MM AQ-3, a project-specific TAC/health risk quantification was completed (refer to Appendix C). The following discussion summarizes the findings and conclusions of the health risk assessment. The assessment evaluated potential health effects to nearby receptors (within 1,000 feet of the project site) from overlapping construction and operational emissions of DPM and $PM_{2.5}$. For purposes of this analysis, receptors are locations where sensitive populations would be present for extended periods of time including the existing residences to the southwest on East Middlefield Road, and to the south on Infinity Way (in South Whisman Precise Plan area), as well as

[50] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 52.

future residences adjacent to the site at 400 Logue Avenue and southwest of the site at 355 E. Middlefield Road.[51] A health risk assessment of future residents on the project site is included in Section 4.1.3.

Consistent with the BAAQMD CEQA Air Quality Guidelines, the CalEEMod, U.S. EPA AERMOD, and EMFAC2017 models were used to calculate health risk from the project with District Utilities System Option construction and operational activities (refer to Appendix C for details about model and modeling assumptions). Community health risk impacts are addressed by predicting increased cancer risk, annual $PM_{2.5}$ concentrations, and Hazard Index (HI) for non-cancer-health risks. The maximum modeled annual DPM and $PM_{2.5}$ concentrations were identified at nearby sensitive receptors to find the maximally exposed individual (MEI), or the sensitive receptor that is most impacted by the project's overlapping construction and operational TAC emissions. Results of this assessment indicated that there are two MEIs located in two different units of the approved 400 Logue Avenue Residential project. Figure 4.1-1 shows the location of off-site receptors, including the MEIs and modeled project traffic. The $PM_{2.5}$ concentration MEI is located at a receptor on the first floor and the cancer risk MEI is located at a receptor on the second floor. The estimated cancer risks and annual $PM_{2.5}$ concentrations due to construction and operation of the project with District Utilities System Option are summarized in Table 4.1-7 below.

The unmitigated cancer risk and annual $PM_{2.5}$ concentration from overlapping construction and operation of the project without the district utilities system are less than shown in Table 4.1-7 since all aspects of the two project options are the same except the option with district utilities system, which includes the construction and operation of the CUP, district heating and cooling system, and district distribution system. While the unmitigated cancer risk and annual $PM_{2.5}$ concentrations of the project without the district utilities system would be less than shown in Table 4.1-7, the unmitigated cancer risk and annual $PM_{2.5}$ concentrations would be similar and still exceed the BAAQMD thresholds of significance.

[51] The existing Mountain View Korean SDA Church at 815 Maude Avenue is not considered a site with a sensitive population as visitors/patrons are not at the location for extended periods of time, such as overnight, nor is there a day care center.

Source: Illingworth & Rodkin, Inc., December 23, 2021.

LOCATIONS OF OFF-SITE SENSITIVE RECEPTORS AND MODELED PROJECT TRAFFIC | FIGURE 4.1-1

Table 4.1-7: Project with District Utilities System Option Construction and Operational Community Risk Impacts at the Off-Site Receptors			
Source	**Maximum Excess Cancer Risk (per million)[1]**	**Annual $PM_{2.5}$ ($\mu g/m_3$)**	**Hazard Index**
Project Construction			
Unmitigated	**113.61**	**2.38**	0.09
Mitigated[1]	**14.52**	**0.44**	
Project Operations			
Unmitigated	3.06	0.05	<0.01
Mitigated[1]	3.06	0.05	<0.01
Total Combined Construction and Operational Community Risk			
Unmitigated	**116.67**	**2.43**	0.12
Mitigated	**17.58**	**0.48**	0.12
BAAQMD Single-Source Threshold	*>10.0*	*>0.3*	*1.0*
Exceeds Threshold?			
Unmitigated	**Yes**	**Yes**	No
Mitigated*	**Yes**	**Yes**	No

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds. The health risk for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the construction and operation of the CUP, district heating and cooling system, and district distribution system. While the health risk due to the project without the district utilities system would be less than shown above, the emissions would be similar and still exceed the BAAQMD threshold of significance for increased cancer risk.

[1] Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

[2] Mitigated assumes the implementation of the conditions of approval and Precise Plan EIR MM AQ-3.1 for construction emissions. No operational mitigation measures are assumed.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-7, the unmitigated cancer risk and annual $PM_{2.5}$ concentrations from overlapping construction and operation of the project with District Utilities System Option at the MEI location would exceed the single-source thresholds. Implementation of the standard condition of approval (COA AQ-1.1) and the new project mitigation MM AQ-1.1 identified above would reduce the project's off-site cancer risk levels by 85 percent to 16.75 excess cancer cases per million at the MEI. The project's annual $PM_{2.5}$ concentrations would be reduced by 81 percent to 0.44 $\mu g/m^3$ at the MEI. Thus, the project's mitigated risk impacts (under either option) would still exceed the BAAQMD single-source significance thresholds of 10 per million for cancer risk and 0.3 $\mu g/m_3$ for $PM_{2.5}$ concentrations at the MEIs. The modeling shows the cancer risk and annual $PM_{2.5}$ concentrations at all other sensitive receptors would be reduced below the single-source threshold (refer to Appendix C) with the implementation of standard condition of approval and new project mitigation measure MM

AQ-1.1. Since no additional mitigation is feasible to reduce the health risk associated with construction emissions (the primary source of the project's significant health risk impact), the following mitigation is required that would reduce the health risk associated with project operations (the lessor source of the project's significant health risk impact).

New Project Mitigation Measure:

MM AQ-1.2: Both Project Options: All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.

In addition, the City requires the following standard condition of approval to address community health risks from interior finishes containing formaldehyde.

Standard Condition of Approval:

COA AQ-1.2: Both Project Options: Indoor Formaldehyde Reductions. If the project utilizes composite wood materials (e.g., hardwood plywood, medium density fiberboard, particleboard) for interior finishes, then only composite wood materials that are made with CARB approved, no-added formaldehyde (NAF) resins, or ultra-low emitting formaldehyde (ULEF) resins shall be utilized (CARB, Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products, 17 CCR Section 93120, *et seq.*, 2009-2013).

Implementation of MM AQ-1.2, would incrementally reduce emissions from the proposed residential building emergency generators identified in Table 4.1-7, but not to a less than significant level. Thus, the project's mitigated health risk impacts (primarily due to construction emissions) (under either option) would still exceed the BAAQMD single-source significance thresholds of 10 per million for cancer risk and 0.3 $\mu g/m_3$ for $PM_{2.5}$ concentrations at the MEIs.

The above discussed community health risk represents the outdoor air at the sensitive receptor locations. The approved 400 Logue Avenue project would be constructed to meet the current 2019 Title 24 Building Standards, which require air filtration in mechanical ventilation systems for residential buildings use MERV 13 filters or greater. This requirement also applies to the proposed residential buildings (under either option). It is also possible that there would be additional sensitive receptors exposed to similar health risk from project construction and operation (under either option) due to the length of the Development Agreement for the project (under either option)[52] and the fact the Precise Plan envisions additional residential land uses in the project vicinity at distances similar to 400 Logue Avenue to the project site. A properly installed and operated ventilation system with MERV 13 filters achieves an 80-percent reduction of ambient $PM_{2.5}$ concentrations at indoor areas.[53] U.S. EPA

[52] As noted in Section 3.2 Project Description, the proposed project under either option would include a Development Agreement to grant implementation of entitlements over a 20-year period.

[53] Bay Area Air Quality Management District. *Planning Healthy Places A Guidebook for Addressing Local Sources of Air Pollutants in Community Planning*. 2016. Pp. 38. http://www.baaqmd.gov/~/media/files/planning-and-research/planning-healthy-places/php_may20_2016-pdf.pdf?la=en

studies indicate most people spend 90 percent of their time indoors.[54] Assuming exposure to 21 hours of indoor filtered air and three hours of outdoor air, the filtration in the ventilation systems would reduce overall exposure by 70 percent. Taking into account the required MERV 13 filters and their proper installation, operation, and maintenance, as well as the EPA's documented time people spend indoors vs. outdoors, the mitigated cancer risk and annual $PM_{2.5}$ concentrations would be reduced below the significance threshold for sensitive receptors in the 400 Logue Avenue project. This less than significant health risk also assumes residents keep their windows closed during construction of the proposed project (under either option). However, neither the applicant nor the City can feasibly implement, require, or guarantee these assumptions through mitigation measures.

In summary, the project (under either option) would result in exposure of sensitive receptors near or on the project site to health risk impacts (primarily due to construction emissions) exceeding BAAQMD thresholds for cancer cases and annual $PM_{2.5}$ concentrations. Implementation of standard conditions of approval and Precise Plan EIR MM AIR-1.1 identified under Impact AQ-1 would reduce the health risk (primarily due to construction emissions) but not to a less than significant level. Additional reductions could be achieved with properly installed, operated, and maintained ventilation systems and potentially from delayed occupancy of the approved 400 Logue Avenue project[55] and residential buildings planned for early phases of the Project; however, neither the City nor applicant can feasibly implement, require, or guarantee these through mitigation. For these reasons, the health risk impact (primarily due to construction emissions) is conservatively concluded to be significant and unavoidable. This is a new impact not previously disclosed in the Precise Plan EIR. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Project Operations Only

Once construction of the project (under either option) is complete, sensitive receptors would no longer be subject to the health risk from overlapping project construction and operational emissions. As shown in Table 4.1-7, the maximum cancer risk, annual $PM_{2.5}$ concentrations, and HI from operation of the project (under either option) only would not exceed BAAQMD's significance thresholds at the nearby sensitive receptors. Therefore, operation of the project (under either option) would result in the same less than significant health risk impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Consistency with 2017 CAP Control Measures

The 2017 CAP includes control measures to reduce GHG emissions. As shown in Table 4.1-8 below, the project would be consistent with the 2017 CAP measures intended to reduce GHG emission by reducing automobile trips, energy and water usage, and waste.

[54] United States Environmental Protection Agency. "Report on the Environment, Indoor Air Quality, What are the trends in indoor air quality and their effects on human health?" Accessed December 22, 2021. https://www.epa.gov/report-environment/indoor-air-quality

[55] If occupancy of the 400 Logue Avenue Residential project is delayed from 2025 to 2028, health risks would be less than significant because construction of the proposed project would occur farther from this receptor location.

Table 4.1-8: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
Transportation Measures		
Trip Reduction Program	Encourage trip reduction policies and programs in local plans, e.g., general and specific plans. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips.	The project site is proximate to VTA bus and light rail and the Mountain View Transportation Management Association shuttle service. The project (under either option) would include new on-street and off-street bicycle and pedestrian improvements and bicycle parking consistent with City requirements. Additionally, the project (under either option) includes a TDM program (refer to Section 3.2.9 Transportation Demand Management for details) consistent with the Precise Plan TDM requirements to reduce vehicle trips and promote alternative modes of travel to single-occupancy vehicle trips. **Therefore, the project is consistent with this measure.**
Bicycle and Pedestrian Access Facilities	Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific plans, fund bike lanes, routes, paths, and bicycle parking facilities.	As noted above, the project (under either option) would include bicycle parking consistent with the City's bicycle parking requirements. The project area has adequate sidewalks, crosswalks, and pedestrian signal heads and the project proposes five new midblock crossings to further enhance the pedestrian environment. **Therefore, the project is consistent with this measure.**
Land Use Strategies	Support implementation of Plan Bay Area, maintain and disseminate information on current climate action plans and other local best practices.	As mentioned above, the project (under either option) would be located in proximity to multiple transit services and would increase the density and diversity of land uses near transit; **therefore, the project is consistent with this measure** (refer to Section 5.16 Transportation for more information).
Building Measures		
Green Buildings	Identify barriers to effective local implementation of CalGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	The project (under either option) would comply with the CalGreen and City's Reach Code requirements, the proposed office buildings would meet the intent of LEED Platinum standards and the proposed residential buildings requesting a Bonus FAR would achieve the equivalent of a GreenPoint rating of 120 points or better, reducing emissions from energy generation and use, and implement a TDM plan to reduce emissions from transportation. **The project (under either option) is consistent with this measure.**
Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for "cool parking" that promotes the use of cool surface treatments for new parking facilities, as well as	No surface parking is proposed for the project (under either option), all parking would be located in parking structures either below-grade, above-grade, or within a building shell. This measure, therefore, is not applicable. The project (under

Table 4.1-8: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	**Description**	**Project Consistency**
	existing surface parking lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or reroofing/roofing upgrades for commercial and residential multi-family housing.	either option) is consistent with the intent of this measure by planting new landscaping and trees and increasing pervious surfaces on-site compared to existing conditions, which would reduce the urban heat island effect. Hardscape materials would also be chosen and designed to reduce heat island effects. **Therefore, the project is consistent with this measure.**
Natural and Working Lands Measure		
Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District's technical guidance, best management practices for local plans, and CEQA review.	Any trees removed would be required to be replaced in accordance with the City's tree replacement policy. **Therefore, the project (under either option) is consistent with this measure.**
Waste Management Measures		
Recycling and Waste Reduction	Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.	The project (under either option) would comply with the City's adopted Zero Waste Plan by providing foodwaste composting facilities for proposed residential and restaurant uses. In addition, the project would comply with the City's Construction and Demolition Diversion Program by recovering or diverting at least 65 percent of construction waste generated by the project from landfills. **Therefore, the project is consistent with this measure.**

In conclusion, the project (under either option) would not conflict with or obstruct implementation of the 2017 CAP control measures and goals; however, the project is found to be inconsistent with the 2017 CAP based on the project exceeding BAAQMD thresholds for health risk and ROG emissions. Specifically, the project (under either option) results in significant, unavoidable operational criteria air pollutant (ROG emissions) and health risk impacts (primarily due to construction emissions). The significant, unavoidable impacts regarding operational ROG emissions and health risk impacts (primarily due to construction emissions) are new impacts not previously disclosed in the Precise Plan EIR. **(New Impact [Significant Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-2:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

As discussed in Section 4.1.1 Environmental Setting, the Bay Area does not meet state and/or federal ambient air quality standards for ground level O_3, $PM_{2.5,}$ or $PM_{10.}$ High O_3 levels are caused by cumulative emissions of ROG and NO_x. Controlling the emissions of these precursor pollutants would reduce O_3 levels.

Construction Period Emissions

As discussed in detail under Impact AQ-1 above, construction of the project (under either option) would not exceed BAAQMD thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$ or fugitive dust with incorporation of the standard condition of approval COA AQ-1.1 and new project mitigation measure MM AQ-1.1. Thus, impacts would be less than significant with mitigation incorporated. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Operational Period Emissions

As discussed in detail under Impact AQ-1 above, operational criteria pollutant emissions associated with the proposed project (under either option) would not exceed BAAQMD significance thresholds, with the exception of ROG. While it is feasible and enforceable for the City to require super compliant VOC coatings be applied initially, the City cannot ensure that future occupants or tenants would use super compliant VOC coatings during reapplication for the lifetime of the project. In addition, there is no feasible mitigation measure to ensure consumer products (such as inks, coatings, and adhesives) used by future residents and tenants would be low in VOCs. Therefore, the project's ROG emissions would be significant and unavoidable. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-3:	**Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

As discussed under Impact AQ-1 above, project (under either option) would result in exposure of sensitive receptors near the project site to TAC emissions in excess of BAAQMD risk thresholds for excess cancer cases and annual $PM_{2.5}$ concentrations primarily from construction emissions. Implementation of mitigation measures MM AQ-1.1 and conditions of approval COA AQ-1.1 and COA AQ-1.2 identified under Impact AQ-1 would reduce the health risk but not to a less than significant level, and therefore, the impact is significant and unavoidable. Project operations would not exceed the thresholds for cancer risk, annual $PM_{2.5}$ concentrations, and HI emissions. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Impact AQ-4:	**Project:** The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Same Impact as Approved Project [Less than Significant Impact])**
	Project with District Utilities Systems Option: The project with District Utilities Systems Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(New Impact [Less than Significant Impact with Mitigation Incorporated])**

Project

Construction Odor Impacts

The Precise Plan EIR disclosed that future construction activities in the Precise Plan area could result in odorous emissions from diesel exhaust associated with construction equipment and concluded that due to the temporary nature of the emissions and the highly diffuse nature of diesel exhaust, exposure of sensitive receptors to these emissions would be limited and less than significant.[56] The odors resulting from construction activities (under either option) would be consistent with the assumptions in the Precise Plan EIR. For these reasons, implementation of the project (under either option) would result in same short-term odor impacts as disclosed in the Precise Plan EIR. **(Same impact as Approved Project [Less than Significant Impact])**

Operational Odor Impacts

The Precise Plan EIR concluded that implementation of the Precise Plan would not result in significant odor impacts with compliance of General Plan Policy INC 20.8, which requires the City to review development projects for potential odor impacts. Operation of the project (without district utilities) would involve operations of office, residential, retail, civic/community, and open spaces uses, none of which generate odors resulting in adverse effects on a substantial number of people. For this reason, the project (without district utilities) would result in the same operational odor impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

Construction Odor Impacts

The project with District Utilities System Option, would result in the same construction odor impacts as discussed above for the project option. **(Same impact as Approved Project [Less than Significant Impact])**

[56] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 52-53.

Operational Odor Impacts

The project with District Utilities System Option would be the same as described above for the project except it also includes the operation of a wastewater treatment plant within the CUP in Building O1.

The BAAQMD CEQA Air Quality Guidelines include screening distances for various odor sources to prevent potential land use conflicts. These screening distances identify two miles for wastewater treatment facilities, which is applied to traditional open municipal facilities that have exposed headworks, open-air ponds, and treat large volumes of wastewater. The screening distances would not apply to the proposed wastewater treatment plant as it is proposed to be small, modern, with enclosed systems where exhaust air is treated.[57] Nonetheless, odor issues could occur if there are upset conditions or improper handling of odor-producing solids or wastewater, improper operations, or poor maintenance. The BAAQMD CEQA Air Quality Guidelines state that a significant odor impact would occur if an odor source receives five or more confirmed complaints per year averaged over a three year period.[58]

The wastewater treatment facility would generate odors from many phases of the treatment process including during anaerobic biological activity, which produces most of the hydrogen sulfide and ammonia type odors that are considered objectionable. Odors can be properly controlled through modern design, appropriate chemical and/or biological treatment, proper ventilation, and facility maintenance. The wastewater treatment facility would be designed to be a completely enclosed system within the CUP. As discussed in Section 3.2.2 Utilities, the proposed wastewater equipment would be equipped with modern technology that minimizes the release of odors and would not include any lagoons, exposed sewage/treatment water, or biosolid piles that would emit odors. The wastewater treatment odors would also be regulated by BAAQMD in the event of odor complaints.

Processes that produce hydrogen sulfide and ammonia are the most objectionably odorous. These processes would be enclosed in the CUP and controlled to minimize odors. Odor controls would be designed using the Best Available Control Technology (BACT) and consistent with regulatory requirements. BACT solutions may include, but are not limited to, the following:

- Installing active ventilation (foul air blowers) to odor control units (e.g., carbon absorption, biofiltration, or ammonia scrubbers);
- Housing odorous processes in a ventilated enclosure;
- Wastewater screenings and grit washed, dewatered, and compacted before being stored in enclosed, odor-proof refuse containers;
- Hauling sealed containers of residuals off-site at regular intervals; and
- Injecting ferrous chloride to remove hydrogen sulfide as needed for odor control at specific wastewater treatment processes.

The project would also include regular monitoring of complaints and reporting on the success of odor controls to regulatory agencies. Proposed residences are located as close as 100 feet of the wastewater

[57] For reference, the Palo Alto Regional Water Quality Control Plant, which treats wastewater generated in Mountain View, has a treatment capacity of up to 80 million gallons per day. Treatment of this volume of wastewater requires specialized and large-scale equipment, which are not required or proposed for the project (under either option).
[58] BAAQMD. *California Environmental Quality Act Air Quality Guidelines.* May 2017. P. 7-4.

treatment plant. Given the proposed use and proximity of residences, the wastewater treatment plant has the potential to cause odors and result in odor complaints. This is a new impact that was not previously identified in the Precise Plan EIR.

New Project Mitigation Measures:

MM AQ-4.1: **Project with District Utilities System Option:** The project applicant shall develop and implement an odor control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor control plan shall describe the design elements and best management practices built into the facility, including the following:

- Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility;
- Odor proofing of refuse containers used to store and transport grit and screenings or biosolids; and
- Injection of chemicals to control hydrogen sulfide.

The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues, as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint and corrective actions could include installing specific odor control technologies (e.g., odor control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's Designee) and BAAQMD prior to issuance of building permits for the CUP. In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to less than five per year, the plant shall cease operations. All wastewater generated by the project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility.

MM AQ-4.2: **Project with District Utilities System Option:** Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.

Through implementation of mitigation measures MM AQ-4.1 and MM AQ-4.2 and compliance with BAAQMD regulations, the project with District Utilities System Option would limit the discharge of odorous substances and respond to upset conditions and odor complaints with corrective actions, reducing impacts to a less than significant level. This is a new impact not previously disclosed in the Precise Plan EIR. **(New Impact [Less than Significant Impact with Mitigation Incorporated])**

4.1.2.2 *Cumulative Impacts*

Impact AQ-C:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact. **(New Impact [Less than Significant Cumulative Impact with Mitigation Incorporated])**

The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. Past, present, and future development projects contribute to the region's adverse air quality impacts. By its very nature, air pollution is largely a cumulative impact. In developing thresholds of significance for air pollution, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's air quality conditions.[59] That is, if a project exceeds the BAAQMD significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.[60]

Implementation of the 2017 CAP

As described above under Impact AQ-1, the project (under either option) would be consistent with the 2017 CAP goals, but would result in significant, unavoidable health risks (primarily due to construction emissions) and operational ROG emissions. The project's implementation of standard conditions of approval COA AQ-1.1 and COA AQ-1.2, Precise Plan EIR MM AQ-3.1, and new project mitigation MM AQ-1.1 would reduce these impacts but not to a less than significant level. The project (under either option), therefore, would result in a cumulatively considerable impact to the implementation of the 2017 CAP. **(New Impact [Significant and Unavoidable Impact with Mitigation Incorporated])**

Net Increase in Criteria Pollutants

As discussed under Impact AQ-1, the project (under either option) would not exceed the project-level thresholds for criteria pollutant emissions with the exception of significant, unavoidable ROG emissions during operations. Implementation of project mitigation measure MM AQ-1.1 requiring the use of low VOC exterior finishes pursuant to Precise Plan EIR MM AQ-3.1 would reduce this impact; however, not to a less than significant level. The project (under either option), therefore, would result in a cumulatively considerable criteria pollutant impact. **(New Impact [Significant and Unavoidable Impact with Mitigation Incorporated])**

[59] BAAQMD. California Environmental Quality Act Air Quality Guidelines. May 2017. P. 2-1. https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

[60] Ibid.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

The Precise Plan EIR concluded that cumulative exposure of sensitive receptors to substantial pollutant concentrations associated with implementation of the Precise Plan would be less than significant with preparation of project-specific air quality assessments and implementation of standard conditions of approval and project mitigation measures to reduce health risks to future sensitive receptors. A cumulative health risk assessment was conducted for the project with District Utilities System Option that evaluated all substantial sources of TACs affecting sensitive receptors located within 1,000 feet of a project site. These sources included rail lines, freeways or highways, busy surface roads, and stationary sources identified by BAAQMD. Table 4.1-9 below summarizes the cumulative health risk impacts at the project MEIs.

Table 4.1-9: Cumulative Health Risk Impacts at the Off-Site MEI

Source	Maximum Cancer Risk (per million)[1]	$PM_{2.5}$ concentration ($\mu g/m^3$)[2]	Hazard Index[2]
Project			
(unmitigated)	**116.67**	**2.38**	0.09
(mitigated*)	17.58	0.44	0.01
Traffic Sources	1.05	0.07	<0.01
Stationary Sources	4.99	0.01	0.01
Cumulative Total			
(unmitigated)	**122.71**	**2.46**	<0.11
(mitigated*)	23.62	0.52	0.03
BAAQMD Cumulative-Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?			
(unmitigated)	**Yes**	**Yes**	No
(mitigated*)	No	No	No

Notes: **Bold** text denotes an exceedance of BAAQMD significance thresholds.

* Mitigated assumes the implementation of condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 under Impact AQ-1.[1]

Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

As shown in Table 4.1-9, the cumulative health risk (specifically excess cancer risk and annual $PM_{2.5}$ concentration) is less than significant with the project's implementation of standard condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and project mitigation measures MM AQ-1.1 and MM AQ-1.2. The Hazard Index is below the cumulative threshold of significance. This is the same impact as identified in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Cumulative Impact with Mitigation Incorporated)]**

Odor

The project would redevelop a site currently developed with light industrial and office uses into a mixed-use neighborhood including office, residential, retail, and civic/community uses, and open space/parks. Except potential odor impacts from operation of the proposed wastewater treatment plant included in the project with District Utilities System Option, the project (under either option) would not result in odor impacts. As discussed under Impact AQ-4 above, implementation of mitigation measures MM AQ-4.1 and MM AQ-4.2 would avoid odor impacts through development and implementation of an odor control plan. There are no other sources of substantial odors in the Precise Plan area that, when combined with the project (under either option), would result in significant cumulative odor impacts. For these reasons, the project (under either option) would not result in significant cumulative odor impacts. **[Same Impact as Approved Project (Less than Significant Cumulative Impact)]**

4.1.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Mountain View requires health risk assessments for new residential developments near sources of air pollution pursuant to General Plan Policies INC 20.6 and INC 20.7.

The same TAC sources identified to evaluate project impacts under Impact AQ-1 above were used to assess on-site health risks. Details about the on-site health risk modeling, data inputs, and assumptions are included in Appendix C. Table 4.1-10 summarizes the results of the health risk assessment for on-site sensitive receptors and shows project construction would pose the highest health risk on-site. However, with the implementation of condition of approval COA AQ-1.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 discussed under Impact AQ-1 above, and when combined with other cumulative sources, the on-site health risks would be below the BAAQMD thresholds.

Table 4.1-10: Impacts from Cumulative TAC Sources at the Project Site

Source	Maximum Cancer Risk (per million)[1]	$PM_{2.5}$ concentration ($\mu g/m^3$)[2]	Hazard Index[2]
Overlapping Project Construction and Operation			
(unmitigated)	**46.80**	<0.67	<0.10
(mitigated*)	8.79	<0.14	<0.01
Cumulative Traffic	1.45	0.02	<0.01
Cumulative Stationary	6.38	0.01	0.01
BAAQMD Single-Source Threshold	*10*	*0.3*	*1.0*
Exceed Threshold?			
(unmitigated)	**Yes**	**Yes**	No
(mitigated*)	No	No	No

Table 4.1-10: Impacts from Cumulative TAC Sources at the Project Site			
Source	**Maximum Cancer Risk (per million)[1]**	**$PM_{2.5}$ concentration ($\mu g/m^3$)[2]**	**Hazard Index[2]**
Cumulative Total			
(unmitigated)	54.63	<0.72	<0.12
(mitigated*)	16.62	<0.19	<0.03
BAAQMD Cumulative Source Threshold	*100*	*0.8*	*10.0*
Exceed Threshold?			
(unmitigated)	No	No	No
(mitigated*)	No	No	No

* Mitigated assumes the implementation of the conditions of approval COA AQ-.1, Precise Plan EIR MM AQ-3.1, and new project mitigation measures MM AQ-1.1 and MM AQ-1.2 under Impact AQ-1.[1]

Maximum assuming third-trimester fetus, infant, child exposure for construction and child/adult exposure during operation for 30-year exposure.

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment, Mountain View, California.* April 19, 2022.

4.1.4 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AQ-1:	**Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds.	No	S	Precise Plan EIR MM AQ-3.1 and MM AQ-1.1	SU
AQ-2:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	No	S	Precise Plan EIR MM AQ-3.1 and MM AQ-1.1	SU
AQ-3:	**Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations.	No	S	MM AQ-1.1	SU
AQ-4:	**Project:** The project (under either option) would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
	Project with District Utilities System Option: The project (with District Utilities System Option) would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No	S	MM AQ-4.1 and 4.2	LTS
AQ-C:	**Both Project Options:** The project (under either option) would not result in a cumulatively considerable contribution to a cumulatively significant air quality impact.	No	S	Precise Plan EIR MM AQ-3.1, MM AQ-1.1, and AQ-1.2	LTS
Abbreviations: S-Significant, LTS – Less than Significant, SU – Significant, Unavoidable Impact					

SECTION 5.0 PREVIOUSLY IDENTIFIED EFFECTS

The City of Mountain View as the CEQA Lead Agency has determined that, based on the analysis in this section, the impacts of the proposed project on the following environmental factors were adequately addressed in the Precise Plan EIR and the General Plan EIR.

5.1	Aesthetics	5.10	Land Use and Planning
5.2	Agriculture and Forestry Resources	5.11	Mineral Resources
5.3	Biological Resources	5.12	Noise
5.4	Cultural Resources	5.13	Population and Housing
5.5	Energy	5.14	Public Services
5.6	Geology and Soils	5.15	Recreation
5.7	Greenhouse Gas Emissions	5.16	Transportation
5.8	Hazards and Hazardous Materials	5.17	Tribal Cultural Resources
5.9	Hydrology and Water Quality	5.18	Utilities and Service Systems
		5.19	Wildfire

As discussed in this section, the project would not result in new or substantially more severe impacts for the environmental factors listed above than disclosed in the Precise Plan EIR and General Plan EIR. The following discussion of the above environmental factors includes the same environmental setting and impact discussion subsections as provided in Section 4.0 for air quality. No cumulative impacts subsection is included as the project-level impacts were found to be the same as disclosed in the Precise Plan EIR and General Plan EIR and, therefore, the project's contribution to cumulative impacts is the same as disclosed in the Precise Plan EIR and General Plan EIR. Refer to the Precise Plan EIR for a discussion of cumulative impacts to the above environmental factors.

5.1 AESTHETICS

5.1.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for aesthetics has not substantially changed since the certification of the Precise Plan EIR.

5.1.1.1 *Regulatory Framework*

State

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to level of service (LOS) for evaluating transportation impacts, specifically Vehicle-Miles-Traveled (VMT). SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts. As part of SB 743, in order to encourage infill development and mode shift away from automobile use, a project's parking impacts will no longer be considered a significant impact on the environment and aesthetic impacts will no longer be considered significant impacts on the environment under CEQA if:

- The project is a residential, mixed-use residential, or employment center project, and
- The project is located on an infill site within a transit priority area.[61]

SB 743 also clarifies that local governments retain their ability to regulate a project's aesthetics impacts outside of the CEQA process.

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment.

[61] An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Public Resources Code Section 21009. Accessed September 3, 2021. https://codes.findlaw.com/ca/public-resources-code/prc-sect-21099.html.

Local

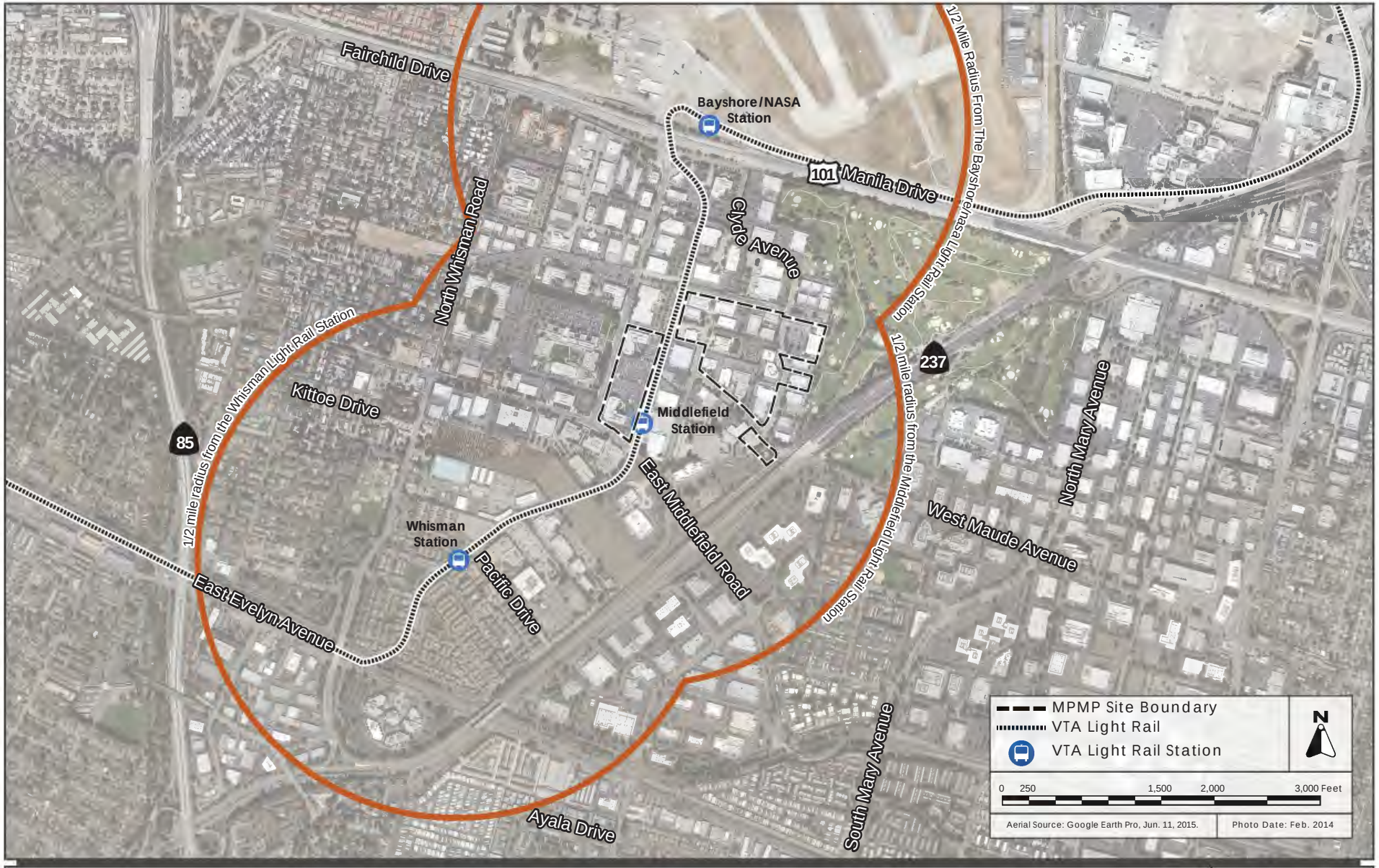
In July 2019, the City of Mountain View Department of Public Works revised the Standard Provisions and Standard Details. The Standard Design Criteria establish parameters for the design, materials, and construction methods for street design, including criteria for street lighting. Additionally, the project is subject to review by the City of Mountain View's Development Review Committee to review project-specific design and aesthetics.

5.1.1.2 *Existing Conditions*

The project site is within a transit priority area, pursuant to SB 743 (see Figure 5.1-1).

The approximately 40-acre project site is located within the larger 412-acre Precise Plan area. As described in Section 3.0 Project Information and shown in Figure 3.2-4, the project site is not all contiguous and is generally bounded by the property of the City and County of San Francisco (often referred to as the SFPUC right-of-way) to the north that consists of paved areas and landscaping, East Middlefield Road (a four-lane roadway) to the south, Ellis Street (a four-lane roadway) to the west, and the Sunnyvale Municipal golf course and SR 237 (a four-lane freeway) to the east.

The project site is currently developed with 23 office and light industrial buildings, ranging from one to four stories in height and totaling approximately 684,645 square feet. The buildings are a mix of older and more contemporary architecture. The older office buildings (built between 1960 and 1990 are lower intensity (one- to two-stories tall) with brick, stucco, or concrete facades. The more contemporary buildings (built between 1990 and the present) are generally taller (up to four stories) with glass expanses, stone facades, and metal details. All the buildings are surrounded by surface parking, and landscaping (primarily consisting of mature trees) is limited to the perimeter of the buildings and within the parking lots. Light rail tracks run north-south dividing the project site into two portions (see Figure 3.2-4). The Middlefield Light Rail Station is located on East Middlefield Road at the midblock between Ellis Street and Logue Avenue. The Middlefield Light Rail Station is a paved at-grade platform station with two shade structures located between the northbound and southbound light rail tracks. The Hetch-Hetchy/TOD Trail, which is a multi-modal paved trail that provides off-street access between Ellis Street and Stevens Creek Trail, is located approximately 65 feet west of the project site, across Ellis Street. Existing sources of light within and adjacent to the project site include streetlights, indoor lighting, and outdoor security lighting, as well as lighting from vehicles traveling on roadways.



TRANSIT PRIORITY AREA | FIGURE 5.1-1

5.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on aesthetics, except as provided in Public Resources Code Section 21099, would the project:

1) Have a substantial adverse effect on a scenic vista?
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?[62] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

5.1.2.1 *Project Impacts*

Impact AES-1:	**Both Project Options:** The project (under either option) would not result in a significant aesthetics impact. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that the implementation of the Precise Plan, including development of the project site, would not result in significant aesthetic impacts.[63] As discussed in the Precise Plan EIR, pursuant to SB 743, "aesthetic and parking impacts of a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment." The proposed project (including the proposed future bicycle/pedestrian bridge overcrossing and future city parks) would meet the criteria of SB 743 because it is a mixed-use residential project located on an infill site within a transit priority area. Additionally, the project includes design objectives for all building designs within the project area, which are consistent with the Precise Plan design guidelines and standards and the project exterior building, site lighting, and street lighting would be designed in accordance with City's Building Code, Public Works' Standard Design Criteria[64], and Caltrans requirements (if applicable). Furthermore, consistent with City standard procedures, the project would be required to comply with the following standard conditions of approval.

Standard Conditions of Approval:

COA AES-1.1: Both Project Options: The project (under either option) shall implement the following measures:

- **Lighting Plan.** The applicant shall submit a lighting plan in building permit drawings. This plan should include photometric contours, manufacturer's specifications on the fixtures, and mounting heights. The design and location of

[62] Public views are those that are experienced from publicly accessible vantage points.
[63] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 36-39.
[64] City of Mountain View, Standard Design Criteria. August 2022.

outdoor lighting fixtures shall ensure there would be no glare and light spillover to surrounding properties, which is demonstrated with photometric contours extending beyond the project property lines. The lighting plan submitted with building permit drawings must be approved by the Zoning Administrator prior to building permit issuance.

- **Both Project Options: Rooftop Deck Lighting.** Proposed lighting fixtures on the rooftop decks and courtyards shall not be visible from ground level on adjacent public streets. Any string lighting shall be designed to include shades to avoid light spillover and be screened so they are not visible from off-site. Limited pedestrian-scale/building-mounted lighting along pathways may be permitted subject to review and approval of photometric lighting plan submitted as part of the building permit drawings.

The project (under either option), therefore, would result in a less than significant aesthetics impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.1.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AES-1:	**Both Project Options:** The project (under either option) would not result in a significant aesthetics impact.	Yes	LTS	None	N/A
Abbreviations: LTS – Less than Significant					

5.2 AGRICULTURE AND FORESTRY RESOURCES

5.2.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for agriculture has not substantially changed since the certification of the Precise Plan EIR.

5.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The highest quality land is identified as Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[65]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[66]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[67] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[68]

[65] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed August 24, 2021. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

[66] California Department of Conservation. "Williamson Act." Accessed September 8, 2021. http://www.conservation.ca.gov/dlrp/lca.

[67] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

[68] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed August 24, 2021. http://frap.fire.ca.gov/.

5.2.1.2 *Existing Conditions*

According to the Santa Clara County Important Farmland 2016 map, the project site is designated as Urban and Built-Up Land, meaning the land contains a building density of at least six units per 10-acre parcel or is used for industrial or commercial purposes, golf courses, landfills, airports, or other utilities.[69] The project site is not currently used for agricultural or forestry uses and has a General Plan land use designation of High Intensity Office and East Whisman Mixed-Use. The site is zoned P-41 East Whisman Precise Plan. The site is currently developed with office buildings and light industrial, surface parking, and landscaping. The project site is not located adjacent to areas used for agricultural or forestry uses. The nearest agricultural uses to the project site are located at 253 North Whisman Road, approximately 575 feet southwest of the project site. The property at 253 North Whisman Road has an Agriculture (AW) zoning designation, and is designated as Unique Farmland in the Farmland Mapping and Monitoring Program.[70] The property is currently under a Williamson Act contract.[71]

5.2.2 **Impact Discussion**

For the purpose of determining the significance of the project's impact on agriculture and forestry resources, would the project:

1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
4) Result in a loss of forest land or conversion of forest land to non-forest use?
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

[69] California Department of Conservation. "California Important Farmland Finder." Accessed September 8, 2021. https://maps.conservation.ca.gov/DLRP/CIFF/
[70] Ibid.
[71] City of Mountain View. *Draft 2030 General Plan and Greenhouse Gas Reduction Strategy Program EIR.* September 2012. Pp. 58 – 60.

5.2.2.1 *Project Impacts*

The Precise Plan area does not include agricultural or forestry resources, therefore, the EWPP EIR did not include an analysis of potential agriculture and forestry resources impacts because the implementation of the Precise Plan would not impact those resources. There would continue to be no impacts to agriculture or forestry resources with the project. This is exemplified in the discussion below.

Impact AG-1:	**Both Project Options:** The project (under either option) would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(Same Impact as Approved Project [No Impact])**

As discussed in Section 4.2.1.2 Existing Conditions, the project site is designated as Urban and Built-Up Land in the Santa Clara County Important Farmland 2016 map. None of the parcels within the project site are designated as farmland pursuant to FMMP maps. Therefore, implementation of the project (under either option) would not convert farmland to non-agricultural uses. **(Same Impact as Approved Project [No Impact])**

Impact AG-2:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(Same Impact as Approved Project [No Impact])**

The project site is not used or zoned for agricultural use, nor is the project site subject to a Williamson Act contract. For these reasons, implementation of the project (under either option) would not conflict with existing zoning or a Williamson Act contract. **(Same Impact as Approved Project [No Impact])**

Impact AG-3:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(Same Impact as Approved Project [No Impact])**

As discussed in Section 5.2.1.2 Existing Conditions above, the project site is zoned for urban uses and is not used or zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, implementation of the project (under either option) would not conflict with existing zoning for (or cause rezoning of) forest land, timberland, or timberland zoned Timberland Production. **(Same Impact as Approved Project [No Impact])**

Impact AG-4:	**Both Project Options:** The project (under either option) would not result in a loss of forest land or conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

The project site is not used as forest land, designated as forest land, or located adjacent to forest land. The project (under either option) would, therefore, not result in a loss of forest land or a conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

Impact AG-5:	**Both Project Options:** The project (under either option) would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. **(Same Impact as Approved Project [No Impact])**

As discussed previously in Section 5.2.1.2 Existing Conditions, the project site and most of the surrounding area are designated as Urban Built-Up Land. There is no designated forest land on the project site or surrounding area. Isolated agricultural land, currently used for orchards, is located approximately 575 feet southwest of the project site on the south side of East Middlefield Road. Generally, increased urban development in proximity to agricultural lands could result in increased development pressure on agricultural lands to convert to nonagricultural uses due to the increased land value and limited access to agricultural support industries. This agricultural land, however, is currently under an active Williamson Act contract, which prevents land under contract from being used for any purposes other than commercial production of agricultural commodities. For this reason, the project (under either option) would not result in the conversion of farmland or forest land to a non-agricultural or non-forest use. **(Same Impact as Approved Project [No Impact])**

5.2.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
AG-1:	**Both Project Options:** The project (under either option) would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	Yes	NI	None	N/A
AG-2:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for agricultural use, or a Williamson Act contract.	Yes	NI	None	N/A
AG-3:	**Both Project Options:** The project (under either option) would not conflict with existing zoning for, or cause	Yes	NI	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
	rezoning of, forest land, timberland, or timberland zoned Timberland Production				
AG-4:	**Both Project Options:** The project (under either option) would not result in a loss of forest land or conversion of forest land to non-forest use.	Yes	NI	None	N/A
AG-5:	**Both Project Options:** The project (under either option) would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.	Yes	NI	None	N/A
Abbreviation: NI – No Impact					

5.3 BIOLOGICAL RESOURCES

The discussion in this section is based, in part, on an arborist report prepared by HortScience | Bartlett Consulting. This report is attached as Appendix D.

5.3.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for biological resources has not substantially changed since the certification of the Precise Plan EIR.

5.3.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[72] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

[72] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed August 19, 2021. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), VTA, USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to biological resources. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 16.3	**Habitat.** Protect and enhance nesting, foraging and other habitat for special-status species and other wildlife.
INC 16.6	**Built environment habitat.** Integrate biological resources, such as green roofs and native landscaping, into the built environment.
Parks, Open Space and Community Facilities	
POS 12.1	**Heritage trees.** Protect trees as an ecological and biological resource.
POS 12.2	**Urban tree canopy.** Increase tree canopy coverage to expand shaded areas, enhance aesthetics and help reduce greenhouse gases.
POS 12.3	**Planter strip.** Require tree planter strips be wide enough to support healthy trees and well-maintained public infrastructure.

Policy	Description
POS 12.4	**Drought-tolerant landscaping.** Increase water-efficient, drought-tolerant and native landscaping where appropriate on public and private property.

Source: City of Mountain View, *Mountain View 2030 General Plan.* July 10, 2012. Pp.135, 152, 59

East Whisman Precise Plan

The Precise Plan contains policies and guidelines related to biological resources. Landscaping and sustainability guidelines include planting native plants and tree species that support native wildlife and build biological diversity.

Mountain View City Code

Section 32.25 of the City Code contains Heritage tree preservation standards that require maintenance and preservation of Heritage trees, tree removal permits for the removal of Heritage trees, and conditions for preservation during construction or grading activity. Mountain View City Code Chapter 32, Article II defines a "Heritage Tree" as a tree with any of the following characteristics: a tree trunk with a circumference of forty-eight inches or more, measured at fifty-four inches above natural grade. Multi-trunk trees are measured just below the first major trunk fork. Any of the following three species of trees with a circumference of twelve inches or more, measured at fifty-four inches above natural grade: Quercus (oak), Sequoia (redwood), Cedrus (cedar), and groves of trees designated as "heritage" by the City Council.

5.3.1.2 *Existing Conditions*

The project site is within an urban area and provides habitat and foraging opportunities for urban-adapted birds. No rare, threatened, endangered, or special-status species are known to inhabit the project site, as described in the Precise Plan EIR.[73] The primary biological resource on-site is trees. The project site contains 1,032 trees, including 310 Heritage trees. No wetlands are present on the project site. The nearest wetlands to the project site are freshwater ponds located within the Sunnyvale Municipal Golf Course, approximately 500 feet east of the project site, and Stevens Creek riverine habitat approximately 0.9-mile west of the project site.

5.3.2 Impact Discussion

For the purpose of determining the significance of the project's impact on biological resources, would the project:

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?

[73] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 64.

3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.3.2.1 *Project Impacts*

Impact BIO-1:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. **(Same Impact as Approved Project [Less than Significant Impact])**

Special Status Species

The Precise Plan EIR concluded that, based on the highly urbanized and developed nature of the Precise Plan area, no natural communities or habitats for special-status plant and animal species are present and implementation of the Precise Plan (including development of the project site) would not result in impacts to special-status species or sensitive habitats.[74] The conditions in and around the project site have not changed substantially since the certification of the Precise Plan EIR. For this reason, the project (under either option) would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [No Impact])**

Nesting Birds

The existing buildings, mature trees, and vegetation on-site can provide foraging and nesting opportunities for a variety of bird species. The proposed project (under either option) would demolish existing buildings, remove 823 existing on-site trees (including 310 Heritage trees), and remove other landscaping/vegetation. Raptors (birds of prey) and nesting birds are protected by the MBTA and the CDFW code requirements. Urban-adapted raptors or other avian nests present on or adjacent to the site could be disturbed by project construction activities and result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFW and would constitute a significant impact.

In compliance with the MBTA and CDFW code and consistent with the Precise Plan EIR, the project (under either option) shall implement the following City standard condition of approval to reduce or avoid construction-related impacts to nesting birds (including raptors) and their nests to a less than significant level.

[74] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp 65.

Standard Condition of Approval:

COA BIO-1.1: **Both Project Options: Preconstruction Nesting Bird Survey**. To the extent practicable, vegetation removal and construction activities shall be performed from September 1 through January 31 to avoid the general nesting period for birds. If construction or vegetation removal cannot be performed during this period, preconstruction surveys shall be performed no more than two days prior to construction activities to locate any active nests as follows:

- The applicant shall be responsible for the retention of a qualified biologist to conduct a survey of the project site and surrounding 500 feet for active nests—with particular emphasis on nests of migratory birds if construction (including site preparation) begins during the bird nesting season, from February 1 through August 31. If active nests are observed on either the project site or surrounding area, the project biologist, in coordination with the appropriate City staff, shall establish no-disturbance buffer zones around the nests (usually 100 feet for perching birds and 300 feet for raptors). The no-disturbance buffer shall remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more and then resumes during the nesting season, an additional survey shall be necessary to avoid impacts on active bird nests that may be present.

With the implementation of the above standard condition of approval, the project (under either option) would result in a less than significant impact to nesting birds because preconstruction surveys would ensure no nesting birds or nests are located on-site during construction and if they are, then buffer zones would be established around nests during construction. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Bird Strike Hazards

Bird safe design measures included in the Precise Plan are intended to help diminish the likelihood of building collision fatalities through façade treatments and light pollution reduction. The proposed project would be required to incorporate the following Precise Plan design standards to reduce bird collision risk, which can be found in Chapter 4 of the Precise Plan.

1. **Façade Treatments**. No more than 10 percent of the surface area of a building's total exterior façade shall have bird-friendly glazing between the ground and 60 feet above ground. Examples of bird-friendly glazing treatments include opaque glass, covering of clear glass surface with patterns, use of paned glass with fenestration patterns, and use of external screens over non-reflective glass.
2. **Occupancy Sensors**. For non-residential development, occupancy sensors or other switch control devices shall be installed on non-emergency lights. These lights should be programmed to shut off during non-work hours and between 10:00 p.m. and sunrise.
3. **Funneling of Flight Paths**. New construction shall avoid funneling of flight paths along buildings or trees towards a building façade.
4. **Skyways, Walkways, or Glass Walls**. New construction and building additions shall avoid building glass skyways or walkways, freestanding glass walls, transparent building corners, or

landscaping behind glass (such as in atriums). New construction and building additions should minimize the use of glass at tops of buildings, especially when incorporating a green roof into the design.

5. **Exceptions to the Bird Safe Design Requirements**. The City may waive or reduce any of this chapter's bird safe design requirements based on analysis by a qualified biologist indicating that proposed construction would not pose a collision hazard to birds. Alternatively, additional design measures may be required based on an analysis by a qualified biologist.

These features would be incorporated into the final development plans for the project (under either option), which would be reviewed by the Planning Division at the time of planning and building permits to ensure proper implementation (consistent with the Precise Plan). With incorporation of the above standard condition of approval and Precise Plan standards, the project (under either option) would have a less than significant impact to bird species due to collisions by implementing façade treatments and light pollution reduction, which would deter birds. This is the same impact as disclosed in the Precise Plan EIR.[75] **(Same Impact as Approved Project [Less than Significant])**

Impact BIO-2:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. **(Same Impact as Approved Project [No Impact])**

There is no riparian habitat or wetland on or adjacent to the site. The nearest wetlands to the project site are freshwater ponds in Sunnyvale Municipal Golf Course, approximately 500 feet east and Stevens Creek riverine habitat approximately 0.9-mile west of the project site.[76] Project construction would not impact either area because activities would be contained on the project site and the off-site construction staging areas. For these reasons, the project would not have an impact on state or federally protected riparian habitat, sensitive natural community, or wetlands. This is the same impact as disclosed in the Precise Plan EIR.[77] **(Same Impact as Approved Project [No Impact])**

Impact BIO-3:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(Same Impact as Approved Project [No Impact])**

See discussion under Impact BIO-2 above. The project (under either option) would not impact wetlands. **(Same Impact as Approved Project [No Impact])**

[75] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 66.
[76] United States Fish and Wildlife Service. *National Wetlands Inventory, Surface Waters and Wetlands.* Map. November 2019.
[77] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 67.

Impact BIO-4:	**Both Project Options:** The project (under either option) would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is currently developed and surrounded by existing urban development. There are no waterways on-site. Neither the site nor adjacent properties contain any riparian corridors, wildlife areas, open space, or wetlands that provide habitat or movement corridors for fish or other wildlife species. In addition, as discussed under Impact BIO-1, the project shall incorporate bird safe building design measures to reduce bird collision fatalities, and implement standard conditions of approval to protect nesting birds. The project site is not within a location consisting of high concentrations of breeding wildlife of one or several species. The development of the project (under either option), therefore, would not impact a wildlife nursery site. This is the same impact as disclosed in the Precise Plan EIR.[78] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact BIO-5:	**Both Project Options:** The project (under either option) would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Same Impact as Approved Project [Less than Significant Impact])**

General Plan Policies

The project (under either option) would integrate native and drought-tolerant landscaping (consistent with General Plan Policy INC 16.6) and would be required to follow standard conditions of approval to protect nesting birds during construction (consistent with General Plan Policy 16.3). The project (under both options), therefore, would comply with General Plan policies related to biological resource protection. This is the same impact as disclosed in the Precise Plan EIR.[79] **(Same Impact as Approved Project [Less than Significant Impact])**

Precise Plan Policies

The project (under either option) would plant native plants and tree species that support native wildlife and build biological diversity, consistent with Precise Plan requirements for biological resources. The project (under either option), therefore, would comply with Precise Plan policies related to biological resource protection. **(Same Impact as Approved Project [Less than Significant Impact])**

Tree Preservation Ordinance

The project (under either option) would remove 823 existing on-site trees, including 310 Heritage trees, from the project site. The project would plant a minimum of 620 new trees. The City of Mountain View regulations require a permit to remove or move any tree over 48-inches in circumference or any oak, Sequoia, or cedar over 12-inches in circumference (measured at 54-inch above grade). A City of

[78] Ibid. P 66.
[79] Ibid. P 67.

Mountain View Heritage Tree Removal Permit is required before any Heritage trees are removed. The proposed project would implement the following standard City conditions of approval to comply with the City's Tree Preservation Ordinance and other city policies.

Standard Condition of Approval:

COA BIO-2.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Arborist Report.** A qualified arborist shall provide written instructions for the care of the existing tree(s) to remain on-site before, during, and after construction. The report shall also include a detailed plan showing installation of chain link fencing around the dripline to protect these trees and installation of an irrigation drip system and water tie-in for supplemental water during construction. Arborist's reports shall be received by the Planning Division and must be approved prior to issuance of building permits. Prior to occupancy, the arborist shall certify in writing that all tree preservation measures have been implemented. Approved measures from the report shall be included in the building permit drawings.
- **Arborist Inspections.** During demolition activity and upon demolition completion, a qualified arborist shall inspect and verify the measures described in the arborist report are appropriately implemented for construction activity near and around the preserved trees, including the critical root zones. Should it be determined that the root systems are more extensive than previously identified and/or concerns are raised of nearby excavation or construction activities for the project foundation or underground parking garage, the design of the building and/or parking garage may need to be altered to maintain the health of the trees prior to building permit issuance.
- **Monthly Arborist Inspections.** Throughout demolition and construction, a qualified arborist must conduct monthly inspections to ensure tree protection measures and maintenance care are provided. A copy of the inspection letter, including recommendations for modifications to tree care or construction activity to maintain tree health, shall be provided to the Planning Division at planning.division@mountainview.gov.
- **Replacement**. The applicant shall offset the loss of each Heritage tree with a minimum of two new trees. Each replacement tree shall be no smaller than a 24-inch box and shall be noted on the landscape plans submitted for building permit review as Heritage replacement trees.
- **Street Tree Protections.** All designated City street trees to remain are to be protected throughout construction activity with protection measures shown on building permit plans.
- **Tree Protection Measures**. The tree protection measures listed in the projects arborist report shall be included as notes on the title sheet of all grading and landscape plans. These measures shall include, but may not be limited to, six-foot chain link fencing at the drip line, a continuous maintenance and care

program, and protective grading techniques. Also, no materials may be stored within the drip line of any tree on the project site.

- **Tree Mitigation and Preservation Plan**. The applicant shall develop a tree mitigation and preservation plan to avoid impacts on regulated trees and mitigate for the loss of trees that cannot be avoided. The plan shall also outline measures to be taken to preserve off-site trees. Routine monitoring for the first five years and corrective actions for trees that consistently fail the performance standards shall be included in the tree mitigation and preservation plan. The tree mitigation and preservation plan shall be developed in accordance with Chapter 32, Articles I and II, of the City Code, and subject to approval of the Zoning Administrator prior to removal or disturbance of any Heritage trees resulting from project activities, including site preparation activities.

In conclusion, with implementation of the above standard condition of approval, the project (under either option) would be consistent with the City's General Plan Policies, Precise Plan Policies, and City's Tree Preservation Ordinance and policies. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact BIO-6:	**Both Project Options:** The project (under either option) would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is not part of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. The project (under either option), therefore, would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) is a conservation program to promote the recovery of endangered species in portions of Santa Clara County while accommodating planned development, infrastructure and maintenance activities. The Precise Plan area, including the project site, is located outside the Habitat Plan area and outside of the expanded study area for burrowing owl conservation.

Nitrogen deposition contribution estimates of impacts on serpentine habitat in Santa Clara County were made as a part of the development of the Habitat Plan. The Precise Plan EIR concluded the nitrogen emissions (based on existing and future vehicle emissions) that would result from build-out of the Precise Plan are less than cumulatively considerable (given that buildout of the Precise Plan is a small portion of Santa Clara County's overall emissions).[80] The Habitat Plan accounts for the indirect impacts of nitrogen deposition (existing and future) and identifies measures to conserve and manage serpentine areas over the term of the Habitat Plan, such that cumulative impacts to this habitat and associated special-status species would not be significant and adverse. For these reasons, the project

[80] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. January 2020. Pp. 68-69.

(under either option) would not conflict with an adopted habitat conservation plan. Impacts would be consistent with those identified in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.3.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
BIO-1:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	Yes	LTS	None	N/A
BIO-2:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	Yes	NI	None	N/A
BIO-3:	**Both Project Options:** The project (under either option) would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.	Yes	NI	None	N/A
BIO-4:	**Both Project Options:** The project (under either option) would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Yes	LTS	None	N/A
BIO-5:	**Both Project Options:** The project (under either option) would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Yes	LTS	None	N/A
BIO-6:	**Both Project Options:** The project (under either option) would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Yes	LTS	None	N/A

Abbreviations: LTS – Less than Significant, NI – No Impact

5.4 CULTURAL RESOURCES

The following discussion is based, in part, on a Historic Resources Evaluation completed by ESA and peer reviewed by PaleoWest. The Historic Resources Evaluation and peer review memorandum are attached as Appendix E.

5.4.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for cultural resources has not substantially changed since the certification of the Precise Plan EIR.

5.4.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection of cultural resources is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800 et seq.) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

The NRHP is the nation's master inventory of historic resources that are considered significant at the national, state, or local level. The minimum criteria for determining NRHP eligibility include:

- The property is at least 50 years old (properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
- It possesses at least one of the following characteristics:
    - Association with events that have made a significant contribution to the broad patterns of history (Criterion 1);
    - Association with the lives of persons significant in the past (Criterion 2);
    - Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (Criterion 3); or
    - Has yielded, or may yield, information important to prehistory or history (Criterion 4); and
- It retains integrity of location, design, setting, materials, workmanship, feeling, and associations.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic

Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[81]

Historical resources eligible for listing in the CRHR must meet the significance criteria described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." If a property is determined not to be historically significant, by definition, it does not have integrity. The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include: 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease, and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction; establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

[81] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed August 31, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts to cultural resources. The following goals and policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 11.5	**Archaeological and paleontological site protection.** Require all new development to meet state codes regarding the identification and protection of archaeological and paleontological deposits.
LUD 11.6	**Human remains.** Require all new development to meet state codes regarding the identification and protection of human remains.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. P. 54

5.4.1.2 *Existing Conditions*

Historic Resources

There are no known historic resources within the Precise Plan area (which includes the project site).[82,83,84] The project site is currently developed with 23 office/light industrial buildings that were constructed between the 1960s and 1990s. Of the 23 existing buildings on-site, the following 20 are 45 years or older[85] (refer to Figure 5.4-1 for the location of these buildings within the project):

1	433 Clyde Avenue (1967)	11	520-526 Clyde Avenue (1972)
2	485 Clyde Avenue (1970)	12	440 Clyde Avenue (1965)
3	495 Clyde Avenue (1968)	13	450 Clyde Avenue (1965)
4	500 Logue Avenue (1972)	14	420 Clyde Avenue (1968)
5	510 Logue Avenue (1972)	15	880 Maude Avenue (1968)
6	520 Logue Avenue (1972)	16	800 Maude Avenue (1968)
7	530 Logue Avenue (1972)	17	830 Maude Avenue (1968)
8	433 Clyde Avenue (1967)	18	840-850 Maude Avenue (1968)
9	500-506 Clyde Avenue (1972)	19	440 Logue Avenue (1964)
10	510-516 Clyde Avenue (1972)	20	885 Maude Avenue (1963)

[82] National Park Service. National Register of Historic Places. Accessed November 12, 2021. https://www.nps.gov/subjects/nationalregister/database-research.htm

[83] California State Parks Office of Historic Preservation. California Register of Historical Resources. Accessed November 12, 2021. https://ohp.parks.ca.gov/?page_id=21238

[84] City of Mountain View. Register of Historic Resources. Accessed November 12, 2021. https://www.livablemv.org/wp-content/uploads/2018/09/MV-Local-Historic-Registry-List.pdf

[85] Per the National Historic Preservation Act, properties 50 years or older meet the minimum age requirement for potential eligibility as historic resources. Due to the duration of project construction (8.5 years), structures that are 45 years old when this EIR was prepared were included because they would meet the minimum age requirement for potential eligibility during project construction.

LOCATION OF BUILDINGS 45 YEARS AND OLDER | FIGURE 5.4-1

According to a Historic Resources Survey Report provided by the applicant and peer review of that analysis by the City's consultant, none of the buildings on the project site have been identified as historic resources in the City of Mountain View Register of Historic Resources, or are listed or are eligible for listing on the CRHR or the NRHP.[86,87] While the 20 existing buildings are associated with sprawling development of office parks in Silicon Valley, this pattern of development is typical for the time and none of the structures appear to have risen above typical associations with these events. For these reasons, the buildings are not considered eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 1. Archival research on the 20 buildings did not reveal any significant associations with people or businesses in a potential period of significance for these buildings. Therefore, the buildings are not considered eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 2. The 20 buildings are typical and modest examples of corporate modern architectural style and are not the work of a master architect or builder. For these reasons, the buildings are not eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 3. Furthermore, the 20 buildings do not have the potential to yield more information and, therefore, are not eligible for listing on the NRHP, CRHR, and Mountain View Registers under Criterion 4. Although the buildings were constructed in the same timeframe and share a historical association to early Silicon Valley, neither the group, or a subset of them represent a historic district. As a collection of buildings, they represent typical suburban office park development from the late 1960s and 1970s, and do not possess characteristics that would make them unique or significant for the period. Because the buildings are not historically significant, they do not possess integrity and no integrity analysis is required.

Prehistoric Resources

As part of the Precise Plan EIR, a records search was conducted at the Northwest Information Center (NWIC) of California Historical Resources Information System (CHRIS), including an examination of the official records and maps for archaeological sites and surveys in the Precise Plan area, as well as a review of the NRHP, the CRHR, the California Inventory of Historic Resources, California State Landmarks, California Points of Historical Interest, the Directory of Properties in the Historical Resources Inventory, Caltrans Local Bridges Surveys, and secondary sources pertaining to state and local prehistory and history. Based upon the research, archaeological resources were not identified on the project site.

Areas that are near natural water sources (e.g., riparian corridors and tidal marshland) would be considered highly sensitive for prehistoric archaeological deposits and human remains. The project site is approximately two miles from the San Francisco Bay and approximately 0.9-mile east of Stevens Creek. The freshwater ponds located within the Sunnyvale Municipal Golf Course are manmade water sources and were not present during the prehistoric period. Thus, the presence of these freshwater ponds does not indicate high sensitivity for prehistoric archaeological deposits or human remains. As discussed in the Precise Plan EIR, there are no known cultural resources within the Precise Plan area (which includes the project site), and the area is considered moderately archaeologically sensitive.[88]

[86] ESA. *East Whisman 19-Property Survey, Historic Resources Survey Report.* March 2022.
[87] PaleoWest. *Peer Review Memorandum, East Whisman 19-Property Survey, Historic Resources Survey Report.* March 2022.
[88] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp 72.

5.4.2 Impact Discussion

For the purpose of determining the significance of the project's impact on cultural resources, would the project:

1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?
3) Disturb any human remains, including those interred outside of dedicated cemeteries?

5.4.2.1 *Project Impacts*

Impact CUL-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(Same Impact as Approved Project [Less than Significant Impact])**

As noted in Section 5.4.1.2 Existing Conditions, there are no known historic resources within the Precise Plan. Due to the length of the proposed construction period (8.5 years), buildings on-site that are 45 years or older have the potential to meet the minimum age requirement (50 years) for eligibility as a historic resource during buildout of the project. The historic evaluation of these buildings, included in Appendix E and summarized in Section 5.4.1.2 Existing Conditions, concluded that none of the buildings are listed on or eligible for listing on a federal, state, or Mountain View list of historic resources. Furthermore, although the buildings were constructed in the same timeframe and share a historical association to early Silicon Valley, neither the group, or a subset of them represent a historic district (refer to Appendix E for further details). No buildings on or adjacent to the project site contain historic resources; therefore, construction of the project would not impact off-site historic resources.[89] For these reasons, the project (under either option) would have a less than significant impact to historic resources. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact Impact])**

Impact CUL-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site is currently developed and, as discussed in the Precise Plan EIR, it is unlikely that buried historical or prehistorical resources are present in most developed areas.[90] Although it is unlikely that buried historic or prehistoric buried archaeological and paleontological resources are present on the site, these resources could be encountered during excavation, construction, or

[89] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 72.
[90] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 74.

infrastructure improvements for the project, resulting in a significant impact. The project (under either option) would implement the below standard conditions of approval related to the discovery of pre-historic or historic period archaeological resources and human remains (in compliance with General Plan Policies LU-11.5 and LU-11.6), should they be encountered on the site.

With incorporation of the following standard conditions of approval (as updated per consultation with Tamien Nation on November 22, 2021 and December 30, 2021), the project (under either option) would not result in a new or substantially more severe significant environmental impact than disclosed in the Precise Plan EIR.

Standard Condition of Approval:

COA CUL-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Cultural Sensitivity Training.** As requested during the Tribal Consultation process for the project, Tribal Cultural Sensitivity Training shall be provided to the construction crews at the beginning of the project to aid those involved in the project to become more familiar with indigenous history of peoples in the vicinity of the project site.
- **Native American Archaeological Monitor.** A Tamien Nation Tribal monitor shall be present for all ground-disturbing activities throughout the project construction process.
- **Discovery of Archaeological and Tribal Cultural Resources**. If indigenous or historic-era cultural materials are unearthed during ground-disturbing activities, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The City and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archaeology, and Tamien Nation shall be immediately informed of the discovery. The qualified archaeologist and a Tamien Nation Tribal representative shall inspect the find within 24 hours of discovery and notify the City of their initial assessment. Indigenous archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks and artifacts; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered-stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and wall, filled wells or privies, and deposits of metal, glass, and/or ceramic refuse. If the find is determined to be potentially significant, the archaeologist, in consultation with a Tamien Nation Tribal representative, shall develop a treatment plan that could include site avoidance, capping, or data recovery.
- **Discovery of Human Remains**. In the event of the discovery of human remains during construction or demolition, there shall be no further excavation or disturbance of the site within a 50-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains.

The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his/her authority, he/she shall notify the NAHC, which shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the landowner shall reinter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

A final report shall be submitted to the City's Community Development Director prior to release of a Certificate of Occupancy. This report shall contain a description of the mitigation programs and its results, including a description of the monitoring and testing resources analysis methodology and conclusions, and a description of the disposition/curation of the resources. The report shall verify completion of the mitigation program to the satisfaction of the City's Community Development Director.

The project (under either option), in compliance with the above standard conditions of approval, would reduce impacts to unknown archaeological resources to a less than significant level by stopping work and monitoring resources to avoid impacts in the event of a discovery. This is the same impact as discussed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact CUL-3:	**Both Project Options:** The project (under either option) would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Same Impact as Approved Project [Less than Significant Impact])**

See discussion under Impact CUL-2. The project (under either option) would implement the standard conditions of approval. **(Same Impact as Approved Project [Less than Significant Impact])**

5.4.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
CUL-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.	Yes	LTS	None	N/A
CUL-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
CUL-3:	**Both Project Options:** The project (under either option) would not disturb any human remains, including those interred outside of dedicated cemeteries.	Yes	LTS	None	N/A
Abbreviations: NI – No Impact, LTS – Less than Significant					

5.5 ENERGY

The following discussion is based, in part, on an Air Quality Analysis completed by Illingworth & Rodkin, Inc. This report is attached as Appendix C.

5.5.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for energy resources has not substantially changed since the certification of the Precise Plan EIR.

5.5.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. Governor Schwarzenegger issued Executive Order (EO) S-3-05, requiring statewide emissions reductions to 80 percent below 1990 levels by 2050. In 2008, EO S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[91] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[92]

California Green Building Standards Code

CalGreen establishes mandatory green building standards for buildings in California. CalGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CalGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[93]

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to energy impacts. The following policy is applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD-10.5	**Building energy efficiency.** Incorporate energy-efficient design features and materials into new and remodeled buildings.

Source: City of Mountain View, *Mountain View 2030 General Plan*. July 10, 2012. P. 53

[91] California Building Standards Commission. "California Building Standards Code." Accessed August 30, 2021. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

[92] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed August 30, 2021. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

[93] California Air Resources Board. "The Advanced Clean Cars Program." Accessed October 14, 2021. https://www.arb.ca.gov/msprog/acc/acc.htm.

Greenhouse Gas Reduction Program

The City's Greenhouse Gas Reduction Program (GGRP) mitigates the environmental impacts of the General Plan and identifies strategies and measures to achieve BAAQMD 2030 emissions reductions goals. The GGRP includes measures to reduce emissions such as green building performance and vehicle trip reduction requirements.

East Whisman Precise Plan

The Precise Plan contains standards, policies, and guidelines related to energy resources. Precise Plan development standards and bonus FAR requirements include requirements for residential and non-residential building energy efficiency and renewable energy generation. The Precise Plan requires vehicle trip caps, dual plumbing for potable and recycled water use, climate-resilient and drought tolerant landscaping, and implementation of sustainable building designs and materials. The Precise Plan also requires new nonresidential Bonus FAR development to meet the intent of LEED BD+C Platinum or equivalent, and new residential Bonus FAR development to meet the intent of 120 points on the Green Point Rated system or equivalent, along with submetering, or other technology that can track individual energy use, for each residential unit.

Mountain View Green Building Code and Reach Code

The Mountain View Green Building Code (MVGBC) amends the state-mandated CalGreen standards to include local green building standards and requirements for private development. The MVGBC does not require formal certification from a third-party organization but requires projects to be designed and constructed to meet the intent of a third-party rating system.[94] For residential projects proposing over five units, the MVGBC requires those buildings meet the intent of 70 GreenPoint Rated points from the Build it Green certification program, as well as compliance with mandatory CalGreen requirements. For non-residential projects proposing buildings between 5,000 and 25,000 square feet, the MVGBC requires those buildings meet the intent of LEED Certified and mandatory CalGreen requirements. For buildings over 25,000 square feet, the MVGBC requires those buildings meet the intent of LEED Silver and mandatory CalGreen requirements. Additionally, development projects subject to CalGreen requirements are required to divert at least 65 percent of construction debris from landfills.

In 2019, the Mountain View City Council approved amendments to Chapters 8, 14, and 24 of the MVGBC, referred to as Reach Code amendments. The Reach Code amendments are applicable to any project submitted after December 31, 2019. These Reach Code amendments require new buildings to be all-electric with an exception for commercial spaces with specialized equipment that cannot operate with electric service if approved by the City.

[94] City of Mountain View. *Mountain View Green Building Code*. 2019. Accessed November 15, 2021. https://www.mountainview.gov/depts/comdev/building/construction/2019_mountain_view_green_building_and_reach_codes.asp

City of Mountain View Construction and Demolition Ordinance

According to the City's Construction and Demolition Ordinance, all development projects involving demolition of greater than 5,000 square feet are required to divert 50 percent of construction demolition debris from landfills. Documentation of this diversion is required prior to scheduling a final building inspection.

5.5.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.[95] Out of the 50 states, California is ranked 2nd in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses, and 39 percent (3,073 trillion Btu) for transportation.[96] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2019 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2019, a total of approximately 16,664 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.

The community-owned SVCE is the electricity provider for the City of Mountain View.[97] SVCE sources the electricity, and PG&E delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan and can upgrade to the GreenPrime plan.[98] Both options are considered 100 percent GHG-emission free.

The electricity demand for existing uses on-site is approximately 11.7 million-kilowatt hours kWh per year.

Natural Gas

PG&E provides natural gas services within the City of Mountain View. In 2019, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[99] In 2019, residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial

[95] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed October 14, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[96] Ibid.
[97] Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed August 30, 2021. https://www.svcleanenergy.org/faqs.
[98] The GreenStart plan offers customers carbon free electricity service from 50 percent renewable sources and the GreenPrime plan offers customers carbon free electricity from 100 percent renewable sources. Source: Silicon Valley Clean Energy. "Your Choices – SVCE." Accessed October 25, 2021. https://www.svcleanenergy.org/choices/#GreenStart
[99] California Gas and Electric Utilities. 2020 *California Gas Report.* Accessed August 30, 2021. https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

sector used 35 percent, and other uses used six percent.[100] Transportation accounted for one percent of natural gas use in California. In 2019, Santa Clara County used approximately two percent of the state's total consumption of natural gas.[101]

The natural gas demand for existing uses on-site is approximately 11 million kilo British thermal units (kBtu) per year.

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline was sold in California.[102] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.[103] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. This standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.[104,105]

The gasoline demand for existing uses on-site is approximately 455,875 gallons per year.

5.5.2 Impact Discussion

For the purpose of determining the significance of the project's impact on energy, would the project:

1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

[100] United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 30, 2021. https://www.eia.gov/state/?sid=CA#tabs-2.
[101] California Energy Commission. "Natural Gas Consumption by County." Accessed August 30, 2021. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[102] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 30, 2021. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[103] United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf
[104] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed October 14, 2021. http://www.afdc.energy.gov/laws/eisa.
[105] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed October 14, 2021. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

1.1.1.2 *Project Impacts*

Impact EN-1:	**Both Project Options:** The project (under either option) would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded the construction and operation of development under the Precise Plan would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy or wasteful use of energy resources because:

- Construction processes are generally designed to be efficient,
- Development would occur in an urbanized area with access to roadways, construction supplies, and workers,
- Standard BAAQMD BMPs would be implemented to restrict construction equipment idling times and prohibit unnecessary idling,
- Construction equipment with reduced emissions would be used,
- Projects would comply with the City's requirements to recycle and/or salvage for reuse a minimum of 65 percent of nonhazardous construction and demolition waste, and
- Projects would comply with Precise Plan green building standards.[106]

In addition, as discussed in the Precise Plan EIR, implementation of the Precise Plan (which includes the project under either option) would result in an overall decrease in gasoline use due to the Precise Plan area's proximity to transit, requirement for TDM plans, and mix of land uses. The annual energy demand of the Precise Plan at buildout is estimated to be approximately 156.1 million kWh of electricity, 188.2 million kBtu of natural gas, and 1.6 million gallons of gasoline.[107]

The project is consistent with the development analyzed in the Precise Plan EIR and, therefore, the energy demand by the project was accounted for in the Precise Plan EIR. The construction of the project is estimated to use gasoline and diesel fuel for vehicles, equipment, and generators, and electricity for tools. There is currently no acceptable standard model or accurate way to predict construction energy demand. Therefore, the construction energy demand for the project (under either option) was not quantified.

The project-specific air quality analysis quantified energy use and demand associated with the project with District Utilities System Option (refer to Appendix C**)**. A summary of the operational energy demand calculated for the project with District Utilities System Option is provided in Table 5.5-1 below. As noted in Section 3.0 Project Description above, the project applicant is considering the District Utilities System Option to further their corporate sustainability goals. Energy demand from construction and operation of the proposed buildings would remain the same under either project option. The operation of the CUP, district heating and cooling system, and district distribution system would be in addition to continued operation of the City's existing utilities systems, as there is no

[106] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 80 – 82.
[107] Ibid. P. 81.

assumed reduction of municipal utility capacity due to the addition of the CUP facilities. Because the City must ensure the existing utilities systems can accommodate the proposed development on the site in the event the District Utilities System is offline, the City must be prepared to service this site if needed. Therefore, this analysis evaluates these proposed CUP facilities as "additive" on the existing municipal utility operations. The analysis represents that additional energy would be required under the District Utilities System option. As shown in Table 5.5-1, on-site electricity and gasoline demand would increase and natural gas demand would decrease compared to existing conditions with implementation of the project (under either option). This is due to the replacement of existing electric/natural gas-powered buildings with new all electric buildings designed consistent with the City's Reach Code standards.[108]

Table 5.5-1: Existing and Project with District Utilities System Option Annual Energy Demand

	Electricity (kWh)	Natural Gas (kBtu)	Gasoline (gallons)[1]
A. Existing Land Uses	11,761,400	11,097,000	455,875
B. Project with District Utilities System Option	35,731,430	95,940	1,384,790
Net Increase in Demand (B-A)	23,970,030	-11,001,060	928,915

Note: The energy demand for the project without the district utilities system are less than shown above since all aspects of the two project options are the same except the option with district utilities system includes the operation of the CUP, district heating and cooling system, and district distribution system.

[1] The estimated gasoline demand is based on the estimated annual VMT of 11,351,292 for existing uses and the average fuel economy of 24.9 mpg.

[2] The estimated gasoline demand is based on the estimated annual VMT (refer to 4.2 Trip Summary Information for Middlefield Campus Operational in Attachment 2 of Appendix C) and the average fuel economy of 24.9 mpg.

kWh = kilowatt per hour

kBtu = kilo-British thermal unit

Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

The energy demand and use during construction and operation of the project (under either option) would not be wasteful or inefficient because there is nothing atypical about the project's construction process, in addition to the same reasons listed for the Precise Plan. Specifically:

- The project site is in an urbanized area, proximate to roadways, construction supplies, and workers;
- Equipment and fuel would not be used wastefully on-site because of the added expense associated with renting the equipment as well as maintenance and fuel;
- The project would be required to implement standard BAAQMD BMPs, restricting construction equipment idling times and prohibiting unnecessary idling and requiring the use of Tier 4 construction equipment with reduced emissions;
- The project would also comply with the City's Reach Code requirements for all electric

[108] Per City Code Chapters 8, 14, and 24, all new construction buildings are required to be electric. Natural gas may be used for commercial spaces with specialized equipment that cannot operate with electric service (e.g., a restaurant with a pizza oven) subject to City approval.

building operations[109], rooftop solar panels, and electric vehicle infrastructure;
- The project would implement a TDM plan designed to reduce vehicle trips;
- The proposed office buildings would meet the intent of LEED Platinum green building standards; and
- The proposed residential buildings would achieve the equivalent of a GreenPoint rating of 120 points or better and include submetering for each residential unit, or an equivalent technology.

For all the reasons listed above, the project (under either option) would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact EN-2:	**Both Project Options:** The project (under either option) would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that future development under the Precise Plan (including the project under either option) would not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency (including the GGRP, RPS program, SB 350, Title 24, CalGreen, and MVGBC identified in Section 5.4.4.1) by:
- Implementing TDM plans,
- Obtaining 100 percent carbon free electricity from SVCE, or a similar provider, and
- Complying with Precise Plan building standards.[110]

The project (under either option) would implement a TDM plan, obtain 100 percent carbon free electricity from SVCE (or similar provider), and comply with Precise Plan building standards. For these reasons, the project (under either option) would result in the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[110] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 82.

5.5.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
EN-1:	**Both Project Options:** The project (under either option) would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Yes	LTS	None	N/A
EN-2:	**Both Project Options:** The project (under either option) would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant, N/A – Not Applicable					

5.6 GEOLOGY AND SOILS

The following discussion is based, in part, on geotechnical investigations performed by ENGEO and Ninyo & Moore. These reports are attached as Appendix F.

5.6.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for geology and soils has not substantially changed since the certification of the Precise Plan EIR.

5.6.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years, with the most recent update in 2018.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could

injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These materials are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to geology and soils impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 4.2	**Natural disasters.** Minimize impacts of natural disasters.
PSA 5.1	**New development.** Ensure new development addresses seismically induced geologic hazards.
PSA 5.2	**Alquist-Priolo zones.** Development shall comply with the Alquist-Priolo Earthquake Fault Zoning Act.
PSA 5.4	**Utility design.** Ensure new underground facilities, particularly water and natural gas lines, are designed to meet current seismic standards.
Infrastructure and Conservation	
INC 2.3	**Emergency-prepared infrastructure design.** Require the use of available technologies and earthquake-resistant materials in the design and construction of all infrastructure projects, whether constructed by the City or others.

Source: City of Mountain View, *Mountain View 2030 General Plan,* July 10, 2012. Pp. 177, 128

Mountain View City Code

The City of Mountain View has adopted the CBC, with amendments, as the reference building code for all projects in the City under Chapter 8 of the City Code. The City of Mountain View's Building Inspection Division is responsible for reviewing plans, issuing building permits, and conducting field inspections. Project-specific geotechnical investigation reports would be required for projects as a City standard condition of approval. Reports would be reviewed by the City of Mountain View's Building Inspection Division prior to issuance of building permits to ensure compliance.

5.6.1.2 *Existing Conditions*

On-site Geology

Soils

The project site is generally underlain by undocumented fill and silt and silty clay loam alluvium soils. The soils present in the area exhibit medium shrink-swell (i.e., expansive) behavior.[111,112]

Site Topography

The project site is relatively flat, and as a result, the risk of erosion or landslide is low. There are no hillsides or steep embankments within the project site that require consideration for development. The elevation of the site ranges from 51 to 62 feet above mean sea level.[113]

Groundwater

The project site is located in the Santa Clara Valley Subbasin, a groundwater subbasin that is 225 square miles in area. The project site is not located within or adjacent to any groundwater recharge facilities used by Valley Water.[114]

Soil borings were performed at select properties within the site and ranged between six to 16 feet below ground surface.

Seismic and Seismic-Related Hazards

Earthquake Faults

The project site is located within the seismically active San Francisco Bay region. Nearby active faults include the San Andreas Fault (10 miles to the west), the Calevaras Fault (14 miles to the southeast), and the Hayward Fault (nine miles to the northeast). The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone.[115]

[111] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2.* January 29, 2021. Revised February 8, 2021. P. 10.
[112] Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 440 Clyde Avenue.* April 3, 2020. P. 10.; Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 450 Clyde Avenue.* April 3, 2020. P. 10.; Ninyo & Moore. *Feasibility Level Geotechnical Investigation. East Whisman: 441 Logue Avenue.* July 14, 2020. P. 10.
[113] Appendix G.
[114] Valley Water. *Annual Groundwater Report 2019.* July 2020. Accessed November 15, 2021. https://www.valleywater.org/sites/default/files/2020-09/2019_Annual_Groundwater_Report_Web_Version.pdf
[115] California Geological Survey. Earthquake Zones of Required Investigation. Accessed September 23, 2021. https://maps.conservation.ca.gov/cgs/EQZApp/app/

Liquefaction

Soil liquefaction can be defined as ground failure or loss of strength that causes otherwise solid soil to take on the characteristics of a liquid. This phenomenon is triggered by earthquake or ground shaking that causes saturated or partially saturated soils to lose strength, potentially resulting in the soil's inability to support structures. The project site is located within a State of California liquefaction hazard zone.[116]

Other Geologic Hazards

The project site is not located within a geologic hazard zone for compressible soil, landslides, or fault rupture.[117]

Paleontological Resources

There have been no recorded fossils discovered within the City of Mountain View, though two fossils have been discovered outside of the Mountain View City limits (the location of one of these deposits is not known; however, the location of the other deposit is identified as approximately two miles west of the City's sphere of influence).[118] Fossiliferous deposits do exist in the City. Soils within the Precise Plan area could have paleontological sensitivity.[119]

5.6.2 Impact Discussion

For the purpose of determining the significance of the project's impact on geology and soils, would the project:

1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides?
2) Result in substantial soil erosion or the loss of topsoil?
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater

[116] Ibid.
[117] Ibid.
[118] City of Mountain View. *General Plan General Plan Environmental Impact Report.* September 2012. P. 470.
[119] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. January 2020. P. 87.

disposal systems where sewers are not available for the disposal of wastewater?

6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

5.6.2.1 *Project Impacts*

Impact GEO-1:	**Both Project Options:** The project (under either option) would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides**. (Same Impact as Approved Project [Less than Significant Impact])**

The project site is not located within the Alquist-Priolo special study zone on the California Geological Survey fault zone map.[120,121] No faults cross the site; therefore, fault rupture would not occur on-site. The project site, however, is located in a seismically active region, and strong to very strong ground shaking would be expected during the lifetime of the proposed project. Ground shaking on the site could damage structures and threaten future occupants of the proposed development. Additionally, as disclosed in the Precise Plan EIR, the project site is in a liquefaction hazard area.[122] Due to the relatively flat topography of the site and surrounding areas, the project would not be subject to substantial slope instability or landslide related hazards.

As identified in the Precise Plan, the proposed project would be designed and constructed in accordance with CBC requirements, Precise Plan EIR policies, General Plan Policies PSA 4.2, PSA 5.1, PSA 5.2, PSA 5.4, and INC 2.3, and the following standard condition of approval, in order to avoid and minimize seismic and seismic related hazards (including liquefaction) to a less than significant level.

Standard Condition of Approval:

COA GEO-1.1: **Both Project Options: Geotechnical Report**. The applicant shall have a design-level geotechnical investigation prepared which includes recommendations to address and mitigate geologic hazards in accordance with the specifications of California Geological Survey Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards, and the requirements of the Seismic Hazards Mapping Act. The report shall be submitted to the City prior to the issuance of building permits, and the recommendations made in the geotechnical report shall be implemented as part of the project. Recommendations may include considerations for design of permanent below-grade walls to resist static lateral earth pressures, lateral pressures caused by seismic activity, and traffic loads;

[120] Department of Conservation, California Geological Survey. *Earthquake Zones of Required Investigation*. Map. 2019.
[121] ENGEO. *East Whisman Phase 1. Geotechnical Report for Horizontal Improvements at R1 and R2*. January29, 2021. Revised February 8, 2021.
[122] Ibid.

method for back draining walls to prevent the buildup of hydrostatic pressure; considerations for design of excavation shoring system; excavation monitoring; and seismic design. Additionally, recommendations shall include measures (e.g., shoring walls, and waterproofing) to minimize the amount of dewatering required during construction and prevent substantial impacts to aquifers or existing wells. Specific recommendations contained in the geotechnical report prepared for the project shall be implemented to the satisfaction of the City of Mountain View Building Inspection Division.

With implementation of the above standard condition of approval, and consistency with CBC and local policies, the project (under either option) would result in a less than significant impact from seismic and seismic-related hazards. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-2:	**Both Project Options:** The project (under either option) would not result in substantial soil erosion or the loss of topsoil. **(Same Impact as Approved Project [Less than Significant Impact])**

Given the site and site area's flat topography, the project (under either option) would not be subject to substantial erosion. In addition, the project (under either option) would implement standard conditions of approval (as described in detail in Section 5.9 Hydrology and Water Quality) to ensure that substantial erosion would not occur during construction and operation of the project. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-3:	**Both Project Options:** The project (under either option) would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. **(Same Impact as Approved Project [Less than Significant Impact])**

Given the proximity (within nine miles) of seismically active faults to the project site, seismic ground shaking could result in liquefaction, liquefaction-induced lateral spreading, or differential settlement. Furthermore, undocumented fill is present in the project site due to the existing developments. Undocumented fill could potentially settle and cause distress to new structures and other improvements proposed by future projects. Implementation of the standard condition of approval discussed under Impact GEO-1 would reduce the impacts of seismic-related hazards to a less than significant level by preparing a design-level geotechnical investigation and implementing the recommendations in the report to properly design and engineer the project to prevent seismic and seismic related hazards (including liquefaction) and addresses undocumented fill on-site. Furthermore, the project site does not contain steep slopes subject to landslide potential.

Valley Water actively monitors for land subsidence through surveying, groundwater elevation monitoring, and data from compaction wells. Valley Water reduces the potential for land subsidence

throughout the Santa Clara Valley by recharging groundwater basins with local and imported surface water. The project (under either option) would develop urban uses connected to the City's water system and would not require permanent groundwater extraction wells on-site. As noted in Section 5.9 Hydrology, the project would require temporary groundwater dewatering during construction. According to a Preliminary Geotechnical Investigation prepared for the project, groundwater would be extracted at a rate of approximately 40 to 80 gallons per minute, or 57,600 to 115,200 gallons per day during construction until building foundations are completed.[123] The standard condition of approval above (COA GEO-1.1) includes evaluation and implementation of measures to minimize dewatering during construction, which would prevent subsidence from the temporary construction dewatering. No permanent dewatering is required for the project. For this reason, the project (under either option) is expected to have a less than significant impact on subsidence.

The project (under either option) would comply with Cal/OSHA requirements that minimize the potential for instability and collapse.

Based on the above discussion, the project would have less than significant impacts related to on- or off-site landslide, lateral spreading, subsidence, or liquefaction from on-site conditions. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-4:	**Both Project Options:** The project (under either option) would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Same Impact as Approved Project [Less than Significant Impact])**

Soils with medium expansion potential occur on the project site, which can cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. The implementation of the standard condition of approval discussed under Impact GEO-1 would reduce impacts of expansive soils to a less than significant level by properly designing and engineering the project to address effects from expansive soils. Therefore, the project (under either option) would result in a less than significant impact from expansive soil and would not create substantial direct or indirect risks to life or property. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[123] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2*. January 29, 2021. Revised February 8, 2021. P. 24.

Impact GEO-5:	**Both Project Options:** The project (under either option) would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. **(Same Impact as Approved Project [Less than Significant Impact])**

Project

The project would connect to the City's existing sanitary sewer system. The project would not require septic tanks or alternative wastewater disposal systems. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

The project with District Utilities System Option includes a CUP, which includes a wastewater treatment plant that would have the capacity to treat a portion of the daily wastewater generated by the project. The remaining wastewater generated by the project above the treatment capacity of the CUP would be treated at the PARWQCP. The design-level geotechnical report for the project discussed under Impact GEO-1 would evaluate the CUP and identify recommendations to ensure on-site soils conditions are adequate to support the development. No leach pits or percolation fields are proposed. Therefore, the project with District Utilities System Option would not result in soils impacts due to the installation of septic tanks or alternative wastewater disposal systems. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GEO-6:	**Both Project Options:** The project (under either option) would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Same Impact as Approved Project [Less than Significant Impact)]**

Although the likelihood of encountering buried paleontological resources is low, the disturbance of these resources (if on-site) during construction and excavation could result in an impact to unknown resources. The Precise Plan EIR included the following standard condition of approval to reduce impacts to unknown paleontological resources to a less than significant level.

Standard Condition of Approval:

COA GEO-2.1: **Both Project Options: Discovery of Paleontological Resources**. In the event a fossil is discovered during construction of the project, excavations within 50 feet of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The City shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards.

With implementation of the above standard condition of approval, the project (under either option) would result in less than significant impacts to paleontological resources by ensuring any unburied paleontological resources are properly recovered and minimizing disturbance during excavation and construction. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.6.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEO-1:	**Both Project Options:** The project (under either option) would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.	Yes	LTS	None	N/A
GEO-2:	**Both Project Options:** The project (under either option) would not result in substantial soil erosion or the loss of topsoil.	Yes	LTS	None	N/A
GEO-3:	**Both Project Options:** The project (under either option) would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Yes	LTS	None	N/A
GEO-4:	**Both Project Options:** The project (under either option) would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property.	Yes	LTS	None	N/A
GEO-5:	**Both Project Options:** The project (under either option) would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GEO-6:	**Both Project Options:** The project (under either option) would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant

5.7 GREENHOUSE GAS EMISSIONS

5.7.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for GHGs has not substantially changed since the certification of the Precise Plan EIR.

5.7.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Refer to the Precise Plan EIR for additional background information.

5.7.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying EO B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (CO_2e) ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area is discussed further under Regional and Local plans below.

Senate Bill 743

Senate Bill (SB) 743 was adopted in 2013 and requires lead agencies to use alternatives to LOS for evaluating transportation impacts, specifically VMT. SB 743 also included changes to CEQA that apply to transit-oriented developments, as related to aesthetics and parking impacts to encourage infill development and a diversity of uses instead of sprawl, promote multi-modal transportation networks, and thereby reduce greenhouse gas emissions.

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures. BAAQMD is currently updating the existing CEQA Guidelines and GHG thresholds of significance. The new significance threshold is anticipated to be considered for adoption in Spring 2022.

Plan Bay Area 2040/2050

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended to support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified PDAs.[124]

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 (upon which Plan Bay Area 2040 is based).

In October 2021, ABAG adopted Plan Bay Area 2050 which includes 35 strategies for housing, transportation, economic viability and the environment and lays out a vision for policies and investments to make the bay area more affordable, connected, diverse, healthy and economically vibrant. It will take several years for the updated plan to be reflected in the regional and county-wide transportation models, so land uses and development projections based on Plan Bay Area 2040 are

[124] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed September 24, 2021.

used as the foundation for this analysis.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to greenhouse gas emissions impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 12.1	**Emissions reduction target.** Maintain a GHG emissions reduction target.
INC 12.2	**Emissions reduction strategies.** Develop cost-effective strategies for reducing GHG emissions.
INC 12.3	**Adaptation strategies.** Develop strategies for adapting to climate change in partnership with local and regional agencies.
Land Use and Design	

Source: City of Mountain View, *Mountain View 2030 General Plan*, July 10, 2012. Pp. 133-134, 59-60

2030 Greenhouse Gas Reduction Program

The City of Mountain View certified the General Plan Program EIR (SCH #2011012069) and adopted the Mountain View 2030 General Plan and Greenhouse Gas Reduction Program (GGRP) in July 2012. The GGRP is a separate but complementary document to the General Plan that implements the long-range GHG emissions reduction goals of the General Plan and serves as a programmatic GHG reduction strategy for CEQA tiering purposes. The GGRP includes goals, policies, performance standards, and implementation measures for achieving GHG emissions reductions, to meet the requirements of AB 32. The program includes a goal to improve communitywide emissions efficiency by 15 to 20 percent over 2005 levels by 2020 and by 30 percent over 2005 levels by 2030.

Climate Protection Roadmap

The City's Climate Protection Roadmap (CPR), completed in 2015, presents a projection of GHG emissions through 2050 and several strategies that would help the City reduce absolute communitywide GHG emissions to 80 percent below 2005 levels by 2050.

Reach Building Code

In 2019, the Mountain View City Council approved amendments to Chapters 8, 14, and 24 of the City of Mountain View Green Building Code, referred to as Reach Code amendments. The Reach Code amendments are applicable to any project submitted to the City after December 31, 2019. As noted in Section 5.5 Energy above, these Reach Code amendments require new buildings to be all-electric with an exception of commercial spaces with specialized equipment that cannot operate with electric service if approved by the City.

California Transportation Plan 2050

The California Transportation Plan 2050 (CTP 2050) defines performance-based goals, policies, and strategies to achieve the state's collective vision for California's future statewide, integrated, multimodal transportation system. The CTP 2050 includes goals for achieving statewide GHG emissions reduction targets, improving multimodal mobility and access to destinations, maintaining a high-quality transportation system, and expanding protection of natural resources.

1.1.1.3 *Existing Conditions*

The Precise Plan area and the project site (located within a designated PDA)[125] is developed primarily with office, light industrial, and R&D uses. These uses currently generate direct GHG emissions from the vehicle trips of employees and visitors, natural gas used for cooking and building heating, operation of stationary equipment (such as back-up generators), and indirect GHG emissions from operational electricity, water use, and other sources.

5.7.2 Impact Discussion

For the purpose of determining the significance of the project's impact on greenhouse gas emissions, would the project:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

1.1.1.4 *Project Impacts*

Impact GHG-1:	**Both Project Options:** The project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Same Impact as Approved Project [Less than Significant Impact])**

As disclosed in the Precise Plan EIR, the implementation of the Precise Plan (which includes the project under either option) is estimated to generate 90,427 $MTCO_2e$ annually[126]. The project's portion of the total Precise Plan GHG emissions is approximately 15,900 $MTCO_2e$.[127] The Precise Plan EIR concluded that implementation of the Precise Plan (which includes the project under either option) would not exceed the City's GGRP 2030 threshold of 4.5 $MTCO^2e$/year/service population. As a result, the Precise Plan concluded that GHG emissions from implementation of the Precise Plan (which

[125] Metropolitan Transportation Commission. *Priority Development Areas (Plan Bay Area 2050).* Map. July 2020. https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2050/explore?location=38.618077%2C-121.005390%2C6.90

[126] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 98.

[127] Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

includes the project under either option), would not result in significant GHG emissions.[128] If evaluated independently, the project (under either option) would result in GHG emissions of 1.82 MTCO2e/year/service population.[129] Consistent with the analysis in the Precise Plan EIR, the project would:

- Be consistent with the 2017 CAP goals;
- Be consistent with the most recent Title 24 building standards for energy efficiency,
- Participate in SVCE's 100 percent carbon-free electricity (or purchase energy contracts from PG&E for carbon-free electricity);
- Be located in a PDA identified in Plan Bay Area;
- Implement a trip cap for office uses and a TDM program including TMA membership for all other proposed commercial and residential uses, consistent with the City of Mountain View Greenhouse Gas Reduction Program and Precise Plan; and
- Incorporate multi-modal transportation improvements on-site and on adjacent City streets to accommodate and encourage non-automobile transportation modes, consistent with the California Transportation Plan 2040.

For the reasons listed above, the project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact GHG-2:	**Both Project Options:** The project (under either option) would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that implementation of the Precise Plan would not conflict with plans, policies, or regulations for reducing GHG emissions, including the 2017 CAP, Plan Bay Area, GGRP, and California Transportation Plan 2040. The Precise Plan would increase development within a PDA identified in Plan Bay Area (as discussed in Section 4.1 Air Quality) and includes policies and requirements for existing and future development within the Precise Plan area to reduce GHG emissions from building operations and vehicle trips such as:

- A trip cap for office uses;
- TDM requirements for commercial and residential development;
- Requirements for projects requesting Bonus FAR to achieve a design intent of LEED Platinum, 120 Green Point Rated points, or equivalent; and
- Include multi-modal transportation improvements to further reduce VMT by encouraging

[128] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 96 – 98.

[129] Service population estimated as a percent of EWPP development. The project proposes 38 percent of residential units, 31.6 percent of net new square feet of office uses, and 50 percent of net new neighborhood commercial uses identified in the approved Precise Plan for a total of 4,803 new residents and 3,929 new employees. 15,900 $MTCO^2e$/year / 8,732 service population = 1.82 $MTCO_2e$/year/service population. Source: Illingworth & Rodkin, Inc. *Middlefield Park Master Plan Project Air Quality Assessment.* April 19, 2022.

mode shifts toward active transportation modes, thereby reducing GHG emissions from vehicle traffic.

Therefore, it was concluded in the Precise Plan EIR that implementation of the Precise Plan (which includes the project under either option) would not conflict with plans, policies, or regulations for reducing GHG emissions.[130] Because development analyzed in the Precise Plan EIR includes the proposed MPMP, the project (under either option) would result in the same less than significant impact with regard to consistency with GHG reduction plans, policies, and regulations as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

5.7.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
GHG-1:	**Both Project Options:** The project (under either option) would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Yes	LTS	None	N/A
GHG-2:	**Both Project Options:** The project (under either option) would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant					

[130] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp. 98–100.

5.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on hazards and hazardous materials reports completed by Iris Environmental dated 2014 and 2016 IVI Assessment dated May 16 and 17, 2013; EMG dated September 23, 2015, Elevate Environmental dated February 21, 2021; and Cornerstone Earth Group dated August 27, 2021. These reports are included in Appendix F.

5.8.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for hazards and hazardous materials has not substantially changed since the certification of the Precise Plan EIR.

5.8.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous

substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[131]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives the EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[132]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[133]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of a property. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The Santa Clara County Department of Environmental Health reviews CalARP

[131] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 11, 2020. https://www.epa.gov/superfund/superfund-cercla-overview.
[132] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.
[133] California Environmental Protection Agency. "Cortese List Data Resources." Accessed September 8, 2021. https://calepa.ca.gov/sitecleanup/corteselist/.

risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by the Cal/OSHA Lead in Construction Standard, CCR Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Municipal Regional Permit Provision C.12.f

PCBs were produced in the United States between 1955 and 1978 and used in hundreds of industrial and commercial applications, including building and structure materials such as plasticizers, paints, sealants, caulk, and wood floor finishes. In 1979, the EPA banned the production and use of PCBs due to their potential harmful health effects and persistence in the environment. PCBs can still be released to the environment today during demolition of buildings that contain legacy caulks, sealants, or other PCB-containing materials.

With the adoption of the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (MRP) by the San Francisco Bay Regional Water Quality Control Board on November 19, 2015, Provision C.12.f requires that permittees develop an assessment methodology for applicable structures planned for demolition to ensure PCBs do not enter municipal storm drain systems.[134] As of July 2019, all applicants proposing full demolition of a building are required to submit a PCB Screening Assessment Applicant Package prior to obtaining a demolition permit. Buildings constructed or remodeled between 1950 and 1980 may contain PCBs in building materials. Implementation of this requirement is required in the San Francisco Bay Regional Stormwater NPDES Permit (Order No. r2-2015-0049, Permit No. CAS612008).[135]

The RWQCB has drafted a renewed MRP for the San Francisco Bay Region, which is anticipated to be adopted by the Water Board in May 2022. If adopted, any new development submitted to the City

[134] California Regional Water Quality Control Board. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* November 2015.

[135] City of Mountain View. "Environmental Projection." Accessed November 18, 2021. https://www.mountainview.gov/depts/fire/environment/protection.asp

after its effective date will be subject to the regulations under the renewed MRP.[136]

Moffett Federal Airfield Comprehensive Land Use Plan (CLUP)

As previously mentioned, FAR Part 77 requires the FAA be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above ground. For the project site, any structure exceeding 182 feet in height above mean sea level (amsl) would require submittal to the FAA for airspace safety review. The project site has an elevation ranging from 62 amsl in the southeast corner of the site to 50 feet amsl in the northwest corner. In addition to height, the Moffett Field CLUP restricts land use and density per acre within turning safety zones.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to hazards and hazardous materials. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 3.2	**Protection from hazardous materials.** Prevent injuries and environmental contamination due to the uncontrolled release of hazardous materials through prevention and enforcement of fire and life safety codes and prevention.
PSA 3.3	**Development review.** Implement development review procedures that encourage effective identification and remediation of contamination and protection of public and environmental health and safety.
PSA 3.4	**Oversight agencies.** Work with local, state and federal oversight agencies to encourage remediation of contamination and protection of public and environmental health and safety.
Infrastructure and Conservation	
INC 18.1	**Contamination prevention.** Protect human and environmental health from environmental contamination.
INC 18.2	**Contamination clean-up.** Cooperate with local, state, and federal agencies that oversee environmental contamination and clean-up.
Land Use and Design	
LUD 3.10	**Zoning standards for sensitive uses.** Allow sensitive uses such as childcare in the North Bayshore and East Whisman Change Areas with measures to protect those uses from hazardous materials used by surrounding businesses.

Source: City of Mountain View, *Mountain View 2030 General Plan*, July 10, 2012. P. 177, 136, 49

[136] California Water Boards, San Francisco Bay, Stormwater Municipal Regional Stormwater NPDES Permit Reissuance: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/. Accessed on April 8, 2022.

5.8.1.2 *Existing Conditions*

Project Site

According to the Precise Plan EIR, the Middlefield–Ellis-Whisman (MEW) Superfund Study Area and various other Leaking Underground Storage Tank (LUST) and spills, leaks, investigations, and cleanup (SLIC) sites (including those on lists compiled pursuant to Government Code Section 65962.5) are located within the Precise Plan area. There are also several contaminated sites located just outside the Precise Plan area whose contamination has migrated within the Precise Plan boundaries.

Middlefield-Ellis-Whisman Superfund Study Area

The project site is located within the MEW Superfund Study Area, an area designated by the EPA as a Superfund site due to the presence of soil and groundwater contaminated by Volatile Organic Compounds (VOCs).[137] As a result, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5.

Prior to 1962, the project site (and many surrounding areas throughout the Precise Plan area) were used for agricultural purposes or left as vacant lands. From the mid-1960s through the early 2000s, the project site was developed with commercial and industrial/R&D buildings. Due to the historic uses of the site for agricultural and industrial/R&D purposes, the Phase I Environmental Site Assessments (ESAs) prepared for the project determined on-site soils and groundwater may be impacted and recommended a Phase II subsurface investigation be completed. A summary of the Phase I ESA findings is shown in Table 5.8-1 below.

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings

Address	On-site Contamination[1]	Depth to Groundwater (feet)	Year Buildings Constructed
401 Ellis Street	• Middlefield Ellis Whisman Groundwater Plume	10 to 15	1997
440 Logue Avenue	• MEW Groundwater Plume • Groundwater monitoring well R43A • Listed in the Leaking Underground Storage Tank, Hist Leaking Underground Storage Tank, CA FID, Underground Storage Tank, Cortese, and Sweeps Underground Storage Tank databases for gasoline release in soils in 1998. Cleanup completed and case has been closed.	6 to 14	1991
441 Logue Avenue	• Leaking Underground Storage Tank site with residual hydrocarbons present in soils and groundwater above commercial Regional Water Quality Control Board screening levels. This case has been closed. • Former Southern Pacific Rail Sur located along	10 to 11.5	2005

[137] Lee, Alana. U.S. Environmental Protection Agency. Person Communication. November 24, 2021.

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings			
Address	**On-site Contamination[1]**	**Depth to Groundwater (feet)**	**Year Buildings Constructed**
	northern project boundary		
500 Logue Avenue	• Within 2,000 feet of Middlefield Ellis Whisman Groundwater Plume • Volatile Organic Compounds in soil and groundwater on-site • Groundwater contamination plume migrated under the site • Subject to development restrictions as a Border Zone property • Above ground fuel storage tanks associated with existing emergency generators • Two groundwater monitoring wells located on eastern portion of the site	10 to 15	1974
405 Clyde Avenue	None	10	1973
420 Clyde Avenue	None	10 to 40	1975 to 1981
433 Clyde Avenue	• Limited localized Tichloroethylene plume likely present due to releases associated with historic drum storage on east side of site.	19	1973
440 Clyde Avenue	• Two aboveground perchloroethylene (PCE) tanks were formerly located on-site and used for bulk storage of PCE for off-site distribution. PCE has been detected in on-site soils and groundwater near the former PCE tanks. A letter from the RWQCB to the site owner stated that no further action related to the pollutant release at the site was required and attributed some, if not all of the PCE impacts in groundwater to off-site sources.	10	1968
485 Clyde Avenue	• Historic use of trichloroethylene (TCE) on-site has been documented and TCE and other volatile organic compounds (VOC) impacts to soil and groundwater have been detected during closure of clarifiers and a hot gas filtration pit. The concentration of VOCs in soil samples were below corresponding ESLs. A no further action letter issued by RWCQB attributes the groundwater impacts to likely offsite contamination and states that RWCQB will not pursue enforcement action against current or future property owners.	20	1974
850 – 840 Maude Avenue	• One above ground diesel storage tank and generators currently on-site	12.7	1973

Table 5.8-1: Summary of Phase I Environmental Site Assessment Findings			
Address	**On-site Contamination[1]**	**Depth to Groundwater (feet)**	**Year Buildings Constructed**
880 Maude Avenue	• HP and E/M Lubricant groundwater plume present • Groundwater impacted by VOCs, primarily Tichloroethylene and Perchloroethylene • An on-site release of PCE and/or TCE may have occurred on-site based on the presence of concrete sump. This sump is of potential concern because: 1) sumps are frequently significant chlorinated solvent release points, and 2) the groundwater data suggests the sources of the potential on-site release might be located approximately where the sump was last seen.	15 to 45	1968
885 Maude Avenue	None	11	1962 to 1968
891 Maude Avenue	None	12	1981

[1] Contamination related to the regional groundwater plumes (MEW and HP and E/M Lubricants may be present on portions of the project site, however, do not originate on-site.

Source: IVI Assessment Services, Inc. *Phase I Environmental Site Assessment, Mountain View Gateway 401 Ellis Street and 500 E. Middlefield Road, Mountain View, California.* May 16, 2013. Iris Environmental. *Phase I Environmental Site Assessment 405 Clyde Avenue, Mountain View, California.* April 18, 2014. EMG. *Phase I Environmental Site Assessment of 420 Clyde Avenue, Mountain View, California 94043.* September 23, 2015. Iris Environmental. *Phase I Environmental Site Assessment 433 Clyde Avenue, Mountain View, California.* October 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment 440 Clyde Avenue Mountain View, California.* February 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment, 440 Logue Avenue, Mountain View, California.* June 9, 2014. Iris Environmental. *Phase I Environmental Site Assessment 441 Logue Avenue, Mountain View California.* February 3, 2014. Iris Environmental. *Phase I Environmental Site Assessment 485 & 495 Clyde Avenue, Mountain View, California.* May 17, 2013. Northgate Environmental Management, Inc. *Phase I Environmental Site Assessment Update, Mountain View Technology Park, Mountain View, California.* November 19, 2007. Iris Environmental. *Phase I Environmental Site Assessment, 800, 830, and 840-850 Maude Avenue, Mountain View, California.* October 22, 2014. Iris Environmental. *Phase I Environmental Site Assessment, 880 Maude Avenue and 420 Clyde Avenue.* April 18, 2016. Iris Environmental. *Phase I Environmental Site Assessment, 885-889 Maude Avenue, Mountain View, California. July 3, 2014.* Iris Environmental. *Phase I Environmental Site Assessment, 891 Maude Avenue, Mountain View, California.* May 19, 2014.

A Phase II Subsurface Investigation was completed for the project site by Elevate Environmental Consulting in February 2021. According to this report, portions of the site are located within the HP and E/M Lubricant Plume, which is impacted by VOC, primarily TCE and perchloroethylene (PCE). The site is also located adjacent and cross-gradient from the MEW plume which is impacted by TCE. Based on recent monitoring data, the MEW plume has encroached into the western edge of the project site.

No existing underground storage tanks were identified on-site as of the date of the Phase II. Two groundwater monitoring wells associated with ongoing monitoring of the MEW plume are present on-site and two are located adjacent to the site boundary, east of 440 Logue Avenue. The EPA has claimed oversight over the Master Plan area.

On-site soils, groundwater, and soil vapors were tested for presence of VOCs, total petroleum hydrocarbons (TPHs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), TCE, chloroform, metals, and asbestos. Table 5.8-2 summarizes the contaminant concentrations detected compared to their respective Environmental Screening Levels (ELS). Refer to Appendix F for details.

Table 5.8-2: Phase II Subsurface Investigation Sampling Results and Environmental Safety Levels

Media Sampled	Contaminant	Sampling Result	Environmental Safety Levels	Exceed Environmental Safety Levels?
Soil	Arsenic	1.5 to 12 mg/kg*	0.067 mg/kg	Yes
	Barium	120 to 710 mg/kg**	390 mg/kg	Yes
	Cobalt	10 to 31 mg/kg**	23 mg/kg	Yes
	Nickel	52-240 mg/kg*	86 mg/kg	Yes
	Vanadium	50-160 mg/kg*	18 mg/kg	Yes
	Pentachlorophenol	<0.0099 to 0.017 J mg/kg	0.013 mg/kg	Yes
	Phenol	<0.0050 to 0.38 mg/kg	0.16 mg/kg	Yes
Groundwater	Chloroform	<0.052 to2.4 µg/L	0.81 µg/L	Yes
	1,2 Dichloroethane	<0.0075 to 2.9 µg/L	0.50 µg/L	Yes
	PCE	<0.16 to 5.7 µg/L	14 µg/L	No
	TCE	<0.051 to 39 µg/L	1.2 µg/L	Yes
Soil Vapor	PCE	<1.36 to 13,000 $\mu g/m^3$	460 $\mu g/m^3$	Yes
	TCE	0.054 J to 5,100 $\mu g/m^3$	16 $\mu g/m^3$	Yes
	Chloroform	<1.6 to 29.5 $\mu g/m^3$	4.1 $\mu g/m^3$	Yes
	1,1-dichloroethane	<0.13 to 130 $\mu g/m^3$	2,400 $\mu g/m^3$	No
	1,2-dichloroethane	<0.21 to 4.1 $\mu g/m^3$	3.6 $\mu g/m^3$	Yes
	Vinyl chloride	<0.0511 to 3.73	0.32 $\mu g/m^3$	Yes

Table 5.8-2: Phase II Subsurface Investigation Sampling Results and Environmental Safety Levels				
Media Sampled	**Contaminant**	**Sampling Result**	**Environmental Safety Levels**	**Exceed Environmental Safety Levels?**
		µg/m^3		
Notes: *within range of regional background concentrations ** calculated 95 percent upper confidence limit (UCL) is below applicable ESL				

As shown in Table 5.8-2, soil samples were found to be either below residential direct contact ESL or within the range of regional background concentrations.[138] Groundwater samples were compared to RWQCB Tier 1 Groundwater ESLs and Groundwater Vapor Intrusion Human Health Risk Screening Levels for Residential and Commercial/industrial exposure scenarios. Groundwater samples contained chloroform, dichloroethane, PCE, TCE, and TPH-diesel above ESL, suggesting the HP and E/M Lubricant Plume is present in groundwater and is impacting soil vapor in the eastern half of the site. The MEW plume is also impacting groundwater and soil vapor on the western edge of the site.

Other Hazards

The Moffett Federal Airfield is located approximately 0.5-mile northwest of the project site. The project site, along with most of the Precise Plan area is located within the Airport Influence Area and within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. The elevation of the project site ranges from 50 to 62 feet amsl and the proposed project would have a maximum height of 16 to 125 feet above grade, therefore, the proposed buildings would be reviewed for consistency with the 182-foot amsl threshold and, depending on the amsl at the building location, may require consultation with the FAA to determine if the project would create an avian hazard.[139] Additionally, as identified in the Precise Plan, an avigation easement may be recorded on sites with new buildings as required by the Moffett CLUP.

Nearby Schools and Childcare Facilities

Schools and childcare facilities in the project area include the Google Children's Center - The Woods day care facility located at 325 Gladys Avenue and Jose Antonio Vargas Elementary school located are 220 North Whisman Road, both of which are located 0.38 miles southwest of the project site.

[138] Due to the widespread presence of certain contaminants in soils throughout the region, sampling results found to be consistent with regional background conditions indicate contaminant concentrations are not unique to the site and cannot be attributed to a specific release.

[139] Santa Clara County, Airport Land Use Commission. November 18, 2016. *Comprehensive Land Use Plan: Moffett Federal Airfield.* Accessed November 16, 2021. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/ALUC_NUQ_CLUP.pdf

5.8.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hazards and hazardous materials, would the project:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

5.8.2.1 *Project Impacts*

Impact HAZ-1:	**Both Project Options:** The project (under either option) would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. **(Same Impact as Approved Project [Less than Significant Impact])**

Project

The Precise Plan EIR concluded that, with compliance with federal, state, and local requirements, and General Plan policies, future development (including the project) would not create a significant hazard to the public or environment through routine transport, use, or disposal of hazardous materials. The conditions in and around the project site have not changed substantially since the certification of the Precise Plan EIR and the project proposes land uses consistent with those identified for the site and previously analyzed in the Precise Plan EIR. For these reasons, the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact[140]])**

[140] Ibid. P. 119.

Emergency Generators

The project (under either option) would include 11 diesel-powered emergency generators within the basements of Buildings R1 through R3, R4, R4 AFF, R5, R6 AFF and O1 through O5. Diesel fuel for these generators would be stored in double-walled aboveground storage tanks with each generator screened from visibility. Based on the number and horsepower of generators proposed, it is estimated that approximately 6,600 gallons of diesel fuel would be stored on-site.

Cooling Towers

The project (under either option) would include cooling towers associated with building and heating cooling equipment. Operation of cooling towers would involve the transport, use, storage, and disposal of hazardous materials, including chemicals intended to inhibit the formation of scale and corrosion, and to reduce bacteria, fungus, and algae growth within cooling towers such as microbiocide containing Dibromocyaneoacetamide, liquid bromine oxidizing biocide containing sodium bromosulfamate, liquid scale and corrosion inhibitor contain etidronic acid, phosphonic acid, and other constituents, and a liquid isothiazole based biocide. These chemicals would be stored in drums ranging from approximately 10 to 55 gallons in size.

Project with District Utilities System Option

The project with District Utilities System Option would result in the same impact as described above for the project without a district utilities system, as the District Utility Systems Option would include the equipment and hazardous materials identified above, with the addition of a CUP including an on-site wastewater treatment facility that would use, store, and generate hazardous materials.

On-site Wastewater Treatment Facility

Operation of the on-site wastewater treatment facility would involve the transport, use, storage, and disposal of hazardous materials, including chemicals intended to inhibit the formation of scale and corrosion, and to reduce bacteria, fungus, and algae growth within cooling towers, such as microbiocide containing dibromocyaneoacetamide, liquid bromine oxidizing biocide containing sodium bromosulfamate, liquid scale and corrosion inhibitor contain etidronic acid, phosphonic acid, and other constituents, and a liquid isothiazole based biocide.[141] These chemicals would be stored in drums within the CUP ranging from approximately 10 to 55 gallons in size.[142] Additionally, operation of the wastewater treatment facility would require use and storage of cleaning chemicals on-site such as citric acid, sodium hypochlorite, methanol, sodium bicarbonate, polymers, and ferric chloride. These chemicals would also be stored in 55-gallon drums within the CUP.[143]

Ozone (O_3) is often used in water disinfection processes for recycled water as O_3 molecules combine with other materials in water, making it easier to extract the unwanted materials from the water.[144] Because O_3 is unstable and decomposes to elemental oxygen in a short amount of time, O_3 must be

[141] Cornerstone Earth Group. *Chemical Use Summary Middlefield Park Master Plan District Systems Mountain View, California.* August 27, 2021.
[142] Ibid.
[143] Ibid.
[144] United States Environmental Protection Agency. *Wastewater Technology Fact Sheet, Ozone Disinfection.* September 1999. https://www3.epa.gov/npdes/pubs/ozon.pdf

generated close to where it is intended to be used. Thus, O_3 generation equipment may be required to ensure that O_3 is available for use at the proposed wastewater treatment plant.[145] O_3 generated on-site would be injected into the water, creating bubbles and off-gasses. Any remaining O_3 in off-gasses should be destroyed before it is released into the atmosphere. If O_3 is used in the on-site wastewater treatment facility, any unused O_3 off-gasses would be required to be sent to an integrated O_3 destruction unit within the CUP to be recycled.

Microgrid

As discussed in Section 3.2.5 Microgrid System, on-site batteries and battery storage units would be located within the CUP either in the basement of Building O1 or in an enclosure adjacent to the building at grade. Battery units include coolant, refrigerant, and electrolytes. Based on the size and number of battery units proposed, a total of 725 gallons of coolant and 84 pounds of refrigerant would be stored on-site within the batteries.[146] Additionally, each battery unit would contain electrolytes which include volatile hydrocarbon-based liquid and a dissolved lithium salt such as lithium hexafluorophosphate. The electrolyte reacts with those materials and is consumed during normal operation of the batteries. As a result, there are very little to no liquid electrolytes present within batteries once they are operational.[147]

The battery storage units would be equipped with electronic monitoring devices to detect a coolant system failure and auto shutdown in the event of internal leaks or thermal runaway.[148] In addition, the equipment cabinets, where the battery units would be stored, would provide protection against environmental, chemical, and physical exposures.[149] The location in which batteries are stored, the design of fire suppression systems, and any required additional secondary containment catchment basins would be reviewed and approved by the City of Mountain View Fire Department (MVFD) prior to issuance of building permits.

The transport, storage, use and disposal of these chemicals would be conducted in accordance with local, state, and federal laws and regulations including Cal/OSHA regulations for construction activities, RCRA requirements for disposal of solid waste and hazardous materials, and TSCA requirements for reporting, record-keeping, and testing related to chemical substances and/or mixtures. Operation in accordance with local, state, and federal laws would ensure that the transport, storage, use and disposal of chemicals associated with the district utilities system option would not create a significant hazard to the public or environment. **(Same Impact as Approved Project [Less than Significant Impact])**

[145] Cornerstone Earth Group. *Chemical Use Summary Middlefield Park Master Plan District Systems Mountain View, California.* August 27, 2021.
[146] Ibid.
[147] Ibid.
[148] Ibid.
[149] Ibid.

Impact HAZ-2:	**Both Project Options**: The project (under either option) would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**

Project

On-Site Soil and Groundwater Contamination

According to the Precise Plan EIR, future development projects within the MEW Superfund Study Area would be subject to the EPA's Record of Decision (ROD) Amendment for the Vapor Intrusion Pathway, MEW Superfund Study Area[150]; and, the Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area.[151] Furthermore, all future development would be required to prepare and submit an air monitoring plan, vapor intrusion control system remedial design plan, and additional requirements as needed by the EPA for review and approval and by the City for review (refer to the Precise Plan EIR for details). The Precise Plan EIR identified a potentially significant hazardous materials impact (Impact HAZ-3) from construction activities associated with development on sites with contaminated soils and groundwater in the Precise Plan area.[152]

As noted in Section 5.8.1 Environmental Setting, portions of the project site are located within the HP and E/M Lubricant Plume and within the MEW plume. On-site soil contaminants are below the residential ESLs or within regional background concentrations.[153] On-site groundwater and soil vapor are impacted by the HP and E/M Lubricant and MEW plumes. There are also two groundwater monitoring wells associated with ongoing monitoring of the MEW plume present on-site. As a result, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5.

The project site is located within the MEW Superfund Study Area and groundwater contamination and soil vapor levels on-site are similar to other sites within the MEW Superfund Study Area. Therefore, the project would have the same impacts as disclosed in the Precise Plan EIR for sites within the MEW Superfund Study Area and would be required to comply with the following EPA-required ROD measures described in the Precise Plan EIR to minimize potential impacts associated with the contaminated groundwater and soil vapor on the project site during project construction and operation.

1) For future/new buildings on property where lines of evidence indicate that there is the potential for vapor intrusion into the new building above EPA's indoor air cleanup levels, the remedy shall

[150] U.S. Environmental Protection Agency. *Middlefield-Ellis-Whisman (MEW) Superfund Study Area, Mountain View and Moffett Field, California*. August 16, 2010.
[151] U.S. Environmental Protection Agency. *Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area.* 2011.
[152] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Pp. 118 – 119.
[153] Due to the widespread presence of certain contaminants in soils throughout the region, sampling results found to be consistent with regional background conditions indicate contaminant concentrations are not unique to the site and cannot be attributed to a specific release.

consist of 1) passive sub-slab ventilation with a vapor barrier (and with the ability to convert the system from passive to active ventilation), 2) monitoring to ensure the long-term effectiveness, and 3) the implementation of Institutional Controls.

2) For future/new buildings on properties where multiple lines of evidence indicate there is no potential for vapor intrusion into the building exceeding EPA's indoor air cleanup levels, indoor air sampling shall be performed after the building is constructed to confirm that there is no potential vapor intrusion risk and EPA's indoor air cleanup levels are met; if approved by the EPA, no further vapor mitigation actions are required.
3) At properties where a vapor intrusion remedy is determined to be required, future project developers would be required to submit the following plans and controls to EPA for review and approval and would be required to implement the EPA-approved measures.

    a) The Air Monitoring Plan assesses the exposure of construction workers and neighboring occupants adjoining the property to VOCs as part of the Air Monitoring Plan; this plan shall specify measures to be implemented if VOCs exceed regulatory threshold values.
    b) The Vapor Intrusion Control System Remedial Design describes the measures to be implemented to help prevent exposure of property occupants to VOCs in indoor air as a result of vapor intrusion. A Vapor Intrusion Mitigation Plan must be prepared, which requires future project developers to design the proposed occupied spaces with appropriate structural and engineering features to reduce risk of vapor intrusion into buildings. At a minimum, this design would include incorporation of vapor barrier and provisions of space to accommodate active ventilation equipment to help prevent indoor air contaminant concentrations exceeding EPA's indoor air cleanup levels. Future project developers would be required to submit the vapor intrusion remedial design (including the Vapor Intrusion Mitigation Plan) to the EPA for review and approval.

4) The ROD Amendment for the Vapor Intrusion Pathway, MEW Superfund Study Area (EPA 2010), and the Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area (EPA 2011) specify the selected remedy for all future buildings as: 1) passive sub-slab ventilation with a vapor barrier (and with the ability to convert the system from passive to active ventilation), 2) monitoring to ensure the long-term effectiveness) except where multiple lines of evidence show that there is no potential for vapor intrusion into a particular building exceeding indoor air cleanup levels, 2) monitoring to ensure the long-term effectiveness of the remedy, and 3) the implementation of institutional controls. Although active sub-slab/sub-membrane ventilation is considered to have a better long-term effectiveness than passive sub-slab ventilation systems, areas with lower groundwater VOC concentrations are considered to have a lower potential for vapor intrusion at levels exceeding indoor air cleanup levels. Because areas overlying higher VOC groundwater concentrations are considered to have a greater potential for vapor intrusion at levels exceeding indoor air cleanup levels, implementing an active sub-slab/sub-membrane ventilation system is acceptable because of its high rating in long-term effectiveness. Other design requirements would be subject to the EPA's determination of necessary measures based upon its Response Action Tiering System for future buildings.

    a) The Long-Term Operations, Maintenance, and Monitoring Plan shall describe actions to be taken following construction to maintain and monitor the vapor intrusion mitigation system as

well as a contingency plan should the vapor system fail.

b) The IC Implementation Plan shall describe non-engineered instruments of control, such as administrative and legal controls that help to minimize the potential for human exposure to contamination and/or protect the integrity of the response action. ICs shall be implemented through the City's planning and permitting procedures to ensure that the appropriate remedy is applied to particular building construction.
c) The Financial Assurance provides proof that adequate funds are available for long-term maintenance and monitoring of the vapor intrusion mitigation system.

Additionally, the Precise Plan includes mitigation measure EIR MM HAZ-3.1, requiring the preparation of a site-specific Phase I ESA and the preparation of a Site Management Plan (SMP) for all development projects with Recognized Environmental Conditions.

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM HAZ-3.1: Prior to the start of any redevelopment activity, a property-specific Phase I ESA shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents.

At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soils, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the project-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., EPA, RWQCB and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.

Consistent with Precise Plan EIR MM HAZ-3.1, Phase I ESAs have been prepared for the project site (refer to Appendix G). Pursuant to Precise Plan EIR MM HAZ-3.1, to protect construction workers and the environment, a SMP would be prepared and implemented.

With implementation of the vapor control measures and SMP described in Precise Plan EIR MM HAZ-3.1 above, impacts associated with hazardous materials would be less than significant because contaminated soil, groundwater, and soil vapor would be properly managed and remediated during project construction and operation. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Asbestos Containing Materials

The Precise Plan EIR identified a less than significant impact from development and redevelopment of sites with existing buildings which may contain ACMs and lead-based paint with compliance with local, state, and federal laws including Cal/OSHA regulations for testing and abatement of ACMs and lead-based paint, and NESHAP requirements for removal of these materials.

Standard Condition of Approval:

COA HAZ-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Toxic Assessment.** A toxic assessment report shall be prepared and submitted as part of the building permit submittal. The applicant must demonstrate that hazardous materials do not exist on the site or that construction activities and the proposed use of this site are approved by: the City Fire Department (Fire and Environmental Protection Division); the State Department of Health Services; the Regional Water Quality Control Board; and any Federal agency with jurisdiction. No building permits will be issued until each agency and/or department with jurisdiction has released the site as clean or a site toxics mitigation plan has been approved.
- **Building Demolition PCB Control.** Nonwood-frame buildings constructed before 1981 that will be completely demolished are required to conduct representative sampling of priority building materials that may contain polychlorinated biphenyls (PCBs). If sample results of one or more priority building materials show PCBs concentrations ≥50 ppm, the applicant is required to follow applicable Federal and State notification and abatement requirements prior to demolition of the building. Submit a completed "Polychlorinated Biphenyls (PCBs) Screening Assessment Applicant Package" with the building demolition plans for the project. A demolition permit will not be issued until the completed "PCBs Screening Assessment Applicant Package" is submitted and approved by the City Fire and Environmental Protection Division (FEPD). Applicants are required to comply with applicable Federal and State regulations regarding notification and abatement of PCBs-containing materials. Contact the City's FEPD at 650-903-6378 to obtain a copy of the "PCBs Screening Assessment Applicant Package" and related guidance and information.

The project site is currently developed with buildings that could contain lead-based paint and or asbestos-containing materials given their age. Consistent with the Precise Plan EIR and the City's standard conditions of approval, the project would comply with existing local, state, and federal regulations to address potential hazards from lead-based paint and asbestos-containing materials. For

these reasons, the project would result in the same less than significant impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Project with District Utilities System Option

The project with the District Utilities System Option would result in the same less than significant impact with Precise Plan EIR MM HAZ-3.1 and COA HAZ-1.1 incorporated, as described above for the project without District Utilities System Option. Unlike the project, the project with District Utilities System Option would also include construction of a CUP, district distribution system, and geothermal system. Grading and excavation for the proposed CUP and district distribution system would result in the same potential hazards to the public and the environment related to impacted groundwater and soil vapor on-site as discussed above for the project. Construction of the geothermal system would require drilling up to 2,820 bores approximately 110 feet bgs.

As discussed in Section 4.10 Hydrology and Water Quality, the project site is underlain by two aquifers located between two and 60 feet bgs and between 55 and 160 feet bgs, respectively. The near surface aquifer is impacted by the HP and E/M Lubricant Plume and the MEW Plume, while the deeper aquifer is not impacted by these plumes. Thus, drilling for the geothermal bores would extend through the near surface aquifer and into a portion of the deeper aquifer. The geothermal bores would be drilled using the mud rotary drilling technique to prevent the potential spread of contamination from the shallow to deeper aquifers.[154] This technique involves advancing a hollow drill pipe into the ground and using a drill bit with water to simultaneously drill and remove the material while the drill pipe remains in place, creating a hollow bore. Once the bore hole has been drilled, a "u-loop" pipe would be inserted into the bore hole for the geothermal system and bentonite grout is poured around the "u-loop" pipe as the drill pipe is removed.[155] Therefore, although the bore would extend between the two aquifers, vertical cross contamination between the two aquifers would not occur because the drill pipe, and later the grout, would hold the space where soil once existed, preventing migration of groundwater along the vertical bore hole.[156] For these reasons, the District Utilities System Option would not result in any significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

[154] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021.
[155] Talon LPE. "Using mud rotary drilling for your next environmental drilling project." Accessed October 7, 2021. https://www.talonlpe.com/blog/why-choose-mud-rotary-drilling-for-your-environmental-drilling-project
[156] Elevate Environmental Consultants, Inc. *Re: Middlefield Park Master Plan Project-Specific Agency Submittal for: Google Planned Horizontal Work.* October 1, 2021.

Impact HAZ-3:	**Both Project Options:** The project (under either option) would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Same Impact as Approved Project [Less than Significant Impact])**

There are no existing or proposed schools within 0.25-mile of the project site. The Google Children's Center – The Woods day care facility and Jose Antonio Vargas Elementary school are located 0.38 miles southwest of the project site. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HAZ-4:	**Both Project Options:** The project (under either option) is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; however, with implementation of mitigation measures, standard conditions of approval, and compliance with existing regulations, it would not create a significant hazard to the public or the environment. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

As noted in Section 5.8.1.2 Existing Conditions, the project site is included on a list of hazardous materials sites with open clean up cases compiled pursuant to Government Code Section 65962.5. However, as discussed under Impact HAZ-2, the project (under either option) would not create a significant hazard to the public or environment with implementation of Precise Plan EIR MM HAZ-3.1, compliance with the ROD measures and regulations for testing, removal of ACMs, and the City's standard condition of approval COA HAZ-1.1. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact HAZ-5:	**Both Project Options:** The project (under either option) would be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. However, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Same Impact as Approved Project [Less than Significant Impact])**

FAR Part 77 sets forth standards and review requirements for protecting the airspace for safe aircraft operations, particularly by restricting density per acre, land use, and the height of potential structures and minimizing reflective surfaces, flashing lights, electronic interface and other potential hazards to aircraft in flight. These regulations require the FAA be notified of certain proposed construction projects located within an extended zone defined by a set of imaginary surfaces radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

The General Plan EIR concluded that construction equipment or future development that exceeds the height restrictions of FAR Part 77 or land use policies from Moffett Federal Airfield's Comprehensive Land Use Plan could affect navigable airspace; however, compliance with General Plan Policy LUD-

2.5 (which requires the City to evaluate land uses and development for consistency with safety, height, noise, and related policies of the CLUP for Moffett Federal Airfield), and FAA notification requirements (including preparation of an aeronautical study by FAA), as specified in FAR Part 77, would reduce potential impacts to a less than significant level.

The Precise Plan EIR concluded that development allowed under the Precise Plan would result in a less than significant hazard to airport operations with compliance with FAA notification requirements, and the Moffett Federal Airfield CLUP, as well as applicable General Plan policies and actions.

The nearest airport to the site is Moffett Federal Airfield, which is approximately 0.5-mile northwest of the site. According to the Moffett Federal Airfield Comprehensive Land Use Plan (CLUP), the project site is located within its Airport Influence Area.[157] A portion of the project site (495 Clyde Avenue, 485 Clyde Avenue, and 433 Clyde Avenue) is located within a turning safety zone of Moffett Federal Airfield.[158]

The project (under either option) is consistent with the land uses and density for the site as identified in the Precise Plan and as analyzed in the Precise Plan EIR. The portion of the site within the turning safety zone complies with the land use and density of 200 people per acre limits as established in the Moffett Field CLUP.[159] As noted in Section 5.8.1, Existing Conditions, the project site is located within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. The project (under either option) proposes buildings ranging from 16 to 125 feet in height on a site with an elevation that ranges from 50 to 62 feet amsl. The project would be designed to comply with the 182-foot amsl height threshold and, depending on the amsl of the building location, may be required to consult with the FAA and obtain a "Determination of No Hazard or Determination" of a "No Hazard with conditions" or a no hazard determination. Additionally, as identified in the Precise Plan, an avigation easement may be recorded on sites with new buildings as required by the Moffett CLUP. The project (under either option) would comply with FAA notification requirements, the Moffett Federal Airfield CLUP, and applicable General Plan policies and actions identified for development within the Precise Plan. Additionally, as discussed in detail in Section 5.12 Noise, the noise levels generated by the proposed land uses on-site would be acceptable for the uses proposed in relation to the Moffett CLUP. For these reasons, the project (under either option) would not expose people to a safety hazards or excessive noise from Airfield operations. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[157] County of Santa Clara. *Comprehensive Land Use Plan, Moffett Federal Airfield*. December 19, 2018.
[158] Santa Clara County Interactive Property Assessment GIS, February 4, 2022, https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=fb3af8ce73b6407c939e1ac5f092bb30
[159] Email correspondence from Santa Clara County Department of Planning and Development confirmed compliance. Received July 15, 2021.

Impact HAZ-6:	**Both Project Options:** The project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that development allowed under the Precise Plan would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the Precise Plan is consistent with General Plan Policies MOB 10.1, MOB 10.2, and MOB 10.4 which require efficient automobile infrastructure, implementation of TDM programs, and monitoring of emergency response times.[160]

The project (under either option) would include seven emergency access roads throughout the site (six new service streets and one emergency vehicle access road parallel to the VTA tracks) and would not interfere with an adopted Mountain View emergency response or evacuation plan because the project would incorporate relevant fire code requirements and is not located along specified evacuation or emergency routes such that an impact would occur. Additionally, as discussed in Section 5.16 Transportation, new private roads and improvements to existing public roads proposed as part of the project (under either option) would be constructed to meet City standards (including adequate widths and turning aisles for emergency access). For these reasons, the project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HAZ-7:	**Both Project Options:** The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(Same Impact as Approved Project [No Impact])**

The project site is located in an urbanized area and not adjacent to wildland areas; therefore, there would be no wildfire-related impact. Also refer to Section 5.19 Wildfire. This is the same impact as disclosed in the Precise Plan EIR.[161] **(Same Impact as Approved Project [No Impact])**

5.8.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-1:	**Both Project Options:** The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Yes	LTS	None	N/A

[160] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P 124.
[161] Ibid. P 125.

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HAZ-2:	**Both Project Options:** The project (under either option) would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	S	Precise Plan EIR MM-3.1	LTS
HAZ-3:	**Both Project Options:** The project (under either option) would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Yes	LTS	None	N/A
HAZ-4:	**Both Project Options:** The project (under either option) is listed on a site compiled pursuant to Government Code section 65962.5; however, with implementation of mitigation measures, standard conditions of approval, and compliance with existing regulations, it would not create a significant hazard to the public or the environment.	Yes	S	Precise Plan EIR MM HAZ-3.1	LTS
HAZ-5:	**Both Project Options:** The project (under either option) located within an airport land use plan would not result in a safety hazard or excessive noise for people residing or working in the project area.	Yes	LTS	None	N/A
HAZ-6:	**Both Project Options:** The project (under either option) would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Yes	LTS	None	N/A
HAZ-7:	**Both Project Options:** The project (under either option) would not expose people or structures, directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	Yes	NI	None	N/A
Abbreviations: LTS – Less than Significant, S – Significant, NI – No Impact.					

5.9 HYDROLOGY AND WATER QUALITY

5.9.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for hydrology and water quality has not substantially changed since the certification of the Precise Plan EIR.

5.9.1.1 *Regulatory Framework*

Federal and State

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the EPA and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) must be filed with the RWQCB by the project sponsor, and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction and filed with the RWQCB by the project sponsor. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San

Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara counties, and the cities of Fairfield, Suisun City, and Vallejo.[162] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

In May 2022, it is anticipated the RWQCB will consider adoption of a renewed MRP. If adopted, any new development would be subject to the regulations under the renewed MRP.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

2016 Groundwater Management Plan

The 2016 Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water

[162] MRP Number CAS612008

manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the SFPUC to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by Valley Water's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu recharge through the provision of treated surface water, acquisition of supplemental water supplies, and water conservation and recycling.[163]

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to hydrology and water quality impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 8.2	**National Pollutant Discharge Elimination System Permit.** Comply with requirements in the Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit (MRP).
INC 8.4	**Runoff pollution prevention.** Reduce the amount of stormwater runoff and stormwater pollution entering creeks, water channels and the San Francisco Bay through participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program.
INC 8.5	**Site-specific stormwater treatment.** Require post-construction stormwater treatment controls consistent with MRP requirements for both new development and redevelopment projects.
INC 8.7	**Stormwater quality.** Improve the water quality of stormwater and reduce flow quantities.

Source: City of Mountain View, *Mountain View 2030 General Plan*. July 10, 2012. Pp. 131-132

East Whisman Precise Plan

The Precise Plan contains policies that pertain to hydrology and water quality. These include integration of green stormwater infrastructure, treatment of runoff, and compliance with the MRP. The

[163] Valley Water. *2016 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2016.

Precise Plan includes the following design guidelines and standards related to hydrology and water quality:

- Green infrastructure measures shall be placed into retrofitted streets as feasible, and as required by the MRP and City's Green Stormwater Infrastructure Plan and other plans and goals,
- Green infrastructure measures are required in new streets, and as required by the Municipal Regional Permit and the City's Green Infrastructure Plan and other plans and goals,
- New public open spaces would be designed to incorporate best practices in sustainability, including water use and conservation, stormwater management, landscaping, and drought tolerant planting,
- New construction shall meet the baseline indoor and outdoor water performance standards defined by LEED, Green Point Rated, and mandatory CalGreen requirements,
- New construction shall install dual plumbing for potable and recycled water use, and
- When the recycled water system is adjacent to the property, new construction shall install the infrastructure necessary to connect to the recycled water system.

5.9.1.2 *Existing Conditions*

Stormwater Drainage

The project site is located within the Stevens Creek watershed, with the nearest waterway being Stevens Creek located approximately 0.9-mile west of the site. Stevens Creek eventually flows into the San Francisco Bay near Long Point, north of NASA Ames Research Center/Moffett Federal Airfield.

Stormwater runoff from impervious surfaces within the Precise Plan area is collected by a municipal storm drain system consisting of storm drain inlets, conveyance pipes, culverts, channels and retention basins operated by the City of Mountain View Public Works Department. Drainage into the City system generally flows south to north towards San Francisco Bay.

The project site consists of 83 percent impervious surfaces (or 31.7 acres) and 17 percent (or 6.5 acres) pervious surfaces. Stormwater runoff from the project site is primarily conveyed to Stevens Creek which flows into the Lower South Bay via Whisman Slough and ultimately to the San Francisco Bay.

Water Quality

The water quality of streams, creeks, ponds, and other surface water bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as nonpoint source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Urban stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, animal feces, etc.), pesticides, litter, and heavy metals. In sufficient concentration, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

While there are no streams, creeks, ponds, or other surface water bodies located within the project site, Stevens Creek is located 0.9-mile west of the site. Stevens Creek is on the 2006 Clean Water Act

Section 303(d) list due to impairment from toxicity from unknown sources. The California Water Board is in the process of examining the current status of impairment.

Groundwater

The Precise Plan area (including the project site) overlies the Santa Clara subbasin. The 225 square-mile Santa Clara groundwater basin provides municipal, domestic, industrial, and agricultural water supply to the area.

Valley Water prepared a Groundwater Management Plan for the Santa Clara and Llagas subbasins in 2016, describing its comprehensive groundwater management framework including objectives and strategies, programs and activities to support those objectives, and outcome measures to gauge performance. The Groundwater Management Plan is the guiding document for how Valley Water will ensure groundwater basins within its jurisdiction are managed sustainably. The Santa Clara subbasin has not been identified as a groundwater basin in a state of overdraft.

The project site is underlain by two aquifers located between two and 30 feet bgs and between 55 and 160 feet bgs, respectively.[164] Depth to groundwater on the project site varies between six to 16 feet bgs, as discussed in Section 5.6 Geology and Soils.

Flooding

The project site is located within Flood Zone X, which is not a Special Flood Hazard Area as identified by FEMA FIRM.[165] Flood Zone X is defined as an area determined to be outside the one percent and 0.2 percent annual chance floodplains, indicative of a minimal flood hazard.

Seiches, Tsunamis, and Mudflows

A seiche is the oscillation of a body of water, typically caused by changes in atmospheric pressure, strong winds, earthquakes, tsunamis, or tidal movements. Seiches occur most frequently in enclosed or semi-enclosed basins such as lakes, bays, or harbors. A damaging seiche has not been recorded in the San Franscisco Bay Area as far as records indicate.[166]

Tsunamis are long period water waves caused by underwater seismic events, volcanic eruptions, or undersea landslides. The Precise Plan area, and therefore the project site, is not located within an identified tsunami inundation area.[167]

[164] Schlumberger. *2020 Annual Progress Report – Middlefield-Ellis-Whisman Fairchild and Regional Groundwater Remediation Programs, Mountain View, California.* April 15, 2021. Accessed October 11, 2021. https://semspub.epa.gov/work/09/100023585.pdf

[165] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06085C0045H. Effective Date May 18, 2009.

[166] City of Mountain View. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR*. SCH #2011012069. September 2012.

[167] California Emergency Management Agency, California Geological Survey, University of Southern California. Tsunami Inundation Map for Emergency Planning – Mountain View Quadrangle. 2009.

5.9.2 Impact Discussion

For the purpose of determining the significance of the project's impact on hydrology and water quality, would the project:

1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - result in substantial erosion or siltation on- or off-site;
    - substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - impede or redirect flood flows?
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

5.9.2.1 *Project Impacts*

Impact HYD-1:	**Both Project Options:** The project (under either option) would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that compliance with the General Construction Permit, MRP, and Precise Plan design guidelines and standards would ensure future project construction and post-construction runoff would not result in substantial sources of polluted runoff and impacts would be less than significant.[168]

The project (under either option) would disturb more than one acre of soil and would be subject to the requirements of the statewide NPDES General Construction Permit to reduce runoff and pollution in runoff from construction activities, including preparation of a SWPPP and implementation of stormwater control BMPs.

The project (under either option) would also replace more than 10,000 square feet of impervious surfaces and would be required to meet the requirements of the MRP. The MRP requires regulated

[168] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. Pp. 134 – 135.

projects to include LID practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained. If adopted in May 2022, the project would be subject to the renewed MRP stormwater treatment requirements.

The project (under either option) would implement the following design guidelines and standards from the Precise Plan:

- Green infrastructure measures shall be placed into retrofitted streets as feasible, and as required by the MRP and City's Green Stormwater Infrastructure Plan and other plans and goals,
- Green infrastructure measures are required in new streets, and as required by the Municipal Regional Permit and the City's Green Infrastructure Plan and other plans and goals,
- New public open spaces would be designed to incorporate best practices in sustainability, including water use and conservation, stormwater management, landscaping, and drought tolerant planting,
- New construction shall meet the baseline indoor and outdoor water performance standards defined by LEED, Green Point Rated, and mandatory CalGreen requirements,
- New construction shall install dual plumbing for potable and recycled water use, and
- When the recycled water system is adjacent to the property, new construction shall install the infrastructure necessary to connect to the recycled water system.

As discussed above, the project (under either option) would comply with General Construction Permit, current MRP, and Precise Plan design guidelines and standards, reducing water quality impacts to a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact**])

Impact HYD-2:	**Both Project Options:** The project (under either option) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that new development under the Precise Plan would not substantially decrease groundwater supplies or interfere with sustainable groundwater management because development would not be located on or impact recharge facilities, pump plants, or drinking water treatment plants.

The project (under either option) would result in 74 percent impervious surfaces. Compared to existing site conditions, this would decrease impervious surfaces in the project site by 11 percent (or approximately 150,150 square feet). The decrease in impervious surfaces would proportionally reduce the amount of runoff on-site, compared to existing conditions. Since the proposed project would reduce the estimated runoff from the site and comply with the General Construction Permit and current MRP, the project would not result in substantial sources of polluted runoff and impacts would be less than significant.

As discussed in Section 5.9.1 Environmental Setting the depth to groundwater varies across the site between six to 16 feet bgs. The project (under either option) would require excavation to a maximum depth of 50 feet bgs for building foundations and utility connections. Additionally, the project with District Utilities System Option would require drilling to a depth of approximately 110 feet bgs for installation of geobores. Thus, groundwater would be encountered during project construction (under either option). According to a Preliminary Geotechnical Investigation prepared for the project, groundwater would be extracted at a rate of approximately 40 to 80 gallons per minute, or 57,600 to 115,200 gallons per day during construction until building foundations are completed.[169] The project would implement COA GEO-1.1 to minimize the volume of groundwater removed during project construction and ensure construction dewatering does not substantially decrease groundwater supplies.

Furthermore, as noted in Section 5.8 Hazards and Hazardous Materials, the project site is located within the MEW Superfund Study Area. Potentially polluted dewatered groundwater would be dealt with as part of the SMP required as part of Precise Plan MM HAZ-3.1, as noted in Section 5.8 Hazards and Hazardous Materials. The SMP would be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction. A Health and Safety Plan establishing appropriate protocols for working in hazardous materials shall also be prepared. During construction within the MEW Superfund Study Area, the project (under either option) would be required to implement EPA-approved measures during dewatering, as applicable.

Additionally, the project (under either option) would not permanently deplete groundwater supplies or interfere with groundwater recharge because the project options would not directly use groundwater and the site does not contribute to recharge because it is mostly paved.

In conclusion, with implementation of the above condition of approval for construction dewatering the project (under either option) would not substantially decrease groundwater supplies or interfere with implementation of the sustainable groundwater management plan for the Santa Clara Valley Groundwater basin. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[169] ENGEO. *East Whisman Phase 1: Geotechnical Report for Horizontal Improvements at R1 and R2*. January 29, 2021. Revised February 8, 2021. P. 24.

Impact HYD-3: **Both Project Options:** The project (under either option) would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that with implementation of standard conditions of approval and MRP and Precise Plan standards and guidelines, the City's stormwater system would adequately convey flows from buildout of the Precise Plan and that future development under the Precise Plan would have a less than significant impact to the existing storm drainage system and the existing drainage patterns of the area.[170]

The project (under either option) would redevelop the existing site with mixed-use office, residential, retail, and open space uses. As discussed under Impact HYD-2, the project (under either option) would result in a decrease of impervious surfaces, thereby resulting in a corresponding decrease in surface runoff from the site compared to existing, pre-project conditions. Because the project (under either option) would decrease impervious surface area and would not cause increased erosion, silt pollution, or other impacts to surface waters, the project site is not subject to a hydromodification management plan (HMP). However, it would be required to comply with MRP Provision C.3 requirements requiring LID practices and water treatment measures. With a decrease of surface runoff, the existing storm drain system would continue to accommodate flows from the site. As a result, the project (under either option) would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site, create runoff that would exceed the capacity of existing or planned drainage systems, or provide substantial additional sources of polluted runoff. Furthermore, because there are no waterways on or adjacent to the project site, the project would not alter the course of a river or stream.

Standard Conditions of Approval:

COA HYD-2.1: **Both Projects Options:** The project (under either option) shall implement the following:

- **State of California Construction General Stormwater Permit.** A "Notice of Intent" (NOI) and "Stormwater Pollution Prevention Plan" (SWPPP) shall be prepared for construction projects disturbing one (1) acre or more of land. Proof of coverage under the State General Construction Activity Stormwater Permit shall be attached to the building plans.
- **Construction Best Management Practices.** All construction projects shall be conducted in a manner which prevents the release of hazardous materials, hazardous waste, polluted water, and sediments to the storm drain system.

[170] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P. 137

- **Construction Sediment and Erosion Control Plan.** The applicant shall submit a written plan acceptable to the City which shows controls that would be used at the site to minimize sediment runoff and erosion during storm events. The plan shall include installation of the following items where appropriate: (a) silt fences around the site perimeter; (b) gravel bags surrounding catch basins; (c) filter fabric over catch basins; (d) covering of exposed stockpiles; (e) concrete washout areas; (f) stabilized rock/gravel driveways at points of egress from the site; and (g) vegetation, hydroseeding, or other soil stabilization methods for high-erosion areas. The plan shall also include routine street sweeping and storm drain catch basin cleaning.
- **Stormwater Treatment (C.3).** This project would create or replace impervious surface; therefore, stormwater runoff shall be directed to approved permanent treatment controls as described in the City's guidance document entitled, "Stormwater Quality Guidelines for Development Projects."
- **Stormwater Management Plan – Third Party Engineer's Certification.** The Final Stormwater Management Plan shall be certified by a qualified third-party engineer that the proposed stormwater treatment controls comply with the City's Guidelines and Provision C.3 of the Municipal Regional Stormwater NPDES Permit (MRP). A list of qualified engineers is available at the following link: http://www.scvurppp-w2k.com/consultants_list.shtml.

The Precise Plan design guidelines require new landscaping to incorporate stormwater capture and treatment into landscaping design and for new public spaces to implement best practices for stormwater management. By decreasing the amount of impervious surfaces on-site and complying with the MRP and Precise Plan design guidelines, the project (under either option) would have a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HYD-4:	**Both Project Options:** The project (under either option) would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded future development allowed under the Precise Plan would result in less than significant impacts from release of pollutants due to inundation because the Precise Plan Area is not located within an area of high flood hazard, dam inundation, or tsunami hazard risk, and future development would comply with Mountain View Fire Department (MVFD) requirements for storage of hazardous materials.[171]

The project site is not located in an identified FEMA 100-year flood hazard zone or subject to tsunamis or seiches.[172] The MVFD requires any facility storing large quantities of any hazardous materials to prepare a Hazardous Materials Business Plan program (HMBP). The project with District Utilities

[171] Ibid.
[172] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06085C0045H. Effective Date May 18, 2009.

System Option would be required to prepare and implement a HMBP approved by MVFD which includes a contingency plan that describes the facility's response procedures in the event of a hazardous materials release. With implementation of the HMBP, and based on the location of the project and the fact that it would not include significant amounts of pollutants, the project would not result in a release of pollutants from flooding, seiches, or tsunamis, and would have a less than significant impact. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact HYD-5:	**Both Project Options:** The project (under either option) would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Same Impact as Approved Project [Less than Significant Impact])**

Valley Water's GWMP establishes recharge facilities, recycled water systems, and conservation strategies to proactively manage groundwater and surface water resources within its jurisdiction. Natural recharge of the groundwater basin occurs along the margins and southern portion of the subbasin where high lateral and vertical permeability allow surface water to infiltrate the aquifers. Percolation of precipitation within recharge areas replenishes groundwater and contributes to the recharge of principal aquifers.[173] There are no recharge facilities, pump plants, or drinking water treatment plants in the Precise Plan area, and therefore, in the project site.[174] The Precise Plan EIR concluded that future development under the Precise Plan would result in less than significant impacts to recharge facilities, pump stations, or drinking water plants because no such facilities are located within the Precise Plan area and it would not interfere with the existing SFPUC pipelines that cross through the Precise Plan area.

The project (under either option) is consistent with the development assumptions in the Precise Plan EIR and would, therefore, result in the same less than significant impact to these facilities. **(Same Impact as Approved Project [Less than Significant Impact])**

[173] California Department of Water Resources. *Santa Clara Valley Groundwater Basin, San Mateo Subbasin*. February 2004. and Santa Clara Valley Water District. *Groundwater Management Plan*. November 2016.
[174] Santa Clara Valley Water District. *Groundwater Management Plan.* November 2016.

5.9.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
HYD-1:	**Both Project Options:** The project (under either option) would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	Yes	LTS	None	N/A
HYD-2:	**Both Project Options:** The project (under either option) would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Yes	LTS	None	N/A
HYD-3:	**Both Project Options:** The project (under either option) would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.	Yes	LTS	None	N/A
HYD-4:	**Both Project Options:** The project (under either option) would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.	Yes	LTS	None	N/A
HYD-5:	**Both Project Options:** The project (under either option) would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant

5.10 LAND USE AND PLANNING

5.10.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for land use has not substantially changed since the certification of the Precise Plan EIR.

5.10.1.1 *Regulatory Framework*

Local

Mountain View 2030 General Plan

The General Plan contains policies to avoid significant impacts due to land use and planning impacts. The following policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 3.4	**Land use conflict.** Minimize conflicts between different land uses
LUD 3.8	**Preserved land use districts.** Promote and preserve commercial and industrial districts that support a diversified economic base.
LUD 19.6	**Residential transitions.** Require development to provide sensitive transitions to adjacent residential uses.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 49, 65

East Whisman Precise Plan

The Precise Plan encompasses an approximately 412-acre area in the City of Mountain View that is generally bounded by US 101 and Moffett Federal Airfield/NASA Ames Research Center to the north, Central Expressway to the south, the City of Sunnyvale to the east, and North Whisman Road to west. The Precise Plan is intended to serve as the primary document and reference guide for the future development and redevelopment of the Precise Plan area. In addition to providing the community and decision makers with a clear vision for the Precise Plan area, the Precise Plan is intended to provide clear policy and regulatory framework by which future development projects and public improvements would be reviewed. The Precise Plan area has been divided into four Character Areas (Mixed-Use Area, Village Center, Employment Area North, and Employment Area South) which function similar to land use districts with specified allowed land uses, development standards, and building placement and massing regulations.

The Precise Plan includes development standards and design criteria that have been adopted to function, along with the standards in the City Code, to limit land use conflicts and provide for compatibility with surrounding properties and neighborhoods. Considerations that are intended to mitigate or address potential adverse effects to adjacent developments or neighborhoods from traffic, noise, odors, visual nuisances, or other similar effects may include, but are not limited to: the placement or orientation of buildings and entryways, parking areas, buffers, and the addition of landscaping, walls, or both.

5.10.1.2 *Existing Conditions*

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan and is zoned P-41 East Whisman Precise Plan. The site is currently developed with 23 office and light industrial buildings, as well as landscaping, and surface parking lots. The site is located adjacent to the VTA Middlefield Light Rail Station. The Hetch Hetchy/TOD Trail is located approximately 65 feet west of the site, across Ellis Street, and the existing VTA multi-use path bisects the project site and is located on the west side of the light rail tracks. Surrounding land uses include office and light industrial uses to the north, south, and east, and Sunnyvale Municipal Golf Course to the east. Existing residential neighborhoods are located further from the project site to the west, east, and south (refer to Figure 3.2-3).

5.10.2 Impact Discussion

For the purpose of determining the significance of the project's impact on land use and planning, would the project:

1) Physically divide an established community?
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

5.10.2.1 *Project Impacts*

Impact LU-1:	**Both Project Options:** The project (under either option) would not physically divide an established community. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded implementation of the Precise Plan would not physically divide an established community because it would not include highways or railways that would impact existing communities, instead it would improve connectivity.[175] The project (under either option) proposes land uses consistent with the Precise Plan and similar to the existing land uses surrounding the project site (refer to Figure 3.2-3). The project (under either option) does not involve components that would physically divide an existing community (i.e., highways or railways). New private roadways are proposed that would provide connections throughout the project site and surrounding neighborhoods. The new roadways would be reviewed during planning permit entitlement review (via Planned Community Permit and Development Review Permits) and would be required to meet City circulation and design requirements in order to create an integrated and cohesive neighborhood. Additionally, the project (under either option) would construct a bicycle and pedestrian trail network throughout the site to improve access to and circulation through the site from the Hetch Hetchy/TOD Trail, Middlefield Light Rail Station, VTA multi-use path, and throughout the Precise Plan area. The proposed bicycle and pedestrian paths would be reviewed during the planning permit entitlement review (via Planned Community Permit and Development Review Permits) and would be required to meet City circulation and design requirements. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[175] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 144.

Impact LU-2:	**Both Project Options:** The project (under either option) would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that the Precise Plan incorporates standards and guidelines to minimize environmental impacts and would be consistent with land use plans, policies, and regulations including the General Plan, Zoning Ordinance, Moffett Field CLUP, and Plan Bay Area 2040. The project's consistency with these land use and development assumptions are discussed in detail below (under either option).

General Plan

The project site is designated High Intensity Office and East Whisman Mixed-Use in the City's General Plan. The General Plan High-Intensity Office designation supports major commercial operations, such as corporations, financial and administrative offices, high-technology industries, and other scientific facilities, as well as supporting retail and other service uses. The General Plan East Whisman Mixed-Used designation promotes a mix of offices, neighborhood-serving commercial, multi-family residential, lodging, and small businesses in the core of the East Whisman area. The project (under either option) would redevelop the site with a mix of office, multi-family residential, retail, civic/community uses, and parkland/open space consistent with the type of development envisioned in the General Plan.

East Whisman Precise Plan

As noted in Section 3.3 Consistency with General Plan Designation and Zoning District, the site is zoned P-41 East Whisman Precise Plan and is located in the Mixed-Use and North Employment Character Areas. These Character Areas allow a mix of low, moderate, and high-intensity uses of office, R&D, multi-family residential, hotel, and retail and service uses. The maximum base building height allowed on-site ranges from 60 to 95 feet; however, additional height allowances of 65 to 135 feet are provided for projects with park dedication, ground floor neighborhood commercial space, and close proximity to light rail. The "base" FAR for the site varies from 0.40 for non-residential development to 1.0 for residential/mixed-use development. The maximum FAR allowed ranges from 0.5 to 1.0 for non-residential development and 2.5 to 3.5 for residential/mixed-use development.

The proposed land uses (under either option) are consistent with the type of development envisioned in the Precise Plan for the Mixed-Use and Employment North Character Areas. The project (under either option) proposes non-residential FARs ranging from 0.39 to 1.0 and residential/mixed-use FARs ranging from 1.12 to 1.66 with maximum building heights of 16 to 125 feet. The MPMP is proposing to use "bonus" FAR for both residential and non-residential development as permitted in the Precise Plan. Thus, the project would be consistent with the development standards for the site under the East Whisman Precise Plan zoning district.

Moffett Field CLUP

The Precise Plan EIR concluded that development allowed under the Precise Plan would not conflict with the Moffett Field CLUP because the Precise Plan includes standards and guidelines to minimize environmental impacts and would be consistent with the CLUP.[176] As noted in Section 5.8 Hazards and Hazardous Materials, the project site is located within the AIA and within the mapped Part 77 182-foot amsl horizontal surface for Moffett Federal Airfield. Additionally, the majority of the project site is not located within any noise contours of the Moffett Federal Airfield, however, the parcels at 520-530 Logue Avenue and 500-526 Clyde Avenue (APN 160-57-008), 485 Clyde Avenue (APN 160-57-006), and 495 Clyde Avenue (APN 160-57-007) are located within the 65 dB noise contour of the Moffett Federal Airfield (refer to Figure 5.12-1).

As discussed in Section 5.8 Hazards and Hazardous Materials, the project (under either option) proposes buildings with heights 16 to 125 feet, and depending on the amsl at the building location, may require consultation with the FAA to obtain a "Determination of No Hazard" or "Determination of No Hazard with Conditions", which may require an avigation easement as noted in the Precise Plan. Additionally, as discussed in Section 5.12 Noise, the project (under either option) proposes office and parking uses within the 65 dBA noise contour for the Moffett Federal Airfield which would be an acceptable noise level for the uses proposed. For these reasons, the project (under either option) would not conflict with airport operations at Moffett Federal Airfield.

Additionally, the properties at 433, 485, and 495 Clyde Avenue are located within the turning safety zone of the Moffett Federal Airfield. The proposed land uses (office, parking, and retail/community/civic space) and densities of 200 people per acre or less are consistent with the CLUP as confirmed with Santa Clara County Department of Planning and Development on July 15, 2021.

Plan Bay Area 2040/2050

As noted in Section 5.7 Greenhouse Gas Emissions above, in October 2021, ABAG adopted Plan Bay Area 2050 which builds on Plan Bay Area 2040 and includes 35 strategies for housing, transportation, economic viability and the environment. Although Plan Bay Area 2050 was adopted, it will take several years for the updated plan to be reflected in the regional and county-wide transportation models, so land uses and development projections based on Plan Bay Area 2040 are used as the foundation for this analysis. The Precise Plan EIR concluded that development allowed under the Precise Plan would not conflict with the Plan Bay Area 2040 because the Precise Plan meets the intent of Plan Bay Area 2040 to focus growth in PDAs and streamline the review process for development projects. Plan Bay Area 2040 focuses future growth in PDAs near transit facilities in order to encourage more sustainable growth in the region. The project (under either option) includes high density mixed-use development adjacent to the Middlefield Light Rail Station and within an identified PDA. Therefore, the project (under either option) would be consistent with Plan Bay Area 2040.

For these reasons, the project would not conflict with applicable land use plans, policies, and regulations and the impact would be less than significant. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[176] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P. 145

5.10.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
LU-1:	**Both Project Options:** The project (under either option) would not physically divide an existing community.	Yes	LTS	None	N/A
LU-2:	**Both Project Options:** The project (under either option) would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating n environmental effect.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant.

5.11 MINERAL RESOURCES

5.11.1 Environmental Setting

An analysis of mineral resources impacts associated with implementation of the Precise Plan was included in the Geology and Soils Section of the Precise Plan EIR. The environmental setting, including the regulatory framework and existing site conditions, for mineral resources has not substantially changed since the certification of the Precise Plan EIR.

5.11.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

5.11.1.2 *Existing Conditions*

Based on mapping by the California Division of Mines and Geology, as well as mapping by the California Department of Conservation, there have been no mineral or aggregate sources of statewide importance identified within the Mountain View city limits.[177]

5.11.2 Impact Discussion

For the purpose of determining the significance of the project's impact on mineral resources, would the project:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

[177] California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification: Aggregate Materials in the San Francisco Monterey Bay Area: Classification of Aggregate Resource Areas: South San Francisco Bay Production – Consumption Region.* Map. 1987.

5.11.2.1 *Project Impacts*

Impact MIN-1:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **[Same Impact as Approved Project (No Impact)]**

There are no minerals or aggregate resources of statewide importance located in the Precise Plan area (which includes the project site). Implementation of the project (under either option), therefore, would not result in the loss of a known mineral resource. This is the same impact as disclosed in the Precise Plan EIR.[178] **(Same Impact as Approved Project [No Impact])**

Impact MIN-2:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. **(Same Impact as Approved Project [No Impact])**

As noted above, there are no minerals or aggregate resources of statewide importance located in the Precise Plan area (which includes the project site). Implementation of the project (under either option), therefore, would not result in the loss of a locally important mineral resource recovery site. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [No Impact])**

5.11.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
MIN-1:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state.	Yes	NI	None	N/A
MIN-2:	**Both Project Options:** The project (under either option) would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	Yes	NI	None	N/A

Abbreviation: NI – No Impact.

[178] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 90.

5.12 NOISE

5.12.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for noise and vibration has not substantially changed since the certification of the Precise Plan EIR.

5.12.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, L_{dn}, or CNEL.[179] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[179] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 p.m. and 10:00 p.m. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

5.12.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects, including light rail, buses, and transit stations. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 5.12-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 5.12-1: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

State, Regional, and Local

California Building Standards Code

The CBC establishes uniform minimum noise insulation performance standards to protect persons within new buildings housing people, including hotels, motels, dormitories, apartments, and dwellings other than single-family residences. Title 24 mandates interior noise levels attributable to exterior sources not exceed 45 L_{dn}/CNEL in any habitable room. Exterior windows must have a minimum Sound Transmission Class (STC) of 40 or Outdoor-Indoor Transmission Class (OITC) of 30 when the property falls within the 65 dBA DNL noise contour for a freeway or expressway, railroad, or industrial source.

California Green Building Standards Code

For commercial uses, CalGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

Moffett Federal Airfield Comprehensive Land Use Plan

The Moffett Federal Airfield is located approximately 0.5-mile northwest of the project site. The Moffett Federal Airfield CLUP includes noise exposure maps and guidelines intended to minimize the public's exposure to excessive noise and safety hazards. The northern half of the project site is located within the 65 dBA CNEL noise contour zone, and the southern half of the project site is located outside of the 65 dBA CNEL noise contour zone, as shown in Figure 5.12-1 below.[180] The following policies from the Moffett Federal Airfield CLUP would be applicable to MPMP.

Policy	Description
Noise	
N-1	The Community Noise Equivalent Level (CNEL) method of representing noise levels shall be used to determine if a specific land use is consistent with the CLUP.
N-2	In addition to the other policies herein, the Noise Compatibility Guidelines presented in Table 3.11-2 shall be used to determine if a specific land use is consistent with this CLUP.
N-3	Noise impacts shall be evaluated according to the Aircraft Noise Contours.
N-4	No residential or transient lodging construction shall be permitted within the 65 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound levels will be less than 45 dB CNEL and there are no outdoor patios or outdoor activity areas associated with the residential portion of a mixed-use residential project of a multi—unit residential project. (Sound wall noise mitigation measures are not effective in reducing noise generated by aircraft flying overhead).
N-6	Residential construction will not be permitted in the area between the 60 dB CNEL contour boundary and the 65 dB CNEL contour boundary unless it can be demonstrated that the resulting interior sound level will be no greater than 45 dB CNEL.
N-7	Noise level compatibility standards for other types of land uses shall be applied in the same manner as the above residential noise level criteria. Table 4-1 below presents acceptable noise levels for other land uses in the vicinity of the Airport.

County of Santa Clara. Airport Land Use Commission. November 18, 2016.

[180] Santa Clara County, Airport Land Use Commission. November 18, 2016. *Comprehensive Land Use Plan: Moffett Federal Airfield.* Figure 5: 2022 Aircraft Noise Contours with AIA. Accessed November 16, 2021. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/ALUC_NUQ_CLUP.pdf. P. 25.

Source: Santa Clara County, November 18, 2016.

MOFFETT FEDERAL AIRFIELD 2022 NOISE CONTOURS | FIGURE 5.12-1

Mountain View 2030 General Plan

The General Plan includes noise compatibility guidelines for various land uses. For reference, these guidelines are provided in Table 5.12-2 below.

Table 5.12-2: General Plan Outdoor Noise Environment Guidelines

Land Use Category	Community Noise Exposure in Decibels (CNEL) Day/Night Average Noise Level in Decibels (L_{dn})						
	55	60	65	70	75	80	85
Residential—Single-Family, Duplex, Mobile Homes							
Residential—Multi-Family, Transient Lodging—Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters, Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Normally Acceptable:
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

Normally Unacceptable:
New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Unacceptable:
New construction or development clearly should not be undertaken.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. Pg. 163

The General Plan contains goals and policies to avoid significant impacts due to noise. The following goals and policies are applicable to the proposed project.

Policy	Description
Noise	
NOI 1.2	**Noise-sensitive land uses.** Require new development of noise-sensitive land uses to incorporate measures into the project design to reduce interior and exterior noise levels to the following acceptable levels: • New single-family developments shall maintain a standard of 65 dBA L_{dn} for exterior noise in private outdoor active use areas. • New multi-family residential developments shall maintain a standard of 65 dBA L_{dn} for private and community outdoor recreation use areas. Noise standards do not apply to private decks and balconies in multi-family residential developments • Interior noise levels shall not exceed 45 dBA L_{dn} in all new single-family and multi-family residential units. • Where new single-family and multi-family residential units would be exposed to intermittent noise from major transportation sources such as train or airport operations, new construction shall achieve an interior noise level of 65 dBA through measures such as site design or special construction materials. This standard shall apply to areas exposed to four or more major transportation noise events such as passing trains or aircraft flyovers per day.
NOI 1.3	**Exceeding acceptable noise thresholds.** If noise levels in the area of a proposed project would exceed normally acceptable thresholds, the City shall require a detailed analysis of proposed noise reduction measures to determine whether the proposed use is compatible. As needed, noise insulation features shall be included in the design of such projects to reduce exterior noise levels to meet acceptable thresholds, or for uses with no active outdoor use areas, to ensure acceptable interior noise levels.
NOI 1.6	**Sensitive uses.** Minimize noise impacts on noise-sensitive land uses, such as residential uses, schools, hospitals and child-care facilities.
NOI 1.7	**Stationary sources.** Restrict noise levels from stationary sources through enforcement of the Noise Ordinance.

Source: City of Mountain View, *Mountain View 2030 General Plan*, July 10, 2012. Pp. 166-167

Mountain View City Code

The City of Mountain View addresses noise regulations in Chapter 21 of the City Code. These regulations help protect the community from exposure to excessive noise and also specify how noise is measured and regulated. The regulations limit noise from stationary equipment (such as heating, ventilation, and air conditioning mechanical systems, delivery truck idling, loading/unloading activities, recreation activities, and parking lot operations) in Section 21.26 of the Code. The maximum allowable noise level is 55 dBA during the day and 50 dBA at night (10:00 p.m. to 7:00 a.m.), unless it has been demonstrated that such operation will not be detrimental to the health, safety, peace, morals, comfort or general welfare of residents subjected to such noise, and the use has been granted a permit by the City. Noise limits can also be regulated through project conditions of approval. The MVPD and City Attorney's office (Code Enforcement Division) enforce noise violations.

Construction noise impacts primarily occur when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses (e.g., residences, daycare facility), and/or when construction duration lasts an extended period of time. Section 8.70.1 of the City Code restricts the hours of construction activity to 7:00 a.m. to 6:00 p.m., Monday through Friday. No construction activity is permitted on Saturday, Sunday, or holidays without written approval from the City. Construction activities are defined to include any physical activity on the construction site or in the project's staging area, including the delivery of materials.

5.12.1.3 *Existing Conditions*

The existing noise environment in the Precise Plan area (including the project site) results primarily from vehicular traffic along freeway and roadways (including US 101, East Middlefield Road, SR 237, North Whisman Road, and Ellis Street), VTA light railcar pass-bys and station stops, and aircraft associated with Moffett Federal Airfield. The northeast quadrant of the project site is located within the 65 dBA CNEL noise contour for the Moffett Federal Airfield, the remainder of the project site is located outside of the 65 dBA CNEL noise contour.

The nearest noise-sensitive receptors to the project site are residences located approximately 700 feet southwest of the site on Infinity Way (in South Whisman Precise Plan area). A noise monitoring survey was completed for the Precise Plan EIR in November 2018 which included one noise measurement on the project site near the location of the proposed Building O2 (ST-9) and one noise measurement at the northwest corner of the Ellis Street/East Middlefield Road intersection (LT-2), near the proposed Building R1.[181] Noise levels at the proposed Building O2 were measured at 50 dBA L_{eq} and noise levels at the corner of the Ellis Street/East Middlefield Road intersection were measured at 70 dBA L_{dn}

5.12.2 Impact Discussion

For the purpose of determining the significance of the project's impact on noise, would the project result in:

1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
2) Generation of excessive groundborne vibration or groundborne noise levels?
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

[181] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. P 167.

5.12.2.1 *Project Impacts*

Impact NOI-1:	**Both Project Options:** The project (under either option) would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. **(Same Impact as Approved Project [Less than Significant Impact])**

As described in the Precise Plan EIR, a significant noise impact would be identified if the project would generate a substantial temporary or permanent noise level increase over ambient noise levels at existing noise-sensitive receptors surrounding the project site and would exceed ambient noise standards presented in the General Plan or City Code at existing noise-sensitive receptors surrounding the project site. The following thresholds are used to determine if the project would result in a significant noise impact:

- A significant temporary noise impact would be identified if the hourly average noise levels exceed 60 dBA L_{eq}, and the ambient by at least five dBA L_{eq}, for a period of more than one year at adjacent residential land uses.
- A significant permanent noise level increase would occur if project-generated traffic would result in: a) a noise level increase of five dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) a noise level increase of three dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the General Plan (normally acceptable exterior noise level for office buildings is 67 dBA).

Construction Noise

The Precise Plan EIR concluded that buildout of the Precise Plan would have less than significant construction noise impacts with adherence to City Code requirements and standard conditions of approval.

As noted in Section 3.2.6 Construction Activities and Phasing, the project (under either option) would include demolition, site preparation, grading and excavation, building construction, architectural coatings, paving, and landscaping. Project construction would occur over four phases and take a total of approximately 8.5 years. During this time, construction activities would be completed between 7:00 a.m. and 6:00 p.m., Monday through Friday, with written approval granted by the chief building official for activities on Saturdays per City Code (Chapter 8). In addition, projects within the Precise Plan area would be required to implement the following standard conditions of approval, as identified in the Precise Plan EIR.

Standard Condition of Approval:

COA NOI-1.1: **Both Project Options:** The project (under either option) shall implement the following measures:

- **Construction Noise Reduction**. The following noise reduction measures shall be incorporated into construction plans and contractor specifications to reduce the impact of temporary construction-related noise on nearby properties: a. comply with manufacturer's muffler requirements on all construction equipment engines; b. turn off construction equipment when not in use, where applicable; c. locate stationary equipment as far as practicable from receiving properties; d. use temporary sound barriers or sound curtains around loud stationary equipment if the other noise reduction methods are not effective or possible; e. and shroud or shield impact tools and use electric powered rather than diesel-powered construction equipment.
- **Construction Practices Noticing - Disturbance Coordinator**. The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise. The coordinator (who may be an employee of the general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented. A telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site. The sign must also list an emergency after-hours contact number for emergency personnel.

In compliance with the allowed construction days and hours per the City Code and with implementation of the above standard conditions of approval, the project (under either option) would have a less than significant construction noise impact on adjacent sensitive receptors and future receptors associated with the proposed project. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Traffic Noise

The future traffic noise from buildout of the Precise Plan was modeled for the Precise Plan EIR. Traffic noise increases above existing levels from Precise Plan-generated traffic were estimated to be one to two dBA L_{dn} or less at noise sensitive receptors within and outside the Precise Plan area.[182] Since the increase in traffic noise result of the Precise Plan buildout (which includes traffic from the project under either option) would be less than three dBA, the Precise Plan EIR concluded that traffic noise generated by the Precise Plan (as well as project) would have a less than significant impact on noise-sensitive receptors in the area. **(Same Impact as Approved Project [Less than Significant Impact])**

[182] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp. 169-170.

Mechanical Equipment Noise

The Precise Plan EIR concluded that mechanical noise from future development would be less than significant in compliance with General Plan Policy NOI-1.7 and the below condition of approval.[183] General Plan Policy NOI-1.7 and the below standard conditions of approval restrict noise levels from stationary sources through enforcement of the Noise Ordinance, which states that stationary equipment noise from any property must be maintained at or below 55 dBA L_{eq} during daytime hours (i.e., between 7:00 a.m. and 10:00 p.m.) and at or below 50 dBA L_{eq} during nighttime hours (i.e., between 10:00 p.m. and 7:00 a.m.) as measured at residential land uses.

Standard Condition of Approval:

COA NOI-1.2: **Both Project Options: Mechanical Equipment (Noise).** The noise emitted by any mechanical equipment shall not exceed a level of 55 dB(A) during the day or 50 dB(A) during the night, 10:00 p.m. to 7:00 a.m., when measured at any location on the adjoining residentially used property.

The project would include mechanical systems (i.e., HVAC, exhaust fans, intake ventilation, air sourced heat pumps, and cooling towers) on portions of the roof tops of the proposed buildings under either project option. Under the project with District Utilities System Option, most mechanical equipment would be located inside Building O1. The Precise Plan EIR includes the standard condition of approval COA NOI-1.2 noted above to reduce potential noise impacts from mechanical equipment.

In compliance with General Plan Policy NOI-1.7 and with implementation of the above standard condition of approval COA NOI-1.2, the project (under either option) would not result in a significant impact from mechanical noise at residential land uses because mechanical equipment would be selected to achieve or remain below exterior noise level standards at nearby residential uses. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact NOI-2:	**Both Project Options:** The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation])**

The Precise Plan EIR determined that construction activities associated with development allowed under the Precise Plan would generate vibration from operation of heavy equipment and impact tools (e.g., jackhammers, hoe rams) and identified a less than significant vibration noise impact with implementation of Precise Plan EIR MM NOI-4.1.

[183] City of Mountain View. *Integrated Final Environmental Impact Report, East Whisman Precise Plan.* January 2020. Pp. 160 – 162.

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM NOI-4.1: Both Project Options: Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where project construction is anticipated to include vibration-generating activities such as pile driving or use of vibratory rollers, in close proximity to existing structures, site specific vibration studies should be concluded to determine the area of impact and to identify appropriate mitigation measures which may include the following:

- Identification of sites that would include vibration compaction activities such as pile driving and have the potential to generate ground-borne vibration, and the sensitivity of nearby structures to ground-born vibration. Vibration levels should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task.
- Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions.
- Construction contingencies would be identified for when vibration levels approached the limits.
- At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements.
- When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.
- Conduct post-survey on structures when either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

Project construction activities (under either option) would generate vibration from operation of heavy equipment and impact tools as described in the Precise Plan EIR. With the incorporation of Precise Plan EIR MM NOI-4.1, the project (under either option) would result in a less than significant vibration impact because the project (under either option) would not include pile driving, locate vibration compaction activities away from vibration sensitive structures, implement a vibration monitoring and construction contingency plan, monitor structures affected by vibration, and conduct a post-construction survey of affected structures. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact NOI-3:	**Both Project Options:** The project (under either option) would be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. However, the project would not expose people residing or working in the project area to excessive noise levels. **(Same Impact as Approved Project [Less than Significant Impact])**

As shown in Figure 5.12-1, most of the project site is not located within any noise contours of the Moffett Federal Airfield; however, the parcels at 500 Logue Ave, 485 Clyde Avenue and 495 Clyde Avenue are located within the 65 dB noise contour of the Moffett Federal Airfield. According to the CLUP noise compatibility policies and the City of Mountain View Outdoor Noise Acceptability Guidelines, aircraft noise levels of 65 dBA are considered acceptable for office uses and neighborhood parks, and conditionally acceptable for residential uses. According to the CLUP, all new construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design.

The project (under either option) proposes office and parking uses, along with a small portion of a park (Maude Park), within the 65 dBA contour for the Moffett Federal Airfield; no residential uses are proposed within this area. Thus, noise levels on-site would be considered acceptable under the CLUP noise compatibility policies and the City of Mountain View Outdoor Noise Acceptability Guidelines. Furthermore, CalGreen requires that commercial/office interior noise levels be maintained at 50 dBA L_{eq} (1-hr) or less during hours of operation and residential interior noise levels be maintained at 45 dBA L_{eq} (1-hr). As part of the City's building permit review process, construction drawings must confirm that measures have been taken to achieve a maximum interior noise level of 50 dBA L_{dn} for commercial/office tenant space and 45 dBA L_{dn} for residential space. To ensure the 50 dBA standard is met for commercial/office and 45 dBA standard is met for residential, a qualified acoustical specialist would prepare a detailed analysis of interior noise levels. Therefore, noise from aircraft would not substantially increase ambient noise levels at the project site and interior noise resulting from aircraft would be compatible with the project (under either option). This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.12.2.2 *Non-CEQA Impacts*

Per *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 *(BIA v. BAAQMD)*, effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of Mountain View has policies (including General Plan Policies NOI 1.1 and NOI 1.2) that address existing noise conditions affecting a proposed project.

Future Exterior Noise Environment

As established by General Plan Policy NOI-1.2, exterior noise environments at private and community outdoor recreation use areas should be maintained at or below 65 dBA L_{dn} to be considered acceptable by the City of Mountain View. The noise standards do not apply to private decks and balconies in multi-family residential developments such as those proposed by the project (under either option). According to the Precise Plan EIR, noise produced by vehicular traffic along roadways in the Precise

Plan area would expose residential land uses to levels above the 65 dBA L_{dn} exterior compatibility threshold.

Consistent with the Precise Plan EIR, as part of the City's building permit review process, a qualified acoustical specialist shall prepare a detailed analysis of exterior noise levels and construction drawings would confirm measures have been taken to achieve a City's exterior noise standards for community outdoor recreation use areas.

Future Interior Noise Environment

Residential Uses

General Plan policies and the CBC's interior noise level standard of 45 dBA L_{dn} apply to the residential portion of the project (under either option). Interior noise levels would vary depending upon the design of the buildings (relative window area to wall area) and the selected construction materials and methods. Standard residential construction provides 15 dBA of exterior-to-interior noise reduction, assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction in interior spaces. According to the Precise Plan EIR, estimated future noise levels 75 feet from the centerline of Middlefield Avenue between Logue Avenue and Ferguson Drive would be up to 68 dBA DNL; therefore, the interior noise levels of the proposed residential building could exceed 45 dBA DNL when windows are partially open. In order to reduce the interior noise at the proposed residential units, the project (under either option) shall implement the following condition of approval.

Standard Condition of Approval:

COA NOI-2.1: Both Project Options: Site-Specific Building Acoustical Analysis. A qualified acoustical consultant shall review final site plans, building elevations, and floor plans prior to construction to calculate expected interior noise levels as required by State noise regulations. Project-specific acoustical analyses are required by the California Building Code to confirm that the design results in interior noise levels reduced to 45 dBA L_{dn} or lower. The specific determination of what noise insulation treatments are necessary shall be completed on a unit-by-unit basis. Results of the analysis, including the description of the necessary noise control treatments, shall be submitted to the City along with the building plans and approved prior to issuance of a building permit. Building sound insulation requirements shall include the provision of forced-air mechanical ventilation for all residential units as recommended by the qualified acoustical consultant, so that windows can be kept closed at the occupant's discretion to control noise. Special building techniques (e.g., sound-rated windows and building facade treatments) shall be implemented as recommended by the qualified acoustical consultant to maintain interior noise levels at or below acceptable levels. These treatments shall include, but are not limited to, sound-rated windows and doors, sound-rated wall construction, acoustical caulking, protected ventilation openings, etc.

Commercial Uses

As mentioned under Impact NOI-3 above, the CalGreen Code requires that interior noise levels be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at the proposed commercial uses. According to the Precise Plan EIR, noise levels in the project vicinity would be approximately 68 dBA DNL. Additionally, a portion of the project site is located within the 65 dBA contour for the Moffett Federal Airfield. Standard construction materials for commercial uses would provide at least 20 to 25 dBA of noise reduction in interior spaces. The inclusion of adequate forced-air mechanical ventilation systems is normally required so windows may be kept closed at the occupant's discretion. The standard construction materials in combination with forced-air mechanical ventilation would satisfy the daytime threshold of 50 dBA $L_{eq(1\text{-}hr)}$.

5.12.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
NOI-1:	**Both Project Options:** The project (under either option) would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Yes	LTS	None	N/A
NOI-2:	**Both Project Options:** The project (under either option) would not result in generation of excessive groundborne vibration or groundborne noise levels.	Yes	S	Precise Plan EIR MM NOI-4.1	LTS
NOI-3:	**Both Project Options:** The project (under either option) would be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. However, the project would not expose people residing or working in the project area to excessive noise levels.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant, S – Significant.

5.13 POPULATION AND HOUSING

5.13.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for population and housing has not substantially changed since the certification of the Precise Plan EIR.

5.13.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[184] The City of Mountain View Housing Element and related land use policies were last updated in 2014. At the time of circulation of this SEIR, the City is preparing an update to the Housing Element, which must be adopted by the state-mandated deadline of January 2023.

Regional and Local

Plan Bay Area 2040/2050

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified PDAs.[185]

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 (upon which Plan Bay Area 2040 is based).

In October 2021, ABAG adopted Plan Bay Area 2050 which includes 35 strategies for housing, transportation, economic viability and the environment and lays out a vision for policies and investments to make the bay area more affordable, connected, diverse, healthy and economically vibrant. It will take several years for the updated plan to be reflected in the regional and county-wide

[184] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed September 24, 2021. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[185] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/. Accessed September 24, 2021.

transportation models, so land uses and development projections based on Plan Bay Area 2040 are used as the foundation for this analysis.

5.13.1.2 *Existing Conditions*

Implementation of the Precise Plan would result in a total of 27,360 employees and 10,750 residents at full buildout in 2030.[186] The growth projection for the Precise Plan is consistent with the growth projections for the area in the General Plan. Currently there is one single-family residence in the Precise Plan area located on Middlefield Road. There are no residential units on or adjacent to the project site.

5.13.2 Impact Discussion

For the purpose of determining the significance of the project's impact on population and housing, would the project:

1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

5.13.2.1 *Project Impacts*

Impact POP-1:	**Both Project Options:** The project (under either option) would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). **(Same Impact as Approved Project [Less than Significant Impact])**

The project would generate approximately 4,045 new residents, which is within the limits previously analyzed in the Precise Plan EIR.[187] For this reason, implementation of the project (under either option) would not result in substantial unplanned population growth in Mountain View or in the region beyond what was previously disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

[186] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 172.

[187] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 172.

Impact POP-2:	**Both Project Options:** The project (under either option) would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(Same Impact as Approved Project [Less than Significant Impact])**

The project site does not contain housing; therefore, the project (under either option) would not displace existing residents or housing. This is the same impact as disclosed in the Precise Plan EIR.[188] **(Same Impact as Approved Project [Less than Significant Impact])**

5.13.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
POP-1:	**Both Project Options:** The project (under either option) would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	Yes	LTS	None	N/A
POP-2:	**Both Project Options:** The project (under either option) would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant.					

[188] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 173.

5.14 PUBLIC SERVICES

5.14.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for public services has not substantially changed since the certification of the Precise Plan EIR.

5.14.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside park land and open space for recreational purposes. It provides provisions for the dedication of park land and/or payment of fees in lieu of park land dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of park land dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by mitigating impacts on school facilities that occur as a result of the planning, use, or development of real property (Section 65996[a]). The legislation states the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to public services impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Public Safety	
PSA 1.1	**Adequate staffing.** Maintain adequate police and fire staffing, performance levels and facilities to serve the needs for the community.
PSA 2.7	**Police service levels and facilities.** Ensure Mountain View Police Department service levels and facilities meet demands from new growth and development.
Parks, Open Space and Community Facilities	
POS 1.1	**Additional parkland.** Expand park and open space resources to meet current City standards for open acreage and population in each neighborhood.
POS 1.2	**Recreation facilities in new residential developments.** Require new development to provide park and recreation facilities.
MOB 10.4	**Emergency response.** Monitor emergency response times and review emergency response time standards.

Source: City of Mountain View. *Mountain View 2030 General Plan*. July 10, 2012. Pgs. 176, 149-150, 114.

East Whisman Precise Plan

The Precise Plan establishes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area. The park and open space vision for the Precise Plan area includes a central park (one to two acres), up to six mini-parks (0.3 to one acres), a neighborhood park (two to three acres), a system of linear parks, and POPA open spaces. The Precise Plan envisions approximately three- to eight-acres would be acquired by the City with the park land in-lieu fees paid from residential development and creation of new open space areas within non-residential developments.

Additionally, the Precise Plan requires a Master Plan be submitted and approved by the City before proposing development within the Neighborhood Park Master Plan area, for which this project is located in. The Master Plan is intended to ensure appropriate location, access, and surrounding new development is planned for around a new two to three-acre park between Clyde and Logue Avenues.

Mountain View Municipal Code

Chapter 41 of the City Code contains a Park Land Dedication Ordinance, which sets requirements for park land dedication or in-lieu fees. The City requires developers to dedicate at least three acres of park land for each 1,000 persons who will live in a new housing project (owned or rented), or to pay an in-lieu fee that would be used to offset the increased demands on park facilities. The City also allows developers to propose, for City Council consideration, a privately owned, publicly accessible (POPA) open space within a residential development site for park land credit, reducing the land or in-lieu fee

obligation generated by the development.

5.14.1.2 *Existing Conditions*

Fire Protection Services

Fire protection services are provided to the project site by the MVFD. The MVFD provides fire suppression, rescue response, hazard prevention and education, and disaster preparedness services. The MVFD has an established response time of six minutes for "Medical Code Three" calls (i.e., those requiring expedited transport).

The City of Mountain View also participates in a mutual aid program with neighboring cities, including Palo Alto, Los Altos, and Sunnyvale. Through this program, one or more of the mutual aid cities would provide assistance to MVFD in whatever capacity was needed.

Fire Station Four is closest to the project site. Station Four is located at 229 North Whisman Road, approximately 0.3-miles southwest of the project site.

Police Protection Services

Police protection in the project site is provided by the Mountain View Police Department (MVPD). Officers patrolling the area are dispatched from police headquarters, located at 1000 Villa Street, approximately two miles southwest of the project site.

The MVPD has a goal to respond to Priority E and Priority 1 calls in less than four minutes at least 55 percent of the time.[189] MVPD has a mutual aid agreement with the surrounding jurisdictions, under which the other agencies would assist the MVPD in responding to calls when needed.

Schools

The project site is located within the Mountain View Whisman School District (MVWSD) and Mountain View-Los Altos Union High School District (MVLASD). Students in the project site would attend Vargas Elementary School located at 220 North Whisman Road (approximately 0.5-mile southwest of the project site) or Edith Landels Elementary School located at 115 West Dana Street (approximately two-miles southwest of the project site), Graham Middle School located at 1175 Castro Street (approximately two-miles southwest of the project site), and Mountain View High School located at 3535 Truman Avenue (approximately three-miles south of the project site). Table 5.14-1 shows the existing school enrollment, capacities, and estimated students generated by the project at these local schools. Data is reflective of 2019-2020 enrollment and capacities rather than 2020-2021 data due to the COVID-19 pandemic's impacts on student enrollment.

[189] Priority E and Priority 1 calls are considered the highest priority calls and signal emergency dispatch from the MVPD. Priority E calls are of higher importance because they are often associated with violent crime incidents.

Table 5.14-1: 2019-2020 School Enrollment and Capacity			
School	**Capacity**	**Enrollment**	**Estimated Number of Project-Generated Students**
Vargas Elementary School[1]	492	293	123*
Edith Landels Elementary School[1]	504	442	124*
Graham Middle School[2]	1,294	871	153
Mountain View High School[3]	1,640	2,183	190

Notes: * Approximate student generation per elementary school, assuming half of elementary students attend each school.

1 Cunningham, Elona. Jack Schreder & Associates, Inc. Personal Communication. October 19, 2021.

2 Westover, Rebecca. Principal, Graham Middle School. Personal Communication. January 19, 2022.

3 Mathiesen, Mike. Associate Superintendent, MVLASD. Personal Communication. December 9, 2021.

Parks and Open Space

The City of Mountain View currently owns or manages approximately 993 acres of parks and open space facilities, including 22 urban parks (13 of which are under joint use agreements with local school districts) and the Stevens Creek Trail. The closest parks to the project site include Devonshire Park, located approximately 0.5-mile northwest, and Pyramid Park, which is currently under construction and located 0.2-miles south of the project.

Libraries

The Mountain View Public Library, located at 585 Franklin Street, is the City's only library. It is located approximately three miles southwest of the project site.

5.14.2 Impact Discussion

For the purpose of determining the significance of the project's impact on public services, would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

1) Fire protection?
2) Police protection?
3) Schools?
4) Parks?
5) Other public facilities?

5.14.2.1 *Project Impacts*

Impact PS-1:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. **(Same Impact as Approved Project [Less than Significant Impact])**

The buildout of the Precise Plan (which includes the project under either option) would incrementally increase the needs for fire protection services.[190] The Precise Plan EIR concluded that there is existing capacity at nearby Fire Station Four to respond to additional service calls created by the Precise Plan (which includes either of the project options) and no new facilities or expansion of existing facilities would be required to serve the buildout of the Precise Plan.[191] In addition, the project (under either option) would be constructed to current Fire Code standards to increase fire safety overall. The MVFD reviews applications for new projects to ensure they comply with the City's current fire codes and standards. Therefore, the project (under either option) would have a less than significant impact on fire protection services. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact PS-2:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. **(Same Impact as Approved Project [Less than Significant Impact])**

MVPD maintains a staffing ratio of approximately 1.3 officers per 1,000 residents. As noted in Section 5.13 Population and Housing, the project (under either option) would construct up to 1,900 residential units, which would generate approximately 4,045 residents.[192]

The Precise Plan EIR concluded that growth in the City (including the buildout of the Precise Plan) would increase the demand for police services and the City has policies to ensure that police staffing is adequate to serve the needs of the community.[193] The MVPD confirmed that implementation of projects consistent with the Precise Plan (such as the project under either option) would not require the

[190] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 178.
[191] Ibid.
[192] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 178.
[193] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 179.

construction or expansion of police facilities. In addition, the project (under either option) would be reviewed during the building permit process to ensure safety features are incorporated to minimize the opportunity for criminal activity. For these reasons, the project (under either option) would have a less than significant impact on police protection services. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact PS-3:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. **(Same Impact as Approved Project [Less than Significant Impact])**

The project (under either option) includes up to 1,900 residential units, which would generate approximately 4,045 residents.[194] It is estimated the project would generate a total of 247 elementary school students, 153 middle school students, and 190 high school students.[195] Based on the capacity, enrollment, and estimated number of project-generated students at the local schools (refer to Table 5.14-1), there is sufficient capacity at the schools to accommodate project-generated students.

The MVSD has a Level 1 fee program in place and the project would be subject to payment of applicable developer fees. Payment of the adopted developer fees by the applicant would, in accordance with Section 65995(h) of the California Government Code, fully and completely mitigate all school impacts. In addition, the project would contribute to the repayment of local general obligation bonds that would provide financing for capital projects at the schools assigned to the project.

The State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects. Those fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure. The Legislature has declared that the payment of those fees constitutes full mitigation for the impacts generated by new development.

Consistent with Government Code 65996 and the Precise Plan EIR, the project (under either option) would pay state-mandated school impact fees to offset impacts to local schools, reducing impacts to a less than significant level. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[194] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR Transportation analysis. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: Fehr and Peers. *East Whisman Precise Plan Project-Level Transportation Analysis.* August 2019. P.

[195] Based on the student generation rates provided by the Jack Schreder & Associates. December 8, 2021. K-5 = 0.085 (0.308 affordable), 6-8 = 0.039 (0.247 affordable), High School = 0.047 (0.312 affordable).

Impact PS-4:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. **(Same Impact as Approved Project [Less than Significant Impact])**

The project (under either option) proposes a network of privately-owned publicly accessible open space, private open space, and land dedication for new public parks totaling 10.15 acres. Additionally, per the Precise Plan, the project (under either option) is a Master Plan that meets the requirements for the Neighborhood Park Master Plan area. Specifically, the project meets the requirements for a Neighborhood Park Master Plan because it identifies surrounding development and opportunity sites for a two- to three- acre park, dedicates land to the City for a neighborhood park, includes an illustrated park access network consistent with the Precise Plan Mobility Chapter, provides an implementation strategy, and is compliant with Moffett Field Comprehensive Land Use Plan noise compatibility policies. Project-related impacts to parks are discussed further in Section 5.15 Recreation below and are concluded to be less than significant. This is the same impact as disclosed in the Precise Plan EIR.[196] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact PS-5:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR concluded that the growth projected in the Precise Plan (which includes the project under either option), would not trigger a need for the City to build or operate a new library in the Precise Plan area.[197] This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[196] City of Mountain View. *East Whisman Precise Plan Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 193.
[197] Ibid. P. 181.

5.14.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
PS-1:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.	Yes	LTS	None	N/A
PS-2:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services.	Yes	LTS	None	N/A
PS-3:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.	Yes	LTS	None	N/A
PS-4:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks.	Yes	LTS	None	N/A

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
PS-5:	**Both Project Options:** The project (under either option) would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.	Yes	LTS	None	N/A
Abbreviations: LTS – Less than Significant.					

5.15 RECREATION

The existing recreational setting, including regulatory framework, has not substantially changed since the certification of the Precise Plan EIR.

5.15.1 Environmental Setting

5.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside park land and open space for recreational purposes. It provides provisions for the dedication of park land and/or payment of fees in lieu of park land dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of park land dedication, or perform a combination of the two.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to recreation impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Parks, Open Space and Community Facilities	
POS 1.1	**Additional parkland.** Expand park and open space resources to meet current City standards for open acreage and population in each neighborhood.
POS 1.2	**Recreation facilities in new residential developments.** Require new development to provide park and recreation facilities.
POS 6.1	**Citywide network of pathways.** Develop a citywide network of pedestrian and bicycle pathways to connect neighborhoods, employment centers, open space resources and major destinations within the city.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 149-150.

East Whisman Precise Plan

The Precise Plan establishes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area.[198] The park and open space vision for the Precise Plan area includes a central park, up to six mini-parks, a neighborhood park, a system of linear

[198] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 172.

parks, and accessible open spaces. Approximately three- to eight-acres would be acquired by the City with the park land in-lieu fees paid and creation of new open space areas within non-residential developments.

Additionally, the Precise Plan requires a Master Plan be submitted and approved by the City before proposing development within the Neighborhood Park Master Plan area, for which the project site is located in. The Master Plan is intended to ensure appropriate location, access, and surrounding new development is planned for around a new two to three-acre park between Clyde and Logue Avenues.

Mountain View City Code

Chapter 41 of the City Code contains a Park Land Dedication Ordinance, which sets requirements for park land dedication or in-lieu fees. The City requires developers to dedicate at least three acres of park land for each 1,000 persons who will live in a new housing project (owned or rented), or to pay an in-lieu fee that would be used to offset the increased demands on park facilities. The City also allows developers to propose, for City Council consideration, a POPA space within a residential development site for park land credit, reducing the land or in-lieu fee obligation generated by the development.

5.15.1.2 *Existing Conditions*

As discussed in Section 5.14 Public Services, the City of Mountain View currently owns or manages approximately 993 acres of parks and open space facilities, including 22 urban parks and the Stevens Creek Trail. The closest park to the project site is Devonshire Park, located approximately 0.5-mile northwest. The closest trail is the Hetch Hetchy/TOD Trail located approximately 65 feet west.

5.15.2 Impact Discussion

For the purpose of determining the significance of the project's impact on recreation:

1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

5.15.2.1 *Project Impacts*

Impact REC-1:	**Both Project Options:** The project (under either option) would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. **[Same Impact as Approved Project (Less than Significant Impact)]**

As noted in Section 5.13 Population and Housing, the project (under either option) would increase the number of residents and employees on-site above existing conditions, which would result in increased use of existing parks and recreational facilities in the project vicinity. The Precise Plan area currently

does not meet the City's standard of 3.0 acres of park land per 1,000 residents.[199] The Precise Plan includes an overall goal of adding 30 acres of publicly accessible open space to serve the projected 10,750 residents of the Precise Plan area (which would meet the City's standard of 3.0 acres per 1,000 residents).[200]

As described in Section 3.2.2 Parks and Open Space, the project (under either option) would include a network of privately-owned publicly accessible open space, private open space, and land dedication for public parks totaling 10.15-acres. Of the 10.15 acres of park land proposed, 2.87 acres would be POPA open space to be developed as part of the project and 7.28 acres would be dedicated to the City for development of future parks at a later date.

The 2.87-acre POPA open space would include a plaza area with outdoor seating, recreational amenities, flexible open area for temporary uses and events, as well as a landscaped multi-use path connecting to a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The recreational amenities may include bike parking, outdoor restaurant/bar, exercise equipment, communal/educational garden, sport courts, and a 1,000-square-foot community room/restroom building.

The addition of 10.15-acres of park land included in the project would offset the demand for recreational facilities by future employees and residents living and working on-site. The dedication of land and POPA open space would be consistent with the City's Park Land Dedication Ordinance and would reduce impacts to a less than significant level. For these reasons, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact REC-2:	**Both Project Options:** The project (under either option) would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **[Same Impact as Approved Project (Less than Significant Impact)]**

While the Precise Plan EIR did not explicitly identify impacts resulting solely from development of new recreational facilities, these impacts were analyzed in combination with other development allowed under the Precise Plan throughout the Precise Plan EIR, especially in Sections 3.2 Air Quality, 3.8 Hazards and Hazardous Materials, 3.9 Hydrology and Water Quality, and 3.11 Noise and Vibration. The project (under either option) would include a network of POPA open space, private open space, and land dedication for public parks totaling 10.15-acres. The environmental impacts associated with development of 2.87 acres of POPA open space and other private open space to be developed as a part of the proposed project are included in and discussed throughout this EIR. The environmental effects associated with development of the remaining 7.28 acres of parkland dedicated to the City for future development of City parks are discussed at a programmatic level throughout this EIR. Subsequent

[199] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 180.
[200] City of Mountain View. *East Whisman Precise Plan.* Adopted November 5, 2019. Amended October 13, 2020. P. 38.

environmental review would be required for the 7.28 acres of city parks once detailed designs are available. This is the same impact as disclosed in the Precise Plan EIR.[201] **(Same Impact as Approved Project [Less than Significant Impact])**

5.15.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
REC-1:	**Both Project Options:** The project (under either option) would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Yes	LTS	None	N/A
REC-2:	**Both Project Options:** The project (under either option) would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	Yes	LTS	None	N/A

Abbreviation: LTS – Less than Significant.

[201] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 181.

5.16 TRANSPORTATION

The following discussion is based, in part, on a Multimodal Transportation Analysis (MTA) by Hexagon Transportation Consultants. This report is attached as Appendix H.

5.16.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for transportation has not substantially changed since the certification of the Precise Plan EIR.

5.16.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a VMT metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions were required by Governor's OPR to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50-mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic level of service (LOS) standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to transportation impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Land Use and Design	
LUD 9.4	**Enhanced pedestrian activity.** Ensure commercial development enhances pedestrian activity through these strategies: • Encourage the first level of the building to occupy a majority of the lot's frontage, with exceptions for vehicle and pedestrian access • Allow for the development of plazas and dining areas • Encourage the majority of a building's ground floor frontage to provide visibility into the building by incorporating windows and doors • Require that ground floor uses be primarily pedestrian-oriented • Ensure pedestrian safety and access when designing parking areas and drive-through operations • Minimize driveways
LUD 17.2	**Transportation Demand Management strategies.** Require development to include and implement Transportation Demand Management strategies.
LUD 19.7	**NASA Ames and Moffett Field area connections.** Create stronger connections between East Whisman and the NASA Ames and Moffett Field Areas.
Mobility	
MOB 1.1	**Multimodal planning.** Adopt and maintain master plans and street design standards to optimize mobility for all transportation modes.
MOB 1.2	**Accommodating all modes.** Plan, design and construct new transportation improvement projects to safely accommodate needs of pedestrians, bicyclists, and transit riders, motorists, and persons with all abilities.
MOB 1.5	**Public accessibility.** Provide traffic calming, especially in neighborhoods and around schools, parks, and gathering places.
MOB 1.6	**Traffic calming.** Provide traffic calming, especially in neighborhoods and around schools, parks, and gathering places.
MOB 2.1	**Broad accessibility.** Improve universal access within private developments and public and transit facilities, programs and services.
MOB 3.2	**Pedestrian connections.** Increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, village centers, and other destinations.
MOB 3.3	**Pedestrian and bicycle crossings.** Enhance pedestrian and bicycle crossings at key locations across physical barriers.
MOB 3.4	**Avoiding street widening.** Preserve and enhance citywide pedestrian connectivity by limiting street widening as a means of improving traffic.

Policy	Description
MOB 3.5	**Walking and bicycling outreach.** Actively engage the community in promoting walking and bicycling through education, encouragement, and outreach on improvement projects and programs.
MOB 4.1	**Bicycle network.** Improve facilities and eliminate gaps along the bicycle network to connect destinations across the City.
MOB 5.4	**Connecting key areas.** Identify and implement new or enhanced transit services to connect Downtown, El Camino Real, San Antonio, North Bayshore, East Whisman, and NASA Ames Research Center.
MOB 5.5	**Access to transit services.** Support right-of-way design and amenities consistent with local transit goals to facilitate access to transit services and improve transit as a viable alternative to driving.
MOB 7.1	**Parking codes.** Maintain efficient parking standards that consider reduced demand due to development conditions such as transit accessibility.
MOB 8.2	**Accommodating all modes.** Plan, design and construct new transportation improvement projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists and persons of all abilities.
MOB 8.3	**Multimodal transportation monitoring.** Monitor the effectiveness of policies to reduce vehicle miles traveled (VMT) per service population by establishing transportation mode share targets and periodically comparing travel survey data to established targets.
MOB 9.2	**Reduced vehicle miles traveled.** Support development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita VMT.
MOB 10.2	**Reducing travel demand.** Promote effective Transportation Demand Management programs for existing and new development.
MOB 10.3	**Avoiding street widening.** Limit widening of streets as a means of improving traffic and focus instead on operational improvements to preserve community character.
Infrastructure and Conservation	
INC 3.4	**Right-of-way regulations.** Ensure that right-of-way regulations comply with relevant street and highway codes while still prioritizing multimodal transportation in all right-of-way design.
INC 20.3	**Pollution-reducing technologies.** Encourage the use of non-fossil fuels and other pollution-reducing technologies in transportation, machinery and industrial processes.
INC 20.4	**Freight routes.** Identify and maintain primary freight routes that provide direct access to industrial and commercial areas.
INC 20.5	**Truck access.** Plan industrial and commercial development to avoid truck access through residential areas, and minimize truck travel on streets designated primarily for residential access by the General Plan.
Parks, Open Space and Community Facilities	
POS 2.3	**Pedestrian and bicycle access.** Improve pedestrian and bicycle access to parks, and create new connections to parks to minimize pedestrian and bicycle travel distances.

Policy	Description
POS 6.1	**Citywide network of pathways.** Develop a citywide network of pedestrian and bicycle pathways to connect neighborhoods, employment centers, open space resources and major destinations within the city.
POS 6.2	**At-grade crossings.** Minimize at-grade crossings of major roads when building new trails.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 53, 60, 65, 110-114, 129, 137, 149-150.

East Whisman Precise Plan

The Precise Plan area has many interlinked circulation networks, including light rail, shuttle and bus transit, complete streets, greenways, multi-use paths and regional highways. These networks connect to other areas in Mountain View and the region, while allowing comfortable travel within the Precise Plan area for all transportation modes. The Precise Plan provides the community and decision makers with a clear vision for the area with standards and guidelines for development of a multimodal district, including a circulation system that supports transit use, creates safe street and rail crossings for all users, and aligns the circulation network with City goals to support non-auto vehicle travel.

Comprehensive Modal Plan (AccessMV)

The City's Comprehensive Modal Plan (AccessMV) was approved on May 25, 2021 and provides a guide for development of the City's multimodal transportation network. The plan identifies pedestrian quality of service (PQOS) and Bicycle Level of Traffic Stress (BLTS) as metrics for assessing the existing and planned transportation network for all modes and identify needed improvements. Projects that increase the PQOS or BLTS score of a particular roadway would reduce the quality of service of pedestrian and bicycle facilities in the area. PQOS is influenced by a number of factors such as proximity to a variety of destinations and amenities, street connectivity and directness of routes to destinations, presence of a continuous network of pedestrian facilities, motor vehicle traffic speeds, and street widths and intersection conditions. BLTS is influenced by the number of through lanes or street width, posted speed limit or prevailing vehicle speeds, presence or type of bicycle facilities, presence of traffic signals, and the presence of crossing islands.

City of Mountain View Vehicle Miles Traveled Policy

Since certification of the Precise Plan EIR, the Mountain View City Council adopted a Vehicle Miles Traveled Policy on June 30, 2020, which replaces LOS with VMT as the metric for determining a significant transportation impact under CEQA consistent with SB 743. The City's VMT policy includes screening criteria for projects which are presumed to have a less than significant transportation impact. Specifically, the City's VMT policy states that projects would have a less than significant VMT impact and do not require further project-specific VMT analysis if the project: is located within a half mile of an existing major transit stop[202] or an existing stop along a high-quality transit corridor; has an FAR of greater than 0.75; has reduced parking compared to the maximum parking required by the City;

[202] According to the City's Multi-Modal Transportation Analysis Handbook, existing major transit stop include the Downtown Mountain View Caltrain station, San Antonio Caltrain station, light rail stations, and/or El Camino Real transit stops. Source: City of Mountain View. *Multi-Modal Transportation Analysis Handbook, Version 1.0.* February 2021. P 47. https://www.mountainview.gov/civicax/filebank/blobdload.aspx?BlobID=33964

is consistent with Plan Bay Area; and does not replace affordable residential units with fewer units of moderate to high income.

5.16.1.2 *Existing Conditions*

Roadway Network

Regional access to the site is provided by US 101, SR 85, SR 237, and Central Expressway. Local access to the site is provided via Middlefield Road, Whisman Road, Maude Avenue, and Logue Avenue. These roadways are briefly described below.

- **US 101** is eight lanes wide with three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction in the vicinity of the project site. US 101 provides access to the project site via full interchanges at Ellis Street and SR 237.

- **SR 85** is a north-south freeway that begins at US 101, east of North Shoreline Boulevard, extends south towards San Jose, and terminates at US 101 east of the Silicon Valley Boulevard/Bernal Road interchange. SR 85 is six lanes wide (two mixed-flow lanes and one HOV lane in each direction) in the vicinity of the project site. SR 85 provides access to the project site via an interchange at SR 237.

- **SR 237** is a four to six-lane freeway within the vicinity of Sunnyvale that extends west to El Camino Real and east to I-880 in Milpitas. East of Mathilda Avenue, SR 237 has two mixed-flow lanes and one HOV lane in each direction. West of Mathilda Avenue, SR 237 has two mixed-flow lanes in each direction. SR 237 provides access to the project site via full interchanges at Middlefield Road and Maude Avenue.

- **Central Expressway** is an east-west, four to six-lane expressway. It begins at Trimble Road in the east, crosses Sunnyvale, extends westward and transitions into Alma Street. In the project area, Central Expressway has two eastbound lanes and two westbound lanes. Central Expressway is mostly grade-separated within Sunnyvale except at Mary Avenue.

- **Middlefield Road** is a mostly east-west four-lane arterial road[203] that runs parallel to US 101. It begins at the intersection of Central Expressway in Mountain View and traverses north then westward through Redwood City. Middlefield Road provides access to project site via its intersections with Ellis Street and Logue Avenue.

- **Maude Avenue** is an east-west arterial street between Logue Avenue in the west and Wolfe Road in the east. Maude Avenue has two lanes west of the SR 237 eastbound frontage road. Between the SR 237 eastbound frontage road and San Angelo Avenue, Maude Avenue has four lanes. Maude Avenue provides direct access to the project site.

[203] Arterial road is a high-capacity road that sits below freeways on the road hierarchy in terms of traffic flow and speed. Source: U.S. Department of Transportation, Federal Highway Administration. *Road Function Classification.* November 2000. https://safety.fhwa.dot.gov/speedmgt/data_facts/docs/rd_func_class_1_42.pdf

- **Moffett Boulevard** is a north-south arterial that extends northward from Central Expressway to US 101. South of Central Expressway, it becomes Castro Street that runs through Downtown Mountain View. The four-lane roadway has a raised median with left-turn pockets at intersections north of Middlefield Road and has a center turn lane with left-turn pockets at intersections south of Middlefield Road.

- **Whisman Road** is a north-south arterial between Fairchild Drive in the north and Dana Street in the south. Whisman Road has two lanes north of Middlefield Road with landscaped medians and left-turn pockets at intersections. South of Middlefield Road, Whisman Road is a four-lane road with landscaped medians beginning south of Pacific Drive.

- **Ellis Street** is a north-south four-lane arterial between Macon Road in the north and Middlefield Road in the south. Ellis Street has multiple landscaped medians and a two-way left turn lane at driveways with left turn pockets at intersections. Ellis Street provides direct access to the project site.

- **Logue Avenue** is a north-south two-lane local street[204] starting at Middlefield Road in the south and ends with a cul-de-sac north of Maude Avenue. Logue Avenue provides direct access to the project site.

- **Clyde Avenue** is a north-south two-lane local street starting at Maude Avenue in the south and continuing as Fairchild Drive in the north. Clyde Avenue provides direct access to the project site.

- **Mary Avenue** is a six-lane roadway south of Central Expressway and a four-lane roadway north of Central Expressway. Mary Avenue travels in the north-south direction. It is classified as a collector north of Central Expressway and an arterial south of Central Expressway. It extends from Almanor Avenue in the north to Homestead Road in the south.

- **Mathilda Avenue** is a six to eight-lane roadway. It is classified as an arterial. It extends from E. Caribbean Drive south past El Camino Real, where it transitions to Sunnyvale-Saratoga Road and extends south into Cupertino and Saratoga.

[204] Local streets are defined as those that provide primary access to residential areas, businesses, farms, and other local areas. Source: U.S. Department of Transportation, Federal Highway Administration. *Road Function Classification.* November 2000. https://safety.fhwa.dot.gov/speedmgt/data_facts/docs/rd_func_class_1_42.pdf

Existing Transit Facilities

Existing public transit services in the project vicinity are provided by the VTA and the Mountain View Transportation Management Association (TMA). VTA operates bus and light rail transit services in Santa Clara County, and the TMA provides free MVgo shuttle service between the Mountain View Transit Center and corporate campuses in the North Bayshore and East Whisman areas. The VTA bus and light rail transit routes and MVgo shuttle routes in the project vicinity and the bus/shuttle stops near the project site are shown on Figure 5.16-1.

VTA Bus Service

VTA Local Route 21 serves the project vicinity with bus stops in each direction on Maude Avenue west of Clyde Avenue, on Logue Avenue between Middlefield Road and Maude Avenue, and on Middlefield Road at Ellis Street. Route 21 also stops at the Mountain View Transit Center, approximately 2.0 miles from the project site. The Mountain View Transit Center provides connections to Caltrain, VTA light rail transit, several VTA bus routes (21, 40, and 52), MV community shuttle, and MVgo shuttle routes.

VTA Light Rail Transit

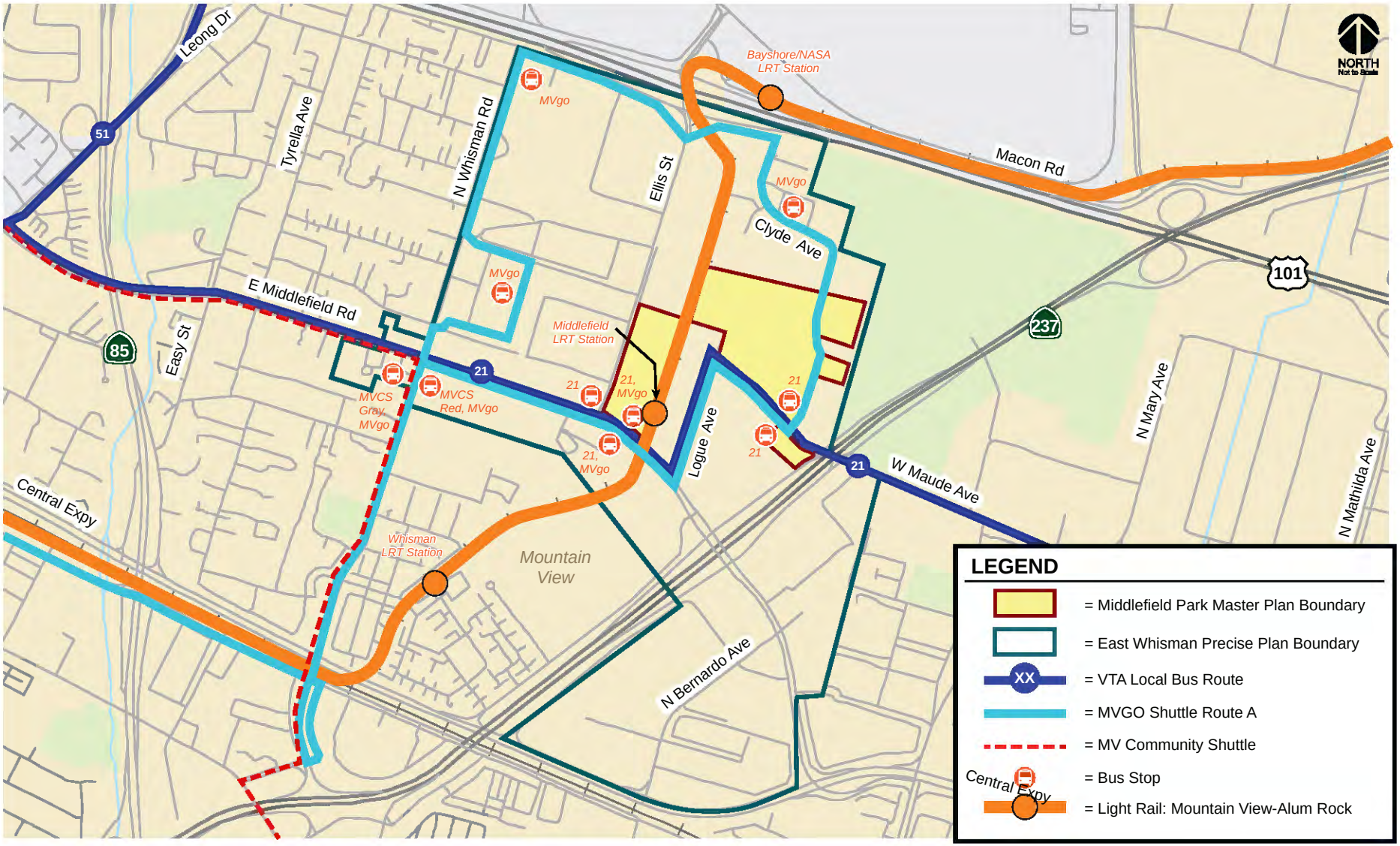
The light rail transit Orange Line serves the project area with the Middlefield Light Rail Station adjacent to the project site. The Orange Line travels between the Mountain View Transit Center and Alum Rock.

Mountain View Community Shuttle

The Mountain View Community Shuttle is a free shuttle service with 50 stops within Mountain View operating during the weekdays from 7 a.m. to 7 p.m. and on weekends and holidays between 10 a.m. and 6 p.m. The community shuttle has 50 stops, the closest of which is located at the intersection of Whisman Road and Middlefield Road approximately 0.3 miles west of the project site.

Mountain View Transportation Management Association Shuttles

The MVTMA operates the MVgo shuttle system. This shuttle system is provided through the collection of TMA member dues. MVgo operates four shuttle routes that provide service to employment areas from the Mountain View Transit Center. Three routes serve the North Bayshore area, and one route serves the East Whisman area. The shuttles are timed to meet Caltrain arrivals during the a.m. and departures during p.m. commute periods. MVgo shuttle Route A provides service to the project area, with two bus stops within the vicinity of the project site, with the closet at the VTA Middlefield Station.



Source: Hexagon Transportation Consultants, Inc., March 11, 2022.

EXISTING TRANSIT FACILITIES

FIGURE 3.16-1

Existing Bicycle Facilities

The bicycle facilities that exist within one mile of the project site (see Figure 5.16-2) include a multi-use trail (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes/boulevards (Class III bikeway).[205]

Striped bike lanes are present along the following street segments:

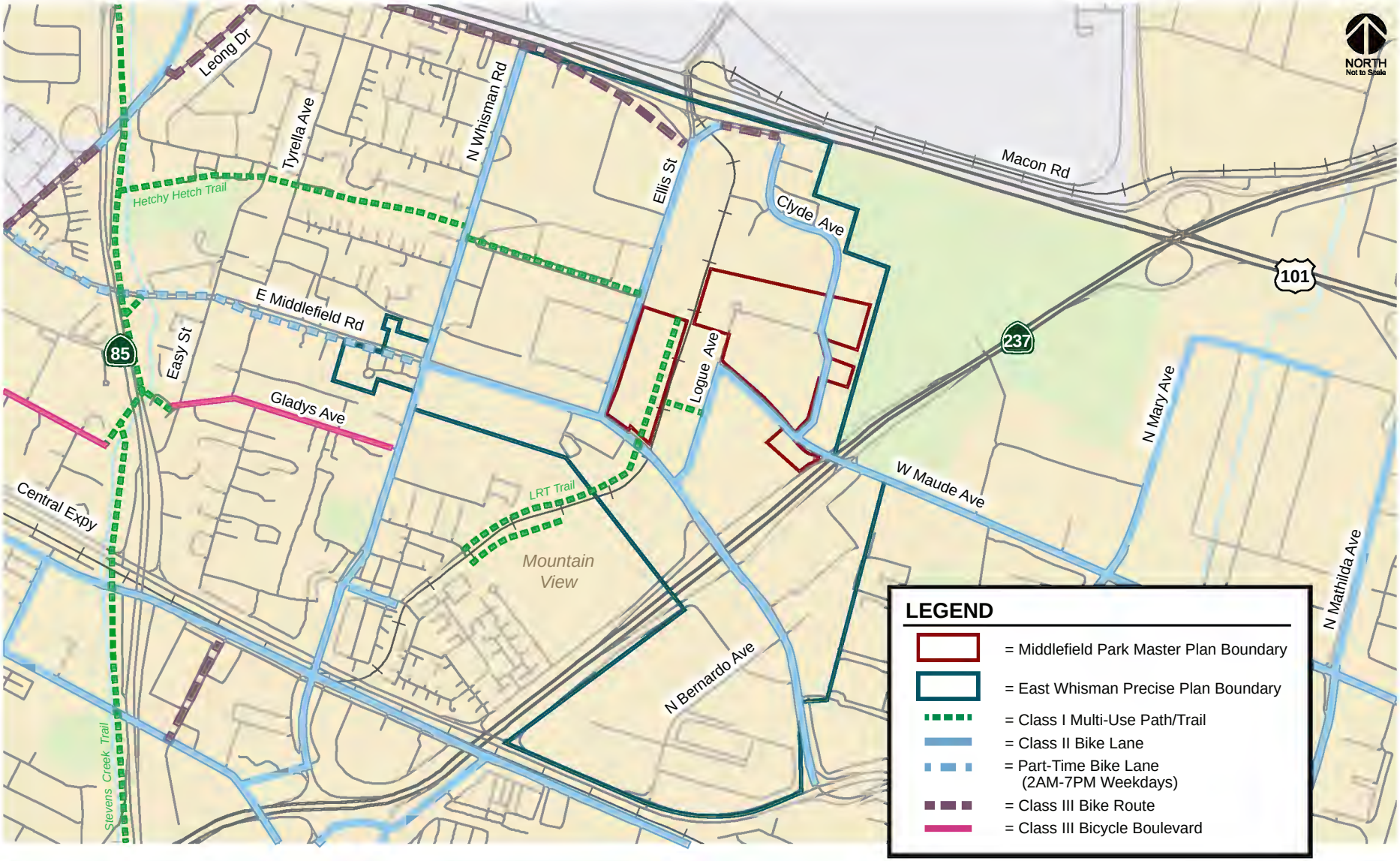
- Logue Avenue between Middlefield Road and Maude Avenue
- Maude Avenue, except for a short segment between Clyde Avenue and SR 237 eastbound frontage road
- Part time on Middlefield Road west of Whisman Road, between Old Middlefield Way and Bernardo Avenue
- Whisman Road, for the entire street
- Ellis Street, for the entire street
- Clyde Avenue, for the entire street
- Evelyn Avenue, east of Hope Street
- Mary Avenue, for the entire street
- Mathilda Avenue, south of Ahwanee Street
- Moffett Boulevard, north of Leong Drive

The City's Bike Map shows that Leong Drive and Fairchild Drive are designated as existing bike routes, however, there are no signs or sharrows on either street to indicate a bike route. The City's Bike Map shows that Central Avenue and Gladys Avenue are designated as existing bike boulevards and these streets are designated with signs.

Other bicycle facilities include:

- **Hetch Hetchy/TOD Trail.** The Hetch Hetchy/TOD Trail extends from Ellis Street and connects to the Stevens Creek Trail. The trail can be accessed from Ellis Street, approximately 65 feet west of the site.
- **Stevens Creek Trail.** The Stevens Creek Trail extends from the Bay, under US 101 and Middlefield Road, and ends at Dale Avenue/Heatherstone Avenue. The trail can be accessed from Easy Street at the Gladys Avenue intersection, approximately one mile from the project site, or from the Hetch Hetchy/TOD Trail.
- **A VTA Multi-Use Path** also exists along the west side of the light rail tracks between the northwest corner of the proposed Building O2 and Whisman Station. The path can be accessed by Middlefield Road and by Ellis Street and Logue Avenue through pedestrian walkways that run between these streets and the Middlefield Light Rail Station.

[205] Bike paths or multi-use trails are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are signed bike routes where bicyclists share a travel lane with motorists. Bike boulevards are modified bike routes with additional treatments that offer convenient and efficient through-routes for bicyclists of all skill levels.



Source: Hexagon Transportation Consultants, Inc., March 11, 2022.

EXISTING BICYCLE FACILITIES

FIGURE 5.16-2

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks, which are present along most project area roadways, and at signalized and unsignalized study intersections. Pedestrian signal heads and push buttons are present at the signalized study intersections. Crosswalks are present along the north leg of the unsignalized study intersection of Logue Avenue and Maude Avenue and along the north leg of Clyde Avenue and Maude Avenue. A high-visibility midblock crosswalk curb extension exists on Logue Avenue between Middlefield Road and Maude Avenue to access the Middlefield Light Rail Station and a midblock crosswalk on Clyde Avenue less than 100 feet north of the plan area boundary. Two enhanced midblock crosswalks with rapid rectangular flashing beacons exist on Ellis Street: one less than 100 feet north of the project site and another adjacent to the project site about 460 feet north of Middlefield Road. Sidewalks are missing on the north side of Maude Avenue between the SR 237 westbound frontage road and Macara Avenue and on the south side of Maude Avenue between Logue Avenue and the SR 237 westbound frontage road. Sidewalks are also missing along the west side of Logue Avenue near the cul-de-sac.

Within a typical walking distance (a half mile or 10 minutes), pedestrian facilities are present between the project site and the surrounding land uses, including bus stops in the area.

5.16.2 Impact Discussion

For the purpose of determining the significance of the project's impact on transportation, would the project:

1) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
4) Result in inadequate emergency access?

5.16.2.1 *Project Impacts*

Impact TRN-1:	**Both Project Options:** The project (under either option) would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. **(Same Impact as Approved Project [Less than Significant Impact])**

Roadway Network

The Precise Plan EIR found that implementation of the Precise Plan (which includes development of the project under either option) would result in LOS deficiencies under existing LOS policies, improvements to address select deficiencies would be implemented, and select deficiencies would be significant and unavoidable.[206] However, as noted above, consistent with SB 743, beginning on July

[206] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 224.

1, 2020, impacts to LOS can no longer constitute a significant impact under CEQA.

The project includes the construction of six new service streets and two project driveways to provide access to parking for each adjacent building, which is consistent with the standards and design requirements of the Precise Plan. Additionally, the project includes the relocation and reconstruction of the terminus of Logue Avenue as an interim improvement until the remainder of Street D in the Precise Plan can be constructed at a future time. This reconstruction would be required to comply with Chapter 27 of the City Code, as well as meet fire turnaround access per the Fire Code.

Pedestrian and Bicycle Policy

The Precise Plan EIR concluded that future development and transportation improvements consistent with the Precise Plan would not conflict with a program plan, ordinance, or policy addressing bicycle lanes, and pedestrian facilities. As described in Section 3.2 Project Description, the project (under either option) includes pedestrian improvements such as construction of new multi-modal paths throughout the site; dedication of park land for a future bicycle and pedestrian bridge overcrossing of the light rail tracks to extend an existing trail; installation of new midblock crossings and enhancements to existing crossings; construction of wider sidewalks with landscaping along project frontages, new driveways, new service streets and paseos; and bicycle improvements such as new buffered bike lanes on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, and protected bike lanes on Middlefield Road. These improvements are consistent with the planned improvements, standards, and guidelines for pedestrian and bicycle facilities included in the Precise Plan. The project is a mixed-use development that would increase the variety and density of uses within walking distance of each other and construct pedestrian and bicycle improvements, resulting in an overall improvement of PQOS and BLTS on area roadways. For these reasons, the project (under either option) would not conflict with the Precise Plan or Access MV policies addressing bicycle and pedestrian facilities.

Transit Facilities

The Precise Plan EIR identified a significant and unavoidable effect on transit vehicle operations at intersections with a deficient LOS (see Precise Plan EIR Impact TRA-3) and found that transit operational improvements such as signal coordination and transit vehicle preemption could reduce the magnitude of congestion on transit operations and improve the overall reliability of transit in congested areas.[207] However, these improvements would not fully mitigate these impacts to a less than significant level. Pursuant to SB 743, LOS is no longer a significant impact under CEQA.

Additionally, the Precise Plan EIR identified that a significant impact associated with increased light rail service delay due to gate operations at the proposed Street C at-grade crossing of the light-rail tracks between Ellis Street and Logue Avenue (see Precise Plan EIR Impact TRA-4). The Precise Plan includes mitigation measure EIR MM TRA-4.1, requiring the removal of the Street C from the Precise Plan. Consistent with Precise Plan EIR mitigation measure EIR MM TRA-4.1, Street C was removed from the Precise Plan and replaced with a grade-separated multi-use path. As noted in Section 3.2.7 Site Access, Circulation, and Parking, the proposed project (under either option) would include dedication of land for future development of bicycle/pedestrian overcrossing of the light rail tracks between Ellis Street and Logue Street. With implementation of the proposed project (under either

[207] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 212.

option) land would be dedicated for a development of a future grade-separated crossing of the light rail tracks as described in EIR MM TRA-4.1, and impacts associated with light rail transit vehicle delay would be eliminated because pedestrian and vehicle traffic could cross the light rail tracks without disrupting light rail service or increasing delays.

As discussed in Section 5.16.1 Environmental Setting, the project area is served by VTA Route 21 and MVgo Route A, with the closest bus stops located on Middlefield Road and Maude Avenue. The site is also served by Middlefield Light Rail Station which is considered a major transit stop. The project (under either option) would enhance and provide shorter access to the transit stops by providing pedestrian and multi-use paths within the Precise Plan area and enhancing a bus stop on project frontage with a shelter and benches (refer to Section 3.2 Project Description). Google currently operates an existing GBus employee shuttle system with an existing stop within the Quad office campus at 369 North Whisman Road/464 Ellis Street, located on the west side of Ellis Street. The project (under either option) would add a second GBus stop in the plan area within the proposed service street between Buildings O3 and O4 to better serve the project.

In order to accommodate a fire and emergency access lane for the project and accommodate a new midblock crossing on Middlefield Road, the project would be required to modify the existing VTA bus stop on Middlefield Road along the project frontage. The preferred design has not been selected by VTA, CPUC, or the City and would require permits and approval from all three parties. The bus stop improvements would include:

- A new midblock pedestrian crossing to connect the north and south ends of an existing VTA multi-use path along the west side of the light rail tracks;
- A new bus shelter and bench;
- A driveway with bollards to restrict access to emergency vehicles;
- A 120-foot in-lane bus stop or bus duck-out (out-of-lane) stop (to be decided)*;*
- A raised protected bike lane along the bus stop or buffered on-street bike lane (to be decided)*;*
- A bus island for loading/unloading passengers (to be decided); and
- Maintaining the existing stop location or shifting the stop westward toward Ellis Street intersection (to be decided).

The General Plan and Precise Plan include policies to encourage an increase in the City's transit ridership, decrease dependence on motor vehicles, and reduce transit delays. The City and VTA have not established policies or significance criteria related to transit vehicle delay. An analysis of the project's contribution to the transit vehicle delay disclosed in the Precise Plan EIR was completed. According to the MTA, the project (under either option) would generate approximately 59 new riders during the a.m. peak hour and 71 new riders during the p.m. peak hour. However, because the applicant operates a shuttle service for employees, the number of office workers that would take VTA transit would likely be minor and the increased transit ridership from the project (under either option) could be accommodated by the existing transit routes. To assess the project's effect on transit vehicle delay, the delay experienced by each route running through the study intersections was estimated based on the average vehicle delay that is calculated as part of the intersection level of service analysis. The results show the project would result in a less than 60 second delay per transit vehicle for the bus routes

in the study area.[208] Therefore, consistent with the Precise Plan EIR, the project would result in increased transit vehicle delay at intersections with identified LOS deficiencies, however, implementation of project (which is consistent with the Precise Plan development assumptions) would not disrupt existing or interfere with planned transit facilities and services. Based on the above discussion, the project would result in the same impact to transit facilities as disclosed in the Precise Plan EIR.

In summary, the project would be consistent with roadway, pedestrian, bicycle, and transit programs, plans, ordinances, and policies disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact TRN-2:	**Both Project Options:** The project (under either option) would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Same Impact as Approved Project [Significant, Unavoidable Impact])**

The Precise Plan EIR identified a project-level and cumulative-level VMT impact due to Precise Plan project-generated VMT on both a citywide and countywide basis. Project-level VMT per service population was calculated in the Precise Plan EIR to be 35.93. The MPMP project's VMT was included in the VMT calculation in the Precise Plan EIR for the Precise Plan as a whole. For this reason, the project would contribute to the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Significant, Unavoidable Impact])**

As noted in Section 5.16.1 Environmental Setting above, since adoption of the Precise Plan and certification of the Precise Plan EIR, City Council adopted the Mountain View VMT Policy, which establishes screening criteria for developments that are expected to cause a less than significant transportation impact under CEQA and for which further VMT analysis is not required. Per CEQA Guidelines Section 15088.5, adoption of new policies and/or regulations is not considered substantial new information requiring recirculation of the EIR because it does not result in a new significant environmental impact, increase the severity of an environmental impact, or alter an existing mitigation measure or alternative. Additionally, projects approved prior to adoption of the Mountain View VMT Policy (such as the Precise Plan, of which the current project is a part) are considered exempt from the new policy. Nevertheless, the project (under either option) is consistent with the VMT policy as described below.

The site is located within a half-mile of the Middlefield Light Rail Station (which is considered a major transit stop), would have a total FAR of 1.46 (which is greater than 0.75 FAR), and would provide fewer parking spaces than required by the Precise Plan. Consistent with Plan Bay Area, the project (under either option) would provide more housing and pedestrian and bicycle improvements within the Precise Plan area, be within walking distance to Middlefield Light Rail Station and implement a TDM program to promote alternative modes of transportation and reduce vehicle trips and GHG emissions. The project (under either option) would also construct affordable housing units on two sites with no existing housing. For these reasons, the project's individual VMT (under either option) would be consistent with the Mountain View VMT Policy and impacts would be less than significant.

[208] Hexagon Transportation Consultants, Inc. *Middlefield Park Master Plan MTA.* April 13, 2022.

While the MPMP project would be consistent with the City's recently adopted VMT policy and thresholds to comply with SB 743, because this EIR analysis is tiering off the prior Precise Plan EIR, this analysis concludes that the MPMP project would contribute to the same significant unavoidable VMT impact as identified in the Precise Plan EIR.

Impact TRN-3:	**Both Project Options:** The project (under either option) would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR concluded that future development under the Precise Plan would not result in project- or cumulative-level impacts due to hazards from geometric design features because the Precise Plan would result in greater connectivity of the street and multimodal network and all proposed structures would be reviewed by MVFD for compliance with emergency access and design requirements under the City's fire code.

Site access is described in detail in Section 3.2.7 Site Access, Circulation, and Parking and shown on Figure 3.2-7. Access to the site under either project option would be provided via multiple service streets and driveways on Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. The proposed driveway/service street access (under either option) was evaluated and found to meet the design requirements identified in the City's zoning ordinance and sight distance requirements. The project (under either option) would also include multiple service roads. All of the proposed service roads would be designed in accordance with the Precise Plan requirements, all private driveways would be designed per City Code Section 36.32.80 (e), and the Logue Avenue cul-de-sac reconstruction would be done in accordance with Chapter 27 and Fire Code requirements. The proposed driveways and service roads, therefore, would meet all required standards and not create design hazards (refer to Appendix H for more detail). Additionally, the existing public street network layout is not being modified by the project (under either option).

The project (under either option) proposes office, residential, retail, civic/community uses and open space consistent with the mix of uses envisioned for the area in the Precise Plan. The project (under either option) does not propose a new use or a use that is incompatible with the existing mix of uses in the project vicinity. For these reasons, with implementation of the recommendations outlined in the project-specific MTA (which includes relocating some of the loading (flex) zones to service roads and removing on-street parking on the north side of Maude Avenue, the east side of Clyde Avenue, and the east side of Logue Avenue), the project (under either option) would not increase hazards due to a geometric design feature or incompatible use (refer to Appendix H). This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact TRN-4:	**Both Project Options:** The project (under either option) would not result in inadequate emergency access. **[Same Impact as Approved Project (Less than Significant Impact)]**

As shown in Figure 3.2-8 Conceptual Circulation Plan, emergency vehicles would be able to access the site from Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, Clyde Avenue, all project driveways and service roads, and an emergency fire lane/multi-use path along the west side of the Middlefield Light Rail Station under either project option.

According to the Precise Plan, if emergency vehicle access is required for residential paseos and multi-use paths, a greenway or multi-use path design typology should be used. Additionally, buildings greater than 30 feet in height require a minimum of two emergency vehicle access roads. All proposed buildings would be greater than 30 feet in height, and all buildings would have at least two emergency vehicle access roads. In addition, the final site design would be reviewed by the MVFD for consistency with applicable fire department standards. For these reasons, the project (under either option) would not result in inadequate emergency access. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project (Less than Significant Impact])**

5.16.3 Non-CEQA Effects

Vehicle Queuing

Although the City does not have an adopted queuing significance threshold, a vehicle queuing analysis was completed at project driveways and at key intersections in the project vicinity and included here for informational purposes. The queuing analysis at study intersections under background plus project conditions found the following movements and peak hours would exceed the storage capacity of the turn lane:.

- Ellis Street and Fairchild Drive, southbound left turn lane during a.m. peak hour
- Mathilda Avenue and Maude Avenue, northbound left turn during a.m. peak hour
- Whisman Road and Middlefield Road, westbound left turn during p.m. peak hour
- Ellis Street and Middlefield Road, eastbound left turn during a.m. and p.m. peak hour
- Logue Avenue and Middlefield Road, eastbound left turn p.m. peak hour
- Clyde Avenue and Maude Avenue, southbound movement during p.m. peak hour

Pursuant to SB 743, LOS and corresponding vehicle queuing are no longer a significant impact under CEQA, therefore, improvements that increase vehicle queuing capacity are not required under CEQA. In addition, as noted above, the City of Mountain View does not have adopted significance thresholds for assessing vehicle queuing impacts. The queuing analysis for these movements is discussed in detail in Appendix H. The project can, however, pay a proportional fair-share contribution to the necessary roadway improvements as a condition of approval. Otherwise, the City is currently undergoing a nexus study for the East Whisman Precise Plan to determine a new development impact fee that contributes towards roadway and other transportation improvements in the area, anticipated to be considered by the City Council in mid-2022. If adopted, the project could provide proportional fair-share with payment of the impact fee.

Bicycle Parking

The project (under either option) proposes to provide bicycle parking in accordance with the bicycle parking requirements identified in the Precise Plan. The requirements for neighborhood commercial uses would apply to the proposed civic/community uses. Table 5.16-1 summarizes the Precise Plan bicycle parking requirements. The project would meet the requirements by providing 2,569 long-term and 362 short-term bicycle parking spaces.

Table 5.16-1: Required Bicycle Parking

Land Use	Short-Term		Long-Term	
	Requirement	Proposed	Requirement	Proposed
Residential	1 space per 10 units (190 spaces)	190	1 space per unit (1,900 spaces)	1,900
Office	1 space per 20,000 square feet or minimum 4 spaces, whichever is greater (66 spaces)	132	1 space per 2,000 square feet or minimum 4 spaces, whichever is greater (659 spaces)	659
Neighborhood Commercial Uses (Retail/Community/Civic Uses)	4 per 5,000 square feet or minimum 2 spaces, whichever is greater (40 spaces)	40	1 per 5,000 square feet or minimum 2 spaces, whichever is greater (10 spaces)	10
Total	296 spaces	362	2,569 spaces	2,569

Source: City of Mountain View. *East Whisman Precise Plan.* November 2019. P. 90.

Vehicle Parking

The project site is located in a transit proximity area and within a half-mile of the Middlefield Light Rail Station. Based on the State Density Bonus Law, the project can provide a maximum of 0.5 spaces per affordable unit within Buildings R4 AFF and R6 AFF.[209] The remaining residential and non-residential uses proposed are required to meet the residential and commercial parking requirements included in the Precise Plan, unless a parking study has been prepared demonstrating an alternative parking ratio is sufficient. Table 5.16-2 summarizes the project's maximum required and proposed vehicle parking ratios. Given the project's proposed mixed-use design, proximity to the Middlefield Light Rail Station, TDM programs, the project proposes reduced parking supply ratios as shown in Table 5.16-2.

[209] Per Assembly Bill 1763 (Density Bonus Law), if a development is located within one-half mile of a major transit stop, as defined in Section 2115 of the Public Resources Code, and there is unobstructed access to major transit stops from the development, the parking ratio for the development shall not exceed 0.5 spaces per unit.

Table 5.16-2: Maximum Vehicle Parking[1]			
Land Use	**Required Precise Plan Parking**	**Proposed Parking**	**Parking Spaces Provided**
Office	Max. 2.9 spaces per 1,000 gross square feet (Max. 3,819 spaces)	2.0 spaces per 1,000 gross square feet	2,634 spaces
Retail, restaurants, fitness and other permitted uses in neighborhood commercial areas (includes community and civic uses)	Min. 4 spaces per 1,000 gross square feet (Min. 200 spaces)	3.68 spaces per 1,000 gross square feet	184 spaces
Residential (Market Rate)	Studio/1 Bed - Max. 1 space per unit 2+ Bed – Max. 2 space per unit (Max. 2,120 spaces)	1 space per unit	1,520 spaces
Residential (Affordable)	0.5 spaces per unit (Max. 190 spaces)		190 spaces
[1] The proposed parking could be reduced with the implementation of additional parking strategies such as unbundled and shared parking. This EIR assumes the maximum parking proposed.			

5.16.4 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
TRN-1:	**Both Project Options:** The project (under either option) would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities.	Yes	LTS	None	LTS
TRN-2:	**Both Project Options:** The project (under either option) would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Yes	S	None	SU
TRN-3:	**Both Project Options:** The project (under either option) would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Yes	LTS	None	N/A
TRN-4:	**Both Project Options:** The project (under either option) would not result in inadequate emergency access.	Yes	LTS	None	N/A
Abbreviations: S – Significant, SU – Significant, Unavoidable, LTS – Less than Significant					

5.17 TRIBAL CULTURAL RESOURCES

5.17.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for tribal cultural resources has not substantially changed since the certification of the Precise Plan EIR.

5.17.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

5.17.1.2 *Existing Conditions*

On May 28, 2021, Tamien Nation requested notification from the City of all non-exempt projects within the City of Mountain View. The tribal representatives for the Tamien Nation was sent the Notice of Preparation for the proposed project on September 30, 2021. Consultation was requested by Tamien Nation on October 28, 2021 and a subsequent meeting was held between staff and the Tamien Nation Chairwoman on November 22, 2021. Following consultation, subsequent email correspondence was received by the City from Tamien Nation on December 20, 2021. In addition, the City completed a Sacred Lands File Search for the site on November 2, 2021. No known tribal cultural resources were identified on the project site through the file search or consultation with Tamien Nation. The consultation was concluded on January 12, 2022, with both the City and Tamien Nation agreeing the site is archeologically sensitive and cultural sensitivity training and monitoring during excavation phases would be required.

5.17.2 Impact Discussion

For the purpose of determining the significance of the project's impact on TCRs, would the project cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.17.2.1 *Project Impacts*

Impact TCR-1:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR concluded that build out of the Precise Plan (which included the project under either option) would result in less than significant impacts to TCRs with implementation of standard conditions of approval identified under Impact CUL-2 in Section 5.4 Cultural Resources.

As noted in 5.17.1 Environmental Setting above, no known TCRs are located on-site. As noted in Section 5.4 Cultural Resources under Impact CUL-2, the project would implement the same conditions of approval as identified in the Precise Plan EIR, with the addition of cultural sensitivity training and monitoring during excavation (as agreed upon with Tamien Nation), to reduce potential impacts to TCRs, should they be identified during ground disturbing activities, to a less than significant level. This is the same impact as disclosed in the Precise Plan EIR.[210] **(Same Impact as Approved Project [Less than Significant Impact])**

[210] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* January 2020. Pp 256 – 257.

Impact TCR-2:	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Same Impact as Approved Project [Less than Significant Impact])**

Refer to discussion under Impact TCR-1. This is the same impact as disclosed in the Precise Plan EIR.[211] **(Same Impact as Approved Project [Less than Significant Impact])**

5.17.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
TCR-1	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	Yes	LTS	None	N/A
TCR-2	**Both Project Options:** The project (under either option) would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.	Yes	LTS	None	N/A
Abbreviation: LTS – Less than Significant.					

[211] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 255.

5.18 UTILITIES AND SERVICE SYSTEMS

The following discussion is based, in part, on a Utilities Impact Study (UIS) completed by Schaaf & Wheeler. This report is attached as Appendix I.

5.18.1 Environmental Setting

The environmental setting, including the regulatory framework and existing site conditions, for utilities and service systems has not substantially changed since the certification of the Precise Plan EIR.

5.18.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, including water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Mountain View adopted its most recent UWMP in June 2021.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program. Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Senate Bill 610

SB 610 requires projects subject to CEQA to comply with Part 2.10 of the Water Code and demonstrate the availability and reliability of water supplies required to serve their projected demand. The bill also requires that Urban Water Management Plans include service reliability assessments.

California Green Building Standards Code

In January 2010, the State of California adopted the CalGreen, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

Local

Mountain View 2030 General Plan

The General Plan contains goals and policies to avoid significant impacts due to utilities impacts. The following goals and policies are applicable to the proposed project.

Policy	Description
Infrastructure and Conservation	
INC 1.3	**Utilities for new development.** Ensure adequate utility service levels before approving new development.
INC 1.5	**Utility service.** Coordinate with all utility providers to ensure safe and adequate utility services.
INC 5.2	**Citywide water conservation.** Reduce water waste and implement water conservation and efficiency measures throughout the city.
INC 5.3	**Water reuse.** Remove barriers and provide guidance for the use of rainwater and graywater as alternative water supplies.
INC 8.4	**Runoff pollution prevention.** Reduce the amount of stormwater runoff and stormwater pollution entering creeks, water channels and the San Francisco Bay through participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program.
INC 8.7	**Stormwater quality.** Improve the water quality of stormwater and reduce flow quantities.
INC 11.1	**Waste diversion and reduction.** Meet or exceed all federal, state and local laws and regulations concerning solid waste diversion and implementation of recycling and source

Policy	Description
	reduction programs.

Source: City of Mountain View. *Mountain View 2030 General Plan*, July 10, 2012. Pp. 128, 130-132.

East Whisman Precise Plan

The Precise Plan includes utility-related standards and guidelines for new construction. These include meeting indoor and outdoor water performance standards as defined by LEED BD+C and CalGreen, installing dual plumbing for potable and recycled water use in all new construction per City codes, and connecting new construction to recycled water infrastructure when the recycled water system is adjacent to the property.

5.18.1.2 *Existing Conditions*

Water Supply and Demand

The City of Mountain View provides water service to the project site. The City is the water retailer for the area and purchases water from two wholesale water suppliers, the SFPUC and Valley Water. In 2020, the City's water supply production was 84 percent SFPUC, 10 percent Valley Water, two percent groundwater, and four percent recycled water. The City's existing water supply is 10,456 acre-feet per year (AFY) and the City's water demand is approximately 10,000 AFY.[212] The UWMP has a projected citywide water demand of 12,058 AFY in 2025 and 14,163 AFY in 2045.[213]

The existing industrial/office land uses in the project site have an existing water demand of approximately 61,736 gallons per day (gpd) or 69 AFY.[214]

Water System and Fire Flow

The City's municipal water system services three pressure zones and consists of three wholesale water turnouts, four reservoirs, three pump stations, four active groundwater supply wells, and buried pipelines. The City serves 17,543 potable water service connections and 58 active recycled water service connections. The project is located in pressure zone two. The project site is served by 12-inch water lines in Ellis Street, East Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue.

Wastewater Treatment/Sanitary Sewer System

The City of Mountain View maintains its own wastewater collection system. Sanitary and storm drains in the City are operated and maintained by the Wastewater Section of the Public Works Department. The City pumps its wastewater to the Palo Alto Regional Water Quality Control Plant (PARWQCP) for treatment. The PARWQCP has an overall 40 mgd average annual treatment capacity. The City has an average annual flow treatment allocation of 15.1 mgd at the PARWQCP. In 2020, approximately 6.9 mgd of wastewater from Mountain View was collected and treated by the PARWQCP.[215] Compared to the average wastewater flow of previous years (18.4 mgd in 2015 and 22.0 mgd in 2010),

[212] City of Mountain View. *2020 Urban Water Management Plan*. June 2021. P. 34.
[213] Ibid. P. 18.
[214] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022. Pp. 2-4.
[215] City of Mountain View. *2020 Urban Water Management Plan.* June 2021. P. 31.

the average wastewater flow in 2020 was substantially lower.[216],[217] This decrease could be the result of the COVID-19 pandemic, which led to fewer people traveling to Mountain View for work and working remotely instead. The project site is served by 10- to 18-inch sewer mains in Ellis Street, Logue Avenue, and Clyde Avenue.

Existing uses on the project site generate approximately 60,530 gallons per day of wastewater.[218]

Storm Drain System

The City of Mountain View Public Works Department operates and maintains the storm drainage system in the City. As discussed in Section 5.9 Hydrology and Water Quality, the project site consists of 83 percent impervious (or 31.7 acres) and 17 percent of pervious surfaces (or 6.5 acres). Runoff from the project site flows into 12- to 36-inch storm drain lines in the surrounding streets, which flows to the west to Stevens Creek and eventually the San Francisco Bay.

Solid Waste

Solid waste collection and recycling services for residents and businesses in Mountain View are provided by Recology Mountain View. Once collected, solid waste and recyclables are transported to the SMaRT Station in Sunnyvale for sorting, and commercial compostable are transported to a composting facility in Vernalis, California. Non-recyclable waste is transported and landfilled at Kirby Canyon Sanitary Landfill in south San José. Kirby Canyon Landfill has an estimated remaining capacity of approximately 14.6 million tons, and a closing date of approximately January 1, 2071.[219]

Telecommunications Systems

The project site is served by existing phone and electrical services. Phone service is provided to the site by AT&T, and electrical service is provided by Pacific Gas and Electric (PG&E) and/or SVCE.

5.18.2 Impact Discussion

For the purpose of determining the significance of the project's impact on utilities and service systems, would the project:

1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local

[216] City of Mountain View. *2015 Urban Water Management Plan.* June 2016. P. 40.
[217] City of Mountain View. *2010 Urban Water Management Plan.* June 2011. P. 5-10.
[218] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022. Pp. 4-5.
[219] Azevedo, Becky. Waste Management Technical Manager. Personal communications. December 27, 2021.

infrastructure, or otherwise impair the attainment of solid waste reduction goals?

5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?

5.18.2.1 *Project Impacts*

Impact UTL-1:	**Both Project Options:** The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that future large-scale development allowed under the Precise Plan could result in impacts to existing water, sewer, and storm drainage infrastructure and require upsizing and/or improvements to nearby water distribution, sewer, and storm drainage infrastructure. The Precise Plan EIR concluded that this impact would be reduced to a less than significant level with payment of necessary fees, compliance with the standards and guidelines of the Precise Plan, and implementation of Precise Plan EIR MM UTL-1.1, listed below.[220]

East Whisman Precise Plan EIR Mitigation Measure:

Precise Plan EIR MM UTL-1.1: Both Project Options: The City shall require, determined on a project-by-project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.

To comply with Precise Plan EIR MM UTL-1.1, a site-specific analysis UIS was prepared by Schaaf & Wheeler for the project. The results of the study are summarized below and discussed in detail in Appendix I.

Project

Water System and Fire Flow

The project (under either option) would have a total water demand of approximately 384,460 gpd and a fire flow requirement of 1,500 gallons per minute (gpm), an increase of 322,697 gpd above existing conditions.[221] The total water demand includes both potable and non-potable water demands. Under the project (without District Utilities System Option), in order to serve the project's non-potable

[220] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 264.

[221] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study*. April 18, 2022. Table 2-1: Proposed Building Estimated Water Demand. Pp. 2-2 through 2-3.

demands with non-potable recycled water, the City's existing recycled water system would need to be extended to the project site.

As mentioned in 5.18.1.2 Existing Conditions, the project is located in pressure zone 2, which is supplied by two SFPUC turnouts. The UIS included modeling which determined that demand in pressure zone 2 can be sufficiently supplied by the turnouts and that the additional project demand would not impact the City's ability to meet the total system demand.[222]

Furthermore, the SWRCB Division of Drinking Water requires storage equal to eight hours of maximum day demand plus fire flow storage in each pressure zone. The existing maximum active water storage in the City is 17 million gallons (MG) and the City operates with an operational storage of 14.3 MG. Thus, the City has the storage volume available to meet the SWRCB Division of Drinking Water requirements and the project (without District Utilities Option) would not require relocation or construction of new or expanded water facilities resulting in significant environmental impacts beyond what was previously disclosed in the General Plan EIR and Precise Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

Wastewater/Sewer System

The project (without District Utilities System Option) would incrementally increase wastewater generation on-site by approximately 231,170 gpd. Based on the UIS, the sewer system does not have sufficient capacity to support the estimated increase in wastewater flow from the project (without District Utilities System Option), consistent with the analysis in the Precise Plan EIR. However, implementation of improvements identified in the 2030 General Plan Update Utility Impact Study and Precise Plan Utility Impact Study included upsizing of the 10-inch pipe along Ellis Street to 15-inches, upsizing the 10-inch pipe between Ellis Street and Logue Avenue to 15-inches, upsizing the 18-inch pipe along Fairchild Drive to 21-inches, and upsizing the 10-inch pipe between Ellis Street and Logue Avenue to 15-inches. With these improvements, there would be sufficient capacity to support the increased wastewater generated by the project (without District Utilities Systems Option). The project (without District Utilities System Option) would pay the impact fee toward these planned improvements. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[223] The environmental impacts associated with construction of these improvements were previously disclosed in the General Plan EIR and the Precise Plan EIR.[224, 225] For these reasons, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects beyond what was previously disclosed in the Precise Plan EIR and General Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

[222] Ibid.
[223] Schaaf & Wheeler. *Middlefield Park Master Plan Utility Impact Study.* April 18, 2022.
[224] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 265.
[225] City of Mountain View. *City of Mountain View Draft 2030 General Plan and Greenhouse Gas Reduction Program EIR.* September 2012. P. 528.

Stormwater Drainage

The project would pay impact fees to fund stormwater drainage improvements included as part of the Capital Improvement Projects (CIPs) and improvements identified in the 2030 General Plan Update Utility Impact Study to provide adequate storm drain service for the buildout of the General Plan (which includes the project under either option). The environmental impacts associated with construction of these improvements were previously disclosed in the General Plan EIR and the Precise Plan EIR. The project (without District Utilities System Option) would, therefore, pay a proportional utility impact fee toward these planned improvements. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[226] Thus, the project would not require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction or relocation of which could cause significant environmental effects beyond those already disclosed in the Precise Plan EIR. This is the same impact as disclosed in the Precise Plan EIR.

Electric Power, Natural Gas, and Telecommunications

The project (without District Utilities System Option) would connect to existing electric power, natural gas, and telecommunications lines. The project would be adequately served and existing overhead facilities would be relocated and undergrounded. The existing nitrogen gas line that runs approximately 50 feet south of the SFPUC Hetch-Hetchy right-of-way would be relocated to accommodate the proposed buildings. The project (without District Utilities System Option) would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects and have a less than significant impact. This is the same impact as identified in the Precise Plan EIR.

For the reasons discussed above, the project (without District Utilities Option) would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. A site-specific UIS was prepared for the project consistent with Precise Plan EIR MM UTL-1.1, which confirmed the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated**])

Project with District Utilities System Option

The project with District Utilities System Option would construct a private district utilities system with underground utility lines to serve buildings within the MPMP with wastewater, recycled water, thermal energy, and electric power service.

Water System and Fire Flow

As discussed above, the total water demand for the project (under either option) would be approximately 384,460 gpd and have a fire flow requirement of 1,500 gpm. Fire water service would be supplied by the existing City system. The total water demand includes both potable and non-potable water demands. Operation of the on-site wastewater treatment plant under the project with District

[226] Ibid.

Utilities System Option would offset water demands by up to 250,000 gpd, as all of the project's non-potable water demands would be met using non-potable recycled water produced onsite, resulting in a lower potable water demand than the project without the District Utilities System Option. The net increase in potable water demand for the project with District Utilities System Option would be approximately 72,697 gpd compared to existing conditions on-site.

Because the project with District Utilities System Option would result in a lower potable water demand than the project without the District Utilities System Option, and the UIS determined that adequate water pressure and storage are available to meet the added demand of the project without the District Utilities System Option, the project with the District Utilities System Option would not require relocation or construction of new or expanded water facilities resulting in significant environmental impacts. Therefore, impacts would be less than significant, and lesser than those disclosed in the Precise Plan EIR.

Wastewater/Sewer System

Since the CUP would allow for direct treatment of wastewater at the project site, the project with District Utilities System Option would result in a net negative demand of -18,830 gpd on the City's wastewater system. With a net decrease in demand, the sewer system would have sufficient capacity downstream and would not require upsizing of pipes[227]; therefore, impacts would be less than significant, and lesser than those disclosed in the Precise Plan EIR.

Stormwater Drainage

As discussed above for the project without District Utilities System, the project (with District Utilities System) would pay impact fees to fund stormwater drainage improvements included as part of the CIPs identified in the 2030 General Plan Update Utility Impact Study (GPUUIS). Implementation of these CIPs would ensure adequate storm drain and water service are provided. No other utility infrastructure improvements would be required as a result of the project (without District Utilities System Option).[228] The environmental effects associated with constructing these improvements were previously disclosed in the General Plan EIR and Precise Plan EIR. For these reasons, construction of the project with District Utilities System Option would result in less than significant impacts. This is the same impact as disclosed in the Precise Plan EIR.

Electric Power, Natural Gas, and Telecommunications

The project without District Utilities System Option would connect to existing electric power, natural gas, and telecommunications lines, and would be adequately served by them. Because the project with District Utilities System Option would also incorporate thermal energy and microgrid system that would provide independent sources of heating, cooling, and electricity (as described in Section 3.2 Project Description), the project with District Utilities System Option would result in less demand than the project without District Utilities System Option, resulting in a lesser impact than disclosed in the Precise Plan EIR.

[227] Ibid.
[228] Ibid.

For the reasons discussed above, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. A site-specific UIS was prepared for the project consistent with Precise Plan EIR MM UTL-1.1, which confirmed the project would result in the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact with Mitigation Incorporated])**

Impact UTL-2:	**Both Project Options:** The project (under either option) would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that implementation of the Precise Plan (including the project under either option) would result in an increase in water demand within the City of Mountain View; however, the City's available potable and non-potable water supplies were expected to be sufficient to meet the demands of existing and future uses during normal years through 2035. The Water Supply Assessment completed for the Precise Plan EIR projected shortfalls of 18 percent for single dry years and 20 percent for multiple dry years with implementation of the Precise Plan.[229] The City's UWMP includes a Water Shortage Contingency Plan that can mitigate for shortfalls of up to 50 percent. Therefore, with implementation of the Water Shortage Contingency Plan, adequate water supplies would be available to meet the City's demand including development allowed under the Precise Plan (including the proposed project under either option) in normal, single-dry, and multiple-dry years. This is the same impact as identified in the Precise Plan EIR.[230] **(Same Impact as Approved Project [Less than Significant Impact])**

Impact UTL-3:	**Both Project Options:** The project (under either option) would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **[Same Impact as Approved Project (Less than Significant Impact)]**

The Precise Plan EIR determined that implementation of the Precise Plan would not prevent the RWQCP from meeting wastewater treatment requirements or generate wastewater above the City's allocated treatment capacity.[231] The RWQCP has an overall treatment capacity of 40 mgd and the City of Mountain View is allocated 15.1 mgd of treatment capacity at the RWQCP. Given the City's current wastewater generation (6.88 mgd), the City's remaining available treatment capacity at the RWQCP (2.49 mgd), and the estimate net increase of wastewater generated from implementation of the Precise Plan (753,034 gpd or 0.75 mgd), the Precise Plan EIR concluded impacts would be less than significant. The project (under either option) is consistent with the development assumptions identified for the site

[229] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 265.
[230] Ibid.
[231] Ibid. P. 266.

in the Precise Plan and development of the project (under either option) was accounted for within the Precise Plan EIR. Therefore, the project (under either option) would result in the same impact as identified in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Impact UTL-4:	**Both Project Options:** The project (under either option) would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that buildout of the Precise Plan would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.[232] New developments within the Precise Plan would be required to comply with the California mandated 50 percent waste diversion and CalGreen standards (including a construction waste recycling requirement and readily accessible areas for recycling). Solid waste and recyclables would be transported to the Sunnyvale SMaRT Station for sorting, and commercial compostable are transported to a composting facility in Vernalis. Non-recyclable solid waste generated within the Precise Plan would be collected by Waste Management and disposed of at Kirby Canyon Landfill. The Precise Plan EIR determined the Kirby Canyon Landfill has sufficient capacity to accommodate solid waste generated from the buildout of the Precise Plan, including that of the proposed project (under either option).

The project (under either option) would comply with the same requirements for recycling and solid waste reductions identified in the Precise Plan EIR, and would not adversely affect the City's compliance with the waste diversion requirements and would be served by a landfill with sufficient capacity. This is the same impact as identified in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Impact UTL-5:	**Both Project Options:** The project (under either option) would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. **(Same Impact as Approved Project [Less than Significant Impact])**

The Precise Plan EIR determined that buildout of the Precise Plan would not adversely affect the City's compliance with the waste diversion requirements under state law because all future developments within the Precise Plan would be required to comply with state and local policies and standards.[233] The project (under either option) would comply with CalGreen standards for construction waste recycling and would divert at least 50 percent of construction waste. Furthermore, solid waste from the project site would be disposed of at the Kirby Canyon Landfill in San José, as discussed under Impact UTL-4. The project (under either option) would not result in a substantial increase in waste landfilled at Kirby Canyon, nor would it be served by a landfill without sufficient capacity. In compliance with the

[232] Ibid.
[233] Ibid.

City Code, General Plan policies, and Precise Plan guidelines, the project (under either option) would not conflict with state and federal solid waste regulations and statutes. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

5.18.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
UTIL-1	**Both Project Options:** The project (under either option) would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Yes	S	Precise Plan EIR MM UTIL-1.1	LTS
UTIL-2	**Both Project Options:** The project (under either option) would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Yes	LTS	None	N/A
UTIL-3	**Both Project Options:** The project (under either option) would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Yes	LTS	None	LTS
UTIL	**Both Project Options:** The project (under either option) would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	Yes	LTS	None	N/A
UTIL-5	**Both Project Options:** The project (under either option) would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste.	Yes	LTS	None	N/A

Abbreviation: S – Significant, LTS – Less than Significant.

5.19 WILDFIRE

5.19.1 Environmental Setting

An analysis of wildfire impacts associated with implementation of the Precise Plan was included in the Hazards and Hazardous Materials Section of the Precise Plan EIR. The environmental setting, including the regulatory framework and existing site conditions, for wildfire has not substantially changed since the certification of the Precise Plan EIR.

5.19.1.1 *Existing Conditions*

The project site is not classified as a very high fire hazard severity zone.[234]

5.19.2 Impact Discussion

For the purpose of determining the significance of the project's impact on wildfire, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1) Substantially impair an adopted emergency response plan or emergency evacuation plan?
2) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
3) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

5.19.2.1 *Project Impacts*

The Precise Plan area (including the project site) is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project (under either option) would not result in wildfire impacts. This is the same impact as disclosed in the Precise Plan EIR.[235] **(Same Impact as Approved Project [No Impact])**

[234] California Department of Forestry and Fire Protection. FHSZ Viewer. Accessed February 15, 2022. https://egis.fire.ca.gov/FHSZ/

[235] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 114.

5.19.3 Conclusion

	Impact	Same Impact Analyzed in Precise Plan EIR?	Significance Before Mitigation	Mitigation	Significance After Mitigation
WLD-1:	**Both Project Options:** The project (under either option) would not result in wildfire impacts.	Yes	NI	None	N/A

Abbreviation: NI – No Impact.

SECTION 6.0 GROWTH-INDUCING IMPACTS

Pursuant to the CEQA Guidelines, a project is considered to be growth inducing if it would "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (Section 15126.2[e]). This section of the EIR is intended to evaluate the impacts of such growth in the surrounding environment. Examples of projects likely to have significant growth inducing impacts include removing obstacles to population growth, for example extending or expanding infrastructure beyond what is needed to serve the project. Other examples of growth inducement include increases in population that may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects.

The Precise Plan EIR concluded implementation of the Precise Plan (which includes the proposed development) would not significantly induce growth for the following reasons:

- The growth is already planned and accounted for in the City's General Plan, and implementation of the General Plan and Precise Plan would focus growth near transit nodes, which would minimize traffic and associated environmental effects (e.g., air pollution and GHG emissions);
- Although the Precise Plan has the potential to incrementally increase development pressure for additional housing within Mountain View and nearby cities, this additional residential development would be generally located in developed, urban areas, and in accordance with local and regional plans for those cities; and
- The Precise Plan would not result in the expansion of urban services or result in pressure to expand beyond the City's existing boundaries or sphere of influence because it would intensify and diversify uses in a low-density area in an existing, urban setting.[236]

The project (under either option) is implementing the Precise Plan and is consistent with the planned growth and identified strategies and policies of the Precise Plan and General Plan. Additionally, construction of the CUP under the District Systems Option would only meet project-specific demand and would not serve the broader Precise Plan area or expand services to any area outside of the project area. For these reasons, the project would not result in a significant growth inducing impact. Therefore, the project (under either option) would result in the same less than significant growth inducing impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

[236] City of Mountain View. *Integrated Final Environmental Impact Report, East Whisman Precise Plan, SCH# 2017082051*. January 2020. Pp. 271 – 272.

SECTION 7.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Pursuant to CEQA Guidelines Section 15126.2(d), an EIR must identify significant irreversible environmental changes that would be caused by the proposed project being analyzed. Significant irreversible changes include the 1) irreversible use of nonrenewable resources, 2) commitment of future generations to similar use, 3) irreversible damage resulting from environmental accidents associated with the project and 4) irretrievable commitments of resources.

7.1 IRREVERSIBLE USE AND IRRETRIEVABLE COMMITMENTS OF NONRENEWABLE RESOURCES

As discussed in the Precise Plan EIR, implementation of Precise Plan (which includes the project under either option), would require the use of nonrenewable resources during construction and operation of development projects. Nonrenewable resources used would include fossil fuels, metals, concrete, plastics, and water. Renewable resources, such as lumber and energy from renewable sources (e.g., solar and wind), would also be used. The City of Mountain View encourages the use of building materials that include recycled materials and requires new development to meet minimum green building design standards. The project (under either option) would be built to current codes, which require insulation and design to minimize wasteful energy consumption. The project would comply with the City's Reach Code requirements for all electric building operations, include rooftop solar panels, and electric vehicle infrastructure, implement a TDM plan designed to reduce residential and nonresidential vehicle trips, meet the intent of LEED Platinum standards on all proposed non-residential buildings, and achieve the equivalent of a GreenPoint rating of 120 points or better for proposed residential buildings. In addition, the site is an infill location currently served by public transportation. Although the district utilities system option would include construction of new utility lines on-site, these utility lines would be designed to maximize the efficiency of energy and water resources on-site and would only deliver energy and wet utilities to the project buildings. Therefore, as concluded in the Precise Plan EIR, the implementation of Precise Plan (which includes the project under either option) would not require the construction of major new lines to deliver energy and would represent a more efficient allocation of nonrenewable resources than other types or patterns of growth.

7.2 COMMITMENT OF FUTURE GENERATIONS TO SIMILAR USES

The project (under either option) would redevelop a site located within an urban area. Development of the project (under either option) would commit resources to prepare the site, construct the buildings, and operate the building, but it would not result in development of undeveloped land.

As concluded in the Precise Plan EIR, implementation of the Precise Plan (which includes the project under either option) would intensify development and increase the diversity of land uses near existing transit stations and would not commit future generations to changes in land use that are substantial.[237]

[237] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 274.

7.3 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS

Without mitigation, irreversible changes to the physical environment could occur from accidental release of hazardous materials associated with development. Compliance with hazardous materials regulations and policies, and remediation of contamination, would reduce impacts to a less than significant level. As discussed in Section 5.8 Hazardous Materials of this EIR, the project (under either option) would not result in significant hazards or hazardous materials impacts.

The Precise Plan EIR concluded that there would be no significant unmitigable hazards and hazardous materials conditions that would substantially affect the public and surrounding environment.[238]

[238] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report.* State Clearinghouse Number 2017082051. January 2020. P. 274.

SECTION 8.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

As discussed in Section 4.1 Air Quality, the project would result in new significant, unavoidable impacts related to operational ROG emissions and health risks (primarily due to construction emissions).

- **Impact AQ-1: Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

SECTION 9.0 ALTERNATIVES

CEQA requires that an EIR identify alternatives to a project as it is proposed. The CEQA Guidelines specify the EIR should identify alternatives which "would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The purpose of the alternatives discussion is to determine whether there are alternatives of design, scope, or location which would substantially lessen the significant impacts, even if those alternatives "impede to some degree the attainment of the project objectives" or are more expensive (CEQA Guidelines Section 15126.6).

In order to comply with the purposes of CEQA, it is important to identify alternatives that reduce the significant impacts anticipated to occur if the project is implemented and try to meet as many of the project's objectives as possible. The CEQA Guidelines emphasize a commonsense approach – the alternatives should be reasonable, "foster informed decision making and public participation," and focus on alternatives that avoid or substantially lessen the significant impacts. The range of alternatives selected for analysis is governed by the "rule of reason" which requires the EIR to discuss only those alternatives necessary to permit a reasoned choice. An EIR is not required to consider alternatives which are infeasible.

The three critical factors to consider in selecting and evaluating alternatives are, therefore: (1) the significant impacts from the proposed project which could be reduced or avoided by an alternative, (2) the project objectives, and (3) the feasibility of the alternatives available. These factors are discussed below.

9.1 FACTORS IN SELECTING AND EVALUATING ALTERNATIVES

9.1.1 Significant Impacts of the Project

As explained above, the CEQA Guidelines state alternatives analysis in an EIR should be limited to alternatives that are feasible and would avoid or substantially lessen any of the significant effects of the project and achieve most of the basic project objectives. In addition to those identified in the Precise Plan EIR, the project would result in a new, significant, unavoidable impacts due to operational ROG emissions and health risks (primarily due to construction emissions):

- **Impact AQ-1: Both Project Options:** The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**
- **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

9.1.2 Project Objectives

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of objectives sought by the proposed project. While CEQA does not require that alternatives must be capable of meeting all of the project objectives, their ability to meet most of the basic objectives is considered relevant to their consideration. As identified in Section 3.4 Project Objectives, the applicant's objectives for the project are as follows:

a) Develop the project area with residential and office uses at an increased density and FAR (consistent with the Character Areas development targets in the Precise Plan) near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit.
b) Redevelop the project site with approximately 1,900 new residential units to better balance the City's jobs-housing ratio.
c) Provide approximately 1.3 million square feet of office uses consistent with the Precise Plan and the following General Plan policies:
    - *LUD 3.1: Land use and transportation*. Focus higher land use intensities and densities within a half-mile of public transit service, and along major commute corridors;
    - *LUD 3.8*: *Preserved land use districts*. Promote and preserve commercial and industrial districts that support a diversified economic base;
    - *LUD 9.2: Compatible transit-oriented development*. Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations; and
    - *LUD 14.3: Business attraction*. Attract innovative and emerging technology businesses.
d) Develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan's Jobs-Housing Linkage Program.
e) Implement a robust TDM plan with trip-reduction measures and on-site amenities that promote walking, bicycling, use of shuttles, transit and other transportation alternatives, consistent with the requirements of the Precise Plan.
f) Support VTA's investment in light rail transit by providing transit-oriented residential and commercial development that facilitates pedestrian and bicycle access to and ridership of transit.
g) Implement sustainable building practices promoting energy and water efficiency consistent with the Precise Plan.
h) Dedicate approximately seven acres of land to the City for the creation of new public parks to serve the existing uses, the proposed project, and the broader community.
i) Support both Precise Plan goals and City Council and staff guidance through the delivery of people-centric community benefits that help people live, work, play, and stay in Mountain View, including measures that support:
    - Housing opportunities and anti-displacement;
    - Retention and growth of small businesses and workforce development;
    - Safe and expanded connections for pedestrians and bicyclists, while consolidating infrastructure for vehicles; and
    - Quality open space for recreation, relaxation and entertainment.

9.1.3 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law interpreting CEQA and the CEQA Guidelines have found that feasibility can be based on a wide range of factors and influences. The CEQA Guidelines state that such factors can include (but are not limited to) the suitability of an alternate site, economic viability, availability of infrastructure, consistency with a general plan or with other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can "reasonably acquire, control, or otherwise have access to the alternative site (Section 15126.6[f][1]).

9.1.4 Alignment with Precise Plan Guiding Principles

To provide additional context, each alternative discussed below is evaluated against the Precise Plan's Guiding Principles,[239] which support and establish the vision for growth in the plan area and are used as a reference point for stakeholders and decision-makers in evaluating projects. These principles include:

1. Transform East Whisman into a mixed-income community with a balance of renters and owners
2. Create a complete neighborhood
3. Focus activity and development around Middlefield Light Rail station
4. Respect North Whisman Area Neighborhood Character
5. Enhance the Middlefield/Whisman Village Center
6. Integrate new housing harmoniously with office uses
7. Maximize land use flexibility while balancing jobs and housing
8. Minimize vehicle trips
9. Build complete streets for active transportation
10. Create a highly-sustainable community

9.2 PROJECT ALTERNATIVES

9.2.1 Project Alternative Considered But Rejected From Further Analysis

9.2.1.1 *Location Alternative*

Pursuant to CEQA Guidelines Section 15126.6(a), an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project. An alternative site may be considered when impacts of the project might be avoided or substantially lessened, and the project proponent can feasibly attain control of the site. Only alternative locations that would avoid or substantially lessen any of the impacts of the project and meet most of the basic project objectives need to be considered for inclusion in the EIR (CEQA Guidelines Sections 15126.6[f] and 15126.6[f][2][A]).

[239] City of Mountain View. East Whisman Precise Plan: Integrated Final Environmental Impact Report. State Clearinghouse Number 2017082051.January 2020. Pp. 17-26.

As described previously, the project proposes to implement a large portion of the City's adopted Precise Plan, which prescribes the land uses to be developed within the Plan. Therefore, decisions regarding the appropriate land use types and densities in this location have recently been made by the City. Because this EIR tiers off the prior certified Precise Plan EIR, the alternatives analysis completed for the Precise Plan, is hereby incorporated by reference.

An alternative location for the project would need to:

- Avoid or substantially lessen the project's significant operational ROG emissions and health risks (primarily due to construction emissions) impacts;
- Be of similar size as the project site (approximately 40-acres) and be able to accommodate the project's buildout, density, and mix of uses;
- Served by available infrastructure (including transportation and utilities);
- Have the appropriate General Plan designation that would allow for high intensity commercial office, residential, retail, and community uses at an intensity over 1.0 FAR; and
- Be, or able to be, under control of the applicant.

In consideration of an alternative location in an EIR, the CEQA Guidelines advise the key question is "whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."[240] Any project of similar size and intensity as the proposed project (under either option) within the City of Mountain View would have similar construction and operational air quality impacts. An alternate location that meets most of the above listed characteristics is the approximately 40-acre San Antonio Shopping Center located at the southwest corner of California Street and Showers Drive (2550 West El Camino Real/350 Showers Drive); however, it is currently developed and not under the control of the applicant. Additionally, if the applicant were to gain control over this site (which has sensitive receptors approximately 85 feet east of the site and future residential units under construction 140 feet northwest of the site at 2580 California Street), development of the project (under either option) on this alternative site would result in similar construction health risk impacts to those receptors as the project would have sensitive receptors of similar proximity to the project site. No other alternative locations in the City would meet the above listed criteria, nor are any isolated from sensitive receptors. Therefore, an alternative infill location in Mountain View would not substantially lessen the project's identified significant and unavoidable impacts.

Case law interpreting CEQA Guidelines Section 15126.6(a), supports the conclusion that an EIR need not include a potentially feasible alternative location in every instance, based on the rule of reason and considerations of feasibility.[241] For the reasons described above, an alternative site was not considered further.

[240] CEQA Guidelines Section 15126.6(f)(2)(A)
[241] California Native Plant Society v City of Santa Cruz (2009) and Mira Mar Mobile Community v City of Oceanside (2004)

9.2.1.2 *Alternative Site Design, Smaller Project Site Alternative*

As discussed in Section 4.1 Air Quality, the project site is adjacent to an approved residential project at 400 Logue Avenue and project construction activities would expose those future residents to TAC emissions in excess of BAAQMD health risk thresholds. Health risk impacts are due, in part, to the proximity of sensitive receptors to construction activities. Therefore, an alternative site design and smaller project site alternative were considered in order to avoid the project's significant, unavoidable health risk impact.

Generally, project construction activities would result in less than significant health risks to sensitive receptors located 1,000 feet or greater from construction activities. However, as shown in Figure 9.2-1 below, most of the project site is located within a 1,000-foot radius of 400 Logue Avenue. No rearrangement of land uses or developing the project on a smaller portion of the project site located 1,000 feet from the 400 Logue site is feasible. For this reason, an alternative site design or smaller project site alternative were not considered further.

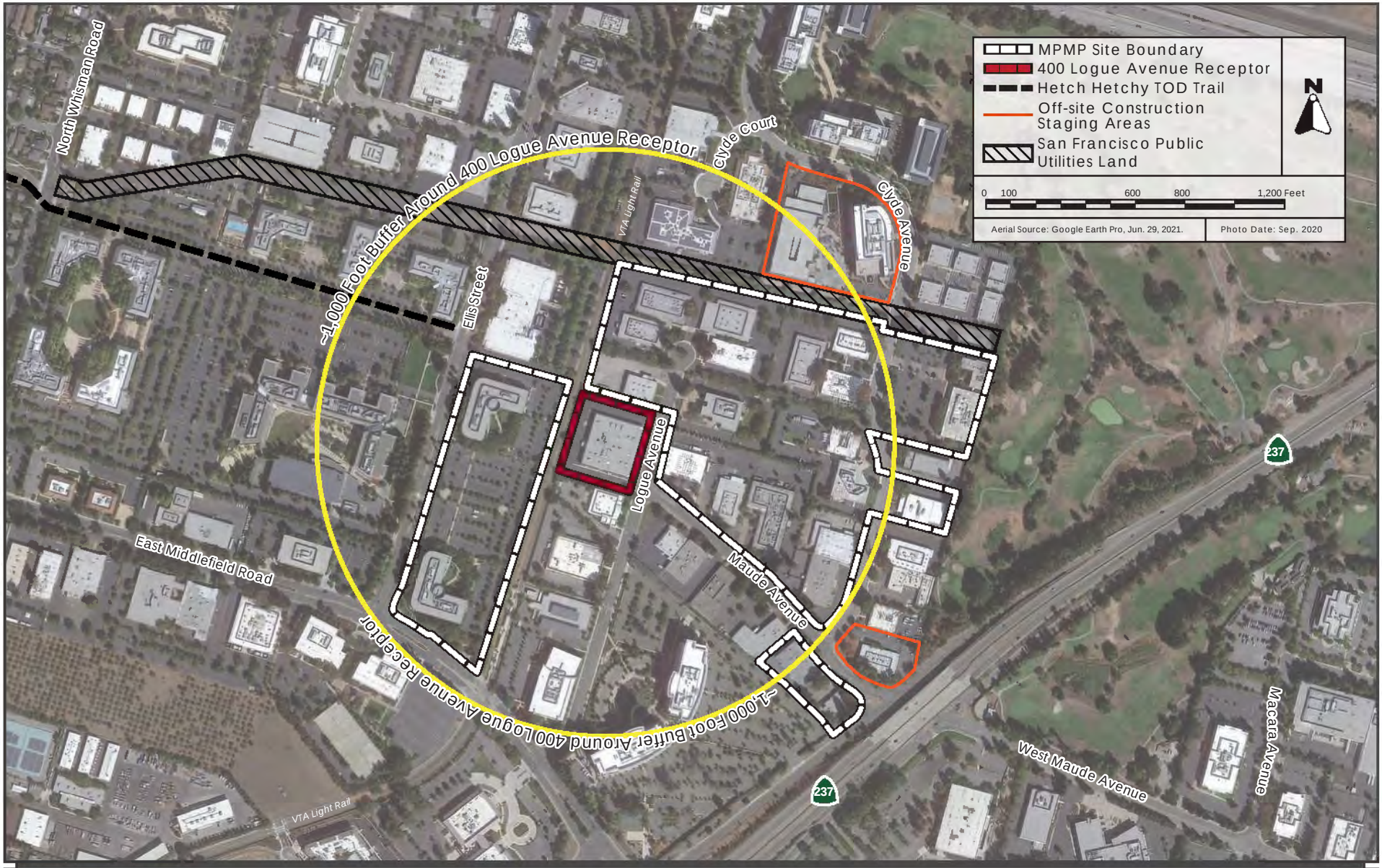
9.2.2 Selected Alternatives

The selected alternatives for analysis are the No Project Alternatives, Reduced Development Alternatives, and Rescheduled Construction Alternative. A breakdown of the development assumptions for each of the selected alternatives is provided in Table 9.2-1 below. A summary comparison of the mitigated environmental impacts of the project (under either option) and the project alternatives is provided in Table 9.2-2 at the end of this section.

9.2.2.1 *No Project, No New Development Alternative*

The CEQA Guidelines specifically require consideration of a "No Project" Alternative. The purpose of including a No Project Alternative is to allow decision makers to compare the impacts of approving the project versus the impacts of not approving the project. The CEQA Guidelines specifically advise the No Project Alternative shall address both the existing conditions and "what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (Section 15126.6(e)(2).18. Under the No Project Alternative, therefore, the project site could remain as it is today or the site could be redeveloped with uses consistent with the existing Precise Plan and General Plan land use designation. For this reason, there are two logical No Project alternatives: 1) a No Project, No New Development Alternative (which is described below) and 2) a No Project, Redevelopment Alternative (which is described under Section 9.2.2.2 below).

Under the No Project, No New Development Alternative, the project site would remain as it is today. Under existing conditions, the site is developed with a total of 684,645 square feet of office, R&D, and light industrial uses.



REARRANGED PROJECT ALTERNATIVE | FIGURE 9.2-1

Table 9.2-1: Summary of Alternatives Development Assumptions						
Land Use	**Project (under either option)[1]**	**Project Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Light Industrial Square Footage	0	684,645	0	0	0	0
Office Square Footage	1,317,000	0	691,285	1,066,770	908,730	1,317,000
Residential Dwelling Units	1,900	0	0	1,539	1,311	1,900
Retail Square Feet	30,000	0	5,000	24,300	20,700	30,000
Community/ Civic Square Footage	20,000	0	0	16,200	13,800	20,000
Park land acres	10.15	0	0	7.8	6.6	10.15
[1] The project with District Utilities System Option includes a CUP not reflected as a land use in the table.						

Comparison of Environmental Impacts

The No Project, No New Development Alternative would avoid the project's significant, unavoidable air quality impacts related to operational ROG emissions and health risks (primarily due to construction emissions), as well as avoid all other impacts disclosed in Section 5.0 Previously Identified Effects because it would not change existing conditions (see Table 9.2-2).

Relationship to Project Objectives

The No Project, No New Development Alternative would not meet any of the project objectives because it would not redevelop the site with a high-density mix of uses (including residential) at a density consistent with the Precise Plan (objectives a through d, f, and h) or implement sustainable building practices (objective g). Additionally, because the No Project, No New Development Alternative would not involve a change in the square footage of development on-site, it would not be required under the Precise Plan to implement a TDM program and would, therefore, not meet objective e nor would it provide community benefit, housing, multi-modal connections, and open space identified in objectives h and i.

Consistency with Precise Plan Principles

This alternative would not meet any of the Precise Plan's guiding principles because it would not redevelop the site consistent with the Precise Plan.

Conclusion

The No Project, No New Development Alternative would avoid the project's impacts (under either option) but would not meet any of the project objectives. This alternative would not meet any of the Precise Plan's guiding principles because it would not redevelop the site consistent with the Precise Plan.

9.2.2.2 *No Project, Redevelopment Alternative*

Given the site's land use designation, it is reasonable to assume that if the proposed project were not approved, an office development could be developed on the project site at the base FAR allowed with a minimum amount of retail. The proposed project (under either option) is consistent with and allowed by the City's General Plan and Precise Plan. The site is identified for high-density, mixed-use development. This policy decision was made when the City's General Plan and Precise Plan were adopted; a specific development proposal need not trigger ad hoc reconsideration of this policy.[242]

Nonetheless, for purposes of this EIR, an alternative redevelopment of the site is considered that would meet the base FAR allowed on the site, which is 0.4 FAR for non-residential uses across the Precise Plan Mixed Use and Employment Area North Character Areas, and include the minimum amount of retail uses required without triggering the City's housing requirements. Assuming the whole site (40 acres) is developed with non-residential uses, the No Project, Redevelopment Alternative would redevelop the site with up to 696,285 square feet (0.4 FAR) of non-residential uses, including a minimum 5,000 square feet of retail required by the Precise Plan. It is also assumed this Alternative

[242] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 C3d 553.

would implement sustainable building practices and a TDM program consistent with the requirements of the Precise Plan.

Comparison of Environmental Impacts

Given the scale of development under this alternative, it is assumed that construction air quality emissions and health risks impacts would be less than the project (under either option) because the amount of development is reduced, providing only a small increase from existing square footage but the proximity to sensitive receptors is the same. As discussed in Section 4.0, the project's significant operational ROG emissions are primarily attributed to architectural coatings, which is directly related to the amount of building surface area. For this reason, a reduction in building surface area requiring architectural coatings would result in a proportional reduction in ROG emissions. Based on the reduced size of development under this alternative, it is assumed that operational ROG emissions would be less than significant. This alternative would require a project-specific VMT analysis because it does not meet the City's density screening criteria of 0.75 FAR for projects located near transit. Therefore, this alternative could result in a significant VMT impact requiring mitigation.

Other impacts identified in Section 5.0 Previously Identified Effect for this alternative, would be similar to the proposed project due to its consistency with the development evaluated in the Precise Plan EIR and existing site conditions, but would not include housing or as much office square footage as proposed by the project (under either option). This alternative would provide approximately 0.5 percent of the planned office square footage in the Precise Plan.[243] Additionally, because this alternative does not include Bonus FAR (i.e., this alternative is less dense), the required sustainable building practices that would apply to this alternative would be less than those required of the proposed project. For example, this alternative would be required to meet LEED Gold standards whereas the project (with about twice as much office development) is required to meet LEED Platinum standards.[244]

Relationship to Project Objectives

The No Project, Redevelopment Alternative partially meets objectives a, c, and f because it does not include residential uses and proposes a little over half of the desired office square footage. The alternative would not meet objective b because it does not include housing and, thus, does not require park land. Objectives d and i, pertaining to the City's Jobs-Housing Program and community benefits, are not applicable because the project would not be subject to the program or be required to provide community benefits.

The No Project, Redevelopment Alternative would implement sustainable building practices and a TDM program consistent with Precise Plan requirements and, therefore, meet objectives e and g. Additionally, while the Redevelopment Alternative does not include transit-oriented residential development (as identified in objective f), it could deliver safe and expanded pedestrian and bicycle connections in accordance with the Precise Plan (refer to objectives f). The Redevelopment Alternative

[243] Calculated as a percent of net new office square footage assumed in Precise Plan EIR (2.3 million square feet of office planned in Precise Plan EIR). Source: City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. Page 11

[244] United States Green Building Council. "How LEED Works." https://www.usgbc.org/leed Accessed March 23, 2022.

would not include park land dedication, Bonus FAR, community benefits or housing, therefore, objectives h and i would not be met.

Consistency with Precise Plan Principles

The No Project Redevelopment Alternative could align with some portions of the Precise Plan's guiding principles 8, 9, and 10, by incorporating a TDM program for trip reductions and providing active transportation improvements (e.g., bike lanes, sidewalks) and green building design as required per the Precise Plan. This alternative can partially align with principle 3, as it provides some increased development near transit, but not at the highest intensities. However, this alternative would not align with principles 1, 2, 6, and 7 as it does not establish a mix of new land uses (residential, retail and open space) and balancing jobs and housing opportunities with greater intensity near transit. Guiding principles 4 and 5 are not applicable based on the project location.

Conclusion

As discussed above, the No Project Redevelopment Alternative would result in less or similar impacts as the proposed project. In regards to the project objectives, the No Project Redevelopment Alternative would:

- Meet objectives e and g
- Partially meet objectives a, b, c, and f
- Not meet objective h and i

In regards to the Precise Plan guiding principles, this alternative would:

- Align with principles 8, 9, and 10
- Partially align with principle 3
- Not align with principles 1, 2, 6, and 7.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.3 *Mitigated 19% Reduced Development Alternative*

The purpose of the Mitigated 19% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts with the incorporation of the air quality mitigation measures identified for the project (under either option). To reduce the project's ROG emissions during operations, the overall development would have to be reduced by approximately 19 percent to achieve less than significant impacts with mitigation incorporated. This alternative, therefore, assumes approximately 1,066,770 square feet of office uses, 1,539 residential units, 24,300 square feet of retail uses, 16,200 square feet of community/civic uses, and 7.8 acres of park land. This alternative would have a total FAR of approximately 1.29.

Comparison of Environmental Impacts

As discussed in Section 4.0, the project's significant operational ROG emissions are primarily attributed to architectural coatings, which is directly related to the amount of building surface area. For this reason, a reduction in building surface area requiring architectural coatings would result in a proportional reduction in ROG emissions. The project's operational ROG emissions with mitigation are approximately 19 percent above the significance threshold. Therefore, reducing the project's

building surface area by 19 percent would reduce the project's operational ROG emissions by 19 percent. For the purposes of this analysis, a reduction in building surface area equates to an equal reduction in the amount of development. For these reasons, the Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG impact with incorporation of the same mitigation measures identified for the project (under either option). This alternative would meet the City's density screening criteria of 0.75 FAR for projects located near transit. Therefore, as with the proposed project, this alternative would have a less than significant VMT impact under the City's current VMT policy.[245] All other impacts would be the same or similar to the proposed project because the Mitigated 19% Reduced Development Alternative would be consistent with the development evaluated in the Precise Plan EIR and subject to the same existing site conditions as the project.

Relationship to Project Objectives

This alternative would develop the site with residential and office uses at an increased density and FAR consistent with the Character Areas and would therefore, meet objective a. The Mitigated 19% Reduced Development Alternative would provide 19 percent less office square footage and residential dwelling units than identified in objectives b (1,900 dwelling units) and c (1.3 million square feet), therefore, it would partially meet these objectives. The Mitigated 19% Reduced Development Alternative would develop residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan, therefore, it would meet objectives d and e. Because this alternative would develop transit-oriented residential and office uses and could include on-site amenities to promote multi-modal transportation options, it would meet objective f. The Mitigated 19% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan, thus it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate 7.8 acres of land to the city for development of future parks pursuant to the City's Park Land Dedication Ordinance. Therefore, the Mitigated 19% Reduced Development Alternative would meet objective h. Additionally, because this alternative would develop a mix of uses on-site, it could include community benefits such as those identified in objective i, although to a lesser extent than the project.

Consistency with Precise Plan Principles

This alternative aligns with Precise Plan principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. However, the alternative's alignment with guiding principle 7 would be substantially lessened by reduced development. In particular, the Precise Plan's Jobs-Housing Linkage program establishes a minimum requirement of housing units to new office development, such that a 19 percent reduction in office square footage would directly impact the number of residential units delivered by a factor of three units per 1,000 square feet of net new office. For this alternative, the project applicant would be minimally required to construct 1,146 residential units (754 units or 40 percent fewer than the proposed project). Guiding principles 4 and 5 are not applicable based on the project location.

[245] This alternative would also contribute to the significant unavoidable VMT impact identified in the Precise Plan EIR for development allowed under the Precise Plan prior to adoption of the City's VMT policy.

It should be noted that the City is currently preparing its required Housing Element update and is allocating and projecting the future development of residential units on the project site.

Conclusion

As discussed above, the Mitigated 19% Reduced Development Alternative would avoid the project's significant, unavoidable operational ROG emissions with the implementation of the same mitigation measures as identified for the project (under either option) and lessen the project's mitigable construction criteria pollutant emissions and health risk impacts with implementation of the same mitigation measures identified for the project (under either option). All other impacts disclosed would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 19% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i; and
- Partially meet objective b and c.

In regards to the Precise Plan guiding principles, this alternative would:

- Align with principles 1, 2, 3, 6, 7, 8, 9, and 10, but alignment with principle 7 would create a significant reduction in residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.4 *31% Reduced Development Alternative*

The purpose of the 31% Reduced Development Alternative is to avoid the project's significant and unavoidable operational ROG emissions impacts without requiring mitigation. To reduce the project's ROG emissions during operations to the extent that mitigation is not required, the overall development would have to be reduced by approximately 31 percent. This alternative, therefore, assumes approximately 908,730 square feet of office uses, 1,311 residential units, 20,700 square feet of ground floor retail space, 13,800 square feet of community/civic uses, and 6.6 acres of park land. This alternative would have a total FAR of approximately 1.10.

Comparison of Environmental Impacts

The 31% Reduced Development Alternative would reduce the project's significant, unavoidable operational ROG impact to a less than significant level with no mitigation measures required. All other impacts would be similar as described for the Mitigated 19% Reduced Development Alternative above, though construction and operational criteria pollutant emissions, and health risks would be lesser than disclosed for the Mitigated 19% Reduced Development Alternative because this alternative assumes less development on-site.

Relationship to Project Objectives

The 31% Reduced Development Alternative would develop residential and office uses at an increased density and FAR consistent with the Character Areas and would therefore meet objective a. The 31% Reduced Development Alternative would provide 31 percent less office square footage and less residential dwelling units than identified in objectives b (1.3 million square feet), and c (1,900 dwelling units), therefore, it would only partially meet these objectives. The 31% Reduced Development Alternative would develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan, therefore, it would meet objectives d and e. Because this alternative

would develop the same mix of uses on-site as the proposed project (under either option), it would support light rail transit and meet objective f. The 31% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan, thus it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate land to the City for development of future parks at a similar rate as the proposed project (under either option). Therefore, the 31% Reduced Development Alternative would dedicate 6.6 acres of parkland and meet objective h (which calls for up to seven acres of parkland). Additionally, because this alternative would develop the same mix of uses on-site as the proposed project (under either option), it could include community benefits such as those identified in objective i, although to a lesser extent than the project.

Consistency with Precise Plan Principles

This alternative would have the same alignment with the Precise Plan principles as the Mitigated 19% Alternative but would result in an even greater reduction in housing units in relation to guiding principle 7 and the Jobs-Housing Linkage Program as outlined above for the Mitigated 19% Alternative. For this alternative, the project applicant would be minimally required to construct 672 residential units (1,228 units or 65 percent fewer than the proposed project). Guiding principles 4 and 5 are not applicable based on the project location.

It should be noted that the City is currently preparing its required Housing Element update and is allocating and projecting the future development of residential units on the project site.

Conclusion

As discussed above, the 31% Reduced Development Alternative would avoid the project's significant, unavoidable construction (with mitigation required) and lessen the project's mitigable construction criteria pollutant emissions and significant and unavoidable health risk impacts with the incorporation of the same mitigation measures identified for the project (under either option). All other impacts disclosed would be the same or similar as the proposed project. In regards to the project objectives, the Mitigated 31% Reduced Development Alternative would:

- Meet objectives a, d, e, f, g, h, and i
- Partially meet objectives b and c

In regards to the Precise Plan guiding principles, this alternative would be:

- Alignment with principles 1, 2, 3, 6, 7, 8, 9, and 10, but alignment with principle 7 would create a significant reduction in residential units.
- Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.5 *Rescheduled Construction Alternative*

The project would result in significant, unavoidable construction health risk impacts at the approved 400 Logue Avenue residential project due to the location of Phase II construction activities (under either option) adjacent to these future receptors. The purpose of this alternative is to avoid the project's significant, unavoidable health risk impact. According to the Initial Study of Environmental Significance prepared for the approved 400 Logue Residential project, it would be constructed and operational in 2025. Rescheduling Phase II construction activities to occur first would ensure pollutants

associated with health risks from the project (under either option) are emitted before the approved 400 Logue Residential project is occupied, reducing the project's health risk impacts on residents at 400 Logue Avenue. Under this alternative, Phase II construction would begin in November 2022 and extend until approximately October 2026, with the heavy construction activities (demolition, site preparation, grading, excavation, and trenching) being completed by approximately July 2024.

Comparison of Environmental Impacts

The Rescheduled Construction Alternative would likely reduce the project's significant, unavoidable health risk impacts to a less than significant level with implementation of the same mitigation measures as identified for the proposed project because the project's largest health risks would occur prior to occupation of the 400 Logue Avenue project. All other impacts would be the same as the proposed project with all identified mitigation measures and conditions of approval because this alternative would include the same development on the same site.

Relationship to Project Objectives

The Rescheduled Construction Alternative would meet all of the project objectives to the same extent as the project (under either option), except objective d as the residential units would not be delivered prior to the office development. Implementing the Rescheduled Construction Alternative, per the Precise Plan, would result in constructing office buildings that cannot be occupied until the residential units have been constructed per Precise Plan requirements for the Jobs-Housing Linkage Program.

Consistency with Precise Plan Principles

This alternative aligns with the Precise Plan principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. In the alternative's aligning with guiding principle 7, it would impact the development since the Precise Plan requires new office built under the Job-Housing Linkage program to obtain occupancy only once the associated residential development obtains occupancy. This would result in the office buildings remaining vacant for multiple years, which is not a typical development or business practice. Additionally, the applicant has indicated advancing the office development in the project first would be logistically and physically challenging as the Phase II development sites are used for construction staging of Phase I development, which is immediately adjacent; there are no alternative sites immediately adjacent to Phase I to locate construction staging. Guiding principles 4 and 5 are not applicable based on the project location.

Conclusion

The Rescheduled Construction Alternative would avoid the project's significant, unavoidable health risk impacts. All other impacts would be the same as the proposed project. The alternative would meet all of the project objectives to the same extent as the proposed project, except for objective d. This would result in a period of time when office buildings on the site would remain vacant while residential units are constructed, based on Precise Plan requirements. This alternative would align with Precise Plan principles 1, 2, 3, 6, 7, 8, 9, and 10, but aligning with principles 7 would create a challenging pattern of development with vacant office buildings. Guiding principles 4 and 5 are not applicable based on the project location.

9.2.2.6 *Environmentally Superior Alternative*

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the discussion of project alternatives, the environmentally superior alternative to the project is the No Project, No New Development Alternative because it would avoid all of the project's significant environmental impacts. CEQA Guidelines Section 15126.6 (e)(2) states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Therefore, in addition to the No Project alternatives, the Mitigated 19% Reduced Development Alternative, 31% Reduced Development Alternative, and Rescheduled Construction Alternative would be environmentally superior alternatives because they would each avoid one of the project's significant, unavoidable impacts (operational ROG emissions and/or health risks primarily from construction operations). Of these three alternatives, the 31% Reduced Development is the most environmentally superior because it avoids one of the project's significant and unavoidable air quality impacts and would have the least amount of development (which would result in less energy use, noise generation, and utility demand) compared to the Mitigated 19% Reduced Development Alternative and Rescheduled Construction Alternative.

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Aesthetics	LTS	**NI**	LTS	LTS	LTS	LTS
Agricultural and Forestry Resources	NI	NI	NI	NI	NI	NI
Air Quality						
• Operational Criteria Air Pollutant Emissions	SU	**NI**	**LTS**	**LTSMM**	**LTS**	SU
• Health Risk	SU	**NI**	**SU**	**SU**	**SU**	**LTSMM**
• Odor	LTS/LTSMM*	**NI**	LTS/LTSMM*	LTS/LTSMM*	LTS/LTSMM*	LTS/LTSMM*
Biological Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Cultural Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Energy	LTS	**NI**	**LTS**	**LTS**	**LTS**	LTS
Geology and Soils	LTS	**NI**	LTS	LTS	LTS	LTS
Greenhouse Gas Emissions	LTS	**NI**	LTS	LTS	LTS	LTS
Hazards and Hazardous Materials	LTSMM	**NI**	LTSMM	LTSMM	LTSMM	LTSMM
Hydrology and Water Quality	LTS	**NI**	LTS	LTS	LTS	LTS

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Land Use	LTS	**NI**	LTS	LTS	LTS	LTS
Mineral Resources	NI	NI	NI	NI	NI	NI
Noise	LTSMM	**NI**	**LTSMM**	**LTSMM**	**LTSMM**	LTSMM
Population and Housing	LTS	**NI**	LTS	LTS	LTS	LTS
Public Services	LTS	**NI**	LTS	LTS	LTS	LTS
Recreation	LTS	**NI**	LTS	LTS	LTS	LTS
Transportation	LTS	**NI**	LTSMM**	LTS	LTS	LTS
Tribal Cultural Resources	LTS	**NI**	LTS	LTS	LTS	LTS
Utilities and Service Systems	LTSMM	**NI**	**LTSMM**	**LTSMM**	**LTSMM**	LTSMM
Wildfire	NI	NI	NI	NI	NI	NI
Meets Project's Objectives?						
Objective a	Yes	No	Partially	Yes	Yes	Yes
Objective b	Yes	No	No	Partially	Partially	Yes
Objective c	Yes	No	Partially	Partially	Partially	Yes
Objective d	Yes	No	N/A	Yes	Yes	Yes
Objective e	Yes	No	Yes	Yes	Yes	Yes
Objective f	Yes	No	Partially	Yes	Yes	Yes

Table 9.2-2: Comparison of Impacts Between the Project and Project Alternatives						
Impacts	**Proposed Project (under either option)**	**Alternatives**				
		No Project, No New Development	**No Project, Redevelopment**	**Mitigated 19% Reduced Development**	**31% Reduced Development**	**Rescheduled Construction**
Objective g	Yes	No	Yes	Yes	Yes	Yes
Objective h	Yes	No	No	Yes	Yes	Yes
Objective i	Yes	No	No	Yes	Yes	Yes

Notes: **Bolded** text indicates impacts that would be less than the proposed project.
*The project without District Utilities System Option would have less than significant odor impacts, the project with District Utilities System Option would have less than significant odor impacts with incorporation of mitigation measures.
** Assumes mitigation may be required to reduce VMT impacts from No Project Redevelopment Alternative.
NI = No Impact, LTS = Less than Significant Impact, LTSMM = Less than Significant Impact with Mitigation Measures Incorporated, SU = Significant and Unavoidable Impact.

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SECTION 11.0 LEAD AGENCY AND CONSULTANTS

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SECTION 12.0 ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	Asbestos-containing materials
AFY	Acre feet per year
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
bgs	Below Ground Surface
BMP	Best Management Practice
2017 CAP	2017 Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CIP	Capital Improvement Projects
CLUP	Comprehensive Land Use Plan
CNEL	Community Equivalent Noise Level
CRHR	California Register of Historical Resources
dB	Decibel
dBA	A-weighted Decibel
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESL	Environmental Screening Level
EWPP	East Whisman Precise Plan
FAA	Federal Aviation Administration
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps

GHG	Greenhouse Gas
General Plan	City of Mountain View 2030 General Plan
Gpd	Gallon per day
Gpm	Gallons per minute
GPUUIS	2030 General Plan Update Utility Impact Study
Leq	Noise Equivalent Level
LID	Low Impact Development
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MG	Million gallons
MGD	Million Gallons per Day
mpg	Miles per Gallon
MPMP	Middlefield Park Master Plan
MRP	Municipal Regional Stormwater National Pollutant Discharge Elimination System Permit
NAHC	California Native American Heritage Commission
NOD	Notice of Determination
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PGE	Pacific Gas & Electric
Precise Plan EIR	East Whisman Precise Plan EIR
PM	Particulate Matter
RWQCB	Regional Water Quality Control Board
RWQCP	Palo Alto Regional Water Quality Control Plant
SB	Senate Bill
SFPUC	San Francisco Public Utilities Commission
SR	State Route
SVCE	Silicon Valley Clean Energy
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants

TCR	Tribal Cultural Resources
TOD	Transit Oriented Development
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
Valley Water	Santa Clara Valley Water District
VMT	Vehicle Miles Traveled
VTA	Valley Transportation Authority

Middlefield Park Master Plan

Final Supplemental Environmental Impact Report

SCH No.: 2021100026

Prepared by

City of Mountain View

In Consultation with

50 YEARS EST. 1972 DAVID J. POWERS & ASSOCIATES, INC. ENVIRONMENTAL CONSULTANTS & PLANNERS

August 2022

TABLE OF CONTENTS

Section 1.0 Introduction 1
Section 2.0 Draft SEIR Public Review Summary 2
Section 3.0 Draft SEIR Recipients 3
Section 4.0 Responses to Draft SEIR Comments 4
Section 5.0 Draft SEIR Text Revisions 31

Appendix A: Draft SEIR Comment Letters

SECTION 1.0 INTRODUCTION

This document, together with the Draft Supplemental Environmental Impact Report (Draft SEIR), constitutes the Final Supplemental Environmental Impact Report (Final SEIR) for the Middlefield Park Master Plan project.

1.1 PURPOSE OF THE FINAL SEIR

In conformance with the California Environmental Quality Act (CEQA) and CEQA Guidelines, this Final SEIR provides objective information regarding the environmental consequences of the proposed project. The Final SEIR also examines mitigation measures and alternatives to the project intended to reduce or eliminate significant environmental impacts. The Final SEIR is intended to be used by the City and any Responsible Agencies in making decisions regarding the project.

Pursuant to CEQA Guidelines Section 15090(a), prior to approving a project, the lead agency shall certify that:

1. The Final SEIR has been completed in compliance with CEQA;
2. The Final SEIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the Final SEIR prior to approving the project; and
3. The Final SEIR reflects the lead agency's independent judgment and analysis.

1.2 CONTENTS OF THE FINAL SEIR

CEQA Guidelines Section 15132 specify that the Final SEIR shall consist of:

1. The Draft SEIR or a revision of the Draft;
2. Comments and recommendations received on the Draft SEIR either verbatim or in summary;
3. A list of persons, organizations, and public agencies commenting on the Draft SEIR;
4. The Lead Agency's responses to significant environmental points raised in the review and consultation process; and
5. Any other information added by the Lead Agency.

1.3 PUBLIC REVIEW

In accordance with CEQA and the CEQA Guidelines (Public Resources Code Section 21092.5[a] and CEQA Guidelines Section 15088[b]), the City shall provide a written response to a public agency on comments made by that public agency at least 10 days prior to certifying the SEIR. The Final SEIR and all documents referenced in the Final SEIR are available for public review at the Community Development Department, City Hall offices at 500 Castro Street, 1st Floor, on weekdays during normal business hours and the Mountain View Public Library at 585 Franklin Street during normal business hours. The Final SEIR is also available for review online at the City's website www.mountainview.gov/CEQA and on the State Clearinghouse website www.ceqanet.opr.ca.gov.

SECTION 2.0 DRAFT SEIR PUBLIC REVIEW SUMMARY

The Draft SEIR for the Middlefield Park Master Plan project, dated April 2022, was circulated to affected public agencies and interested parties for a 45-day review period from April 25, 2022 through June 9, 2022. The City undertook the following actions to inform the public of the availability of the Draft SEIR:

- A Notice of Availability of Draft SEIR was published on the City's website at www.mountainview.gov/CEQA and in the Daily Post newspaper on April 25, 2022.
- Notification of the availability of the Draft SEIR was mailed to property owners and tenants within a 750 foot radius of the project boundary and other members of the public who had indicated interest in the project;
- Email notification of the availability of the Draft SEIR was sent on April 25, 2022, to all subscribed recipients on the City's project website at www.mountainview.gov/googlemiddlefieldpark.
- Notification of the availability of the Draft SEIR was sent on May 4, 2022 to all subscribed recipients on the City Hall Connection e-newsletter.
- The Draft SEIR was delivered to the State Clearinghouse on April 25, 2022 (posted on April 26, 2022), as well as sent to various governmental agencies, organizations, businesses, and individuals (see Section 3.0 for a list of agencies, organizations, businesses, and individuals that received the Draft SEIR); and
- Copies of the Draft SEIR were made available on the City's website at www.mountainview.gov/CEQA.

SECTION 3.0 DRAFT SEIR RECIPIENTS

CEQA Guidelines Section 15086 requires that a local lead agency consult with and request comments on the Draft EIR prepared for a project of this type from responsible agencies (government agencies that must approve or permit some aspect of the project), trustee agencies for resources affected by the project, adjacent cities and counties, and transportation planning agencies.

The NOA for the Draft SEIR was sent to owners and occupants within 750 foot of the project site and to adjacent jurisdictions. The following agencies and organizations received a copy of the Draft SEIR from the City or via the State Clearinghouse:

- Bay Area Air Quality Management District
- California Air Resources Board
- California Department of Conservation
- California Department of Fish and Wildlife
- California Department of Housing and Community Development
- California Department of Parks and Recreation
- California Department of Resources Recycling and Recovery
- California Department of Transportation, District 4
- California Department of Transportation, Division of Aeronautics
- California Department of Transportation, Division of Transportation Planning
- California Department of Water Resources
- California Energy Commission
- California Governor's Office of Emergency Services
- California Highway Patrol
- California Native American Heritage Commission
- California Natural Resources Agency
- California Public Utilities Commission
- California Regional Water Quality Control Board, San Francisco Bay Region
- California State Lands Commission
- Carpenters Local Union 405
- Department of Toxic Substances Control
- Environmental Protection Agency, San Francisco Office
- Mountain View-Los Altos Union High School District
- Mountain View Whisman School District
- Office of Historic Preservation
- San Francisco Bay Conservation and Development Commission
- San Francisco Public Utilities Commission
- San Francisco Regional Water Quality Control Board
- Santa Clara Valley Water District
- State Water Resources Control Board, Division of Drinking Water
- State Water Resources Control Board, Division of Water Quality
- Valley Transportation Authority

SECTION 4.0 RESPONSES TO DRAFT SEIR COMMENTS

In accordance with CEQA Guidelines Section 15088, this document includes written responses to comments received by the City of Mountain View on the Draft SEIR.

Comments are organized under headings containing the source of the letter and its date. The specific comments from each of the letters and/or emails are presented with each response to that specific comment directly following. Copies of the letters and emails received by the City of Mountain View are included in their entirety in Appendix A of this document. All comments received on the Draft SEIR are listed below and will be considered by the City Council prior to making a decision on the project.

A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft SEIR for public review, but before certification. Information can include changes in the project or environmental setting as well as additional data. However, new information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. None of the comments raised on the Draft SEIR represent new significant information that would warrant recirculation of the Draft SEIR pursuant to CEQA Guidelines Section 15088.5(a).

Comment Letter and Commenter **Page of Response**

A. California Public Utilities Commission (dated June 13, 2022) 5
B. Santa Clara Valley Water District (dated June 8, 2022) 7
C. Santa Clara Valley Transportation Authority (dated June 9, 2022) 13
D. Mountain View Whisman School District (dated June 9, 2022) 24

A. California Public Utilities Commission (dated June 13, 2022)

COMMENT A.1: The California Public Utilities Commission's (Commission) Rail Crossing Engineering Branch (RCEB) is taking this opportunity to address the City of Mountain View (City) Supplemental Environmental Impact Report (SIR) for the Middlefield Park Master Plan. RCEB staff offers the following comments:

Commission Requirements and Policy

The Commission has jurisdiction over the safety of highway-rail crossings (crossings) in California. The Commission has exclusive power over the design, alteration, and closure of crossings, pursuant to Public Utilities Code Section 1201 et al. Based on Commission Rules of Practice and Procedure, Rule 3.9, an application to the Commission is required to construct a railroad across a public road. The Diridon Station Area Plan is subject to several other rules and regulations involving the Commission. The proposed project's design criteria must comply with the California Manual on Uniform Traffic Control Devices (MUTCD) and Commission General Orders (GO's). The following GO's, among others, may be applicable:

- GO 26-D (regulations governing clearances on railroads and street railroads with reference to side and overhead structures, parallel tracks, and the crossing of public roads, highways, and streets)
- GO 72-B (rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads, and highways)
- GO 75-D (regulations governing standards for warning devices for at-grade highway-rail crossings)
- GO 88-B (rules for altering public highway-rail crossings)
- GO 95 (rules for overhead electric line construction)
- GO 118 (regulations governing the construction, reconstruction, and maintenance of walkways adjacent to railroad trackage and the control of vegetation adjacent thereto).

> **Response A.1:** The project evaluated in the Draft SEIR is the proposed Middlefield Park Master Plan, which is not located in the Diridon Station Area Plan in San José as referenced in the above comment. As noted on page 33 of the Draft SEIR, the project would require approval of permits (potential GO-88B process) from California Public Utilities Commission for the midblock crossing of Middlefield Road at the Middlefield Light Rail Station, and safety upgrades. The City and applicant will coordinate with CPUC to obtain all necessary permits and comply with the California Manual on Uniform Traffic Control Devices and Commission General Orders, as noted and applicable. This comment does not raise any issues with the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT A.2: Specific Project Comments

RCEB recommends that the City add language to the Addendum so that any future development adjacent to or near the light rail right-of-way (ROW) is planned with the safety of the rail corridor in mind. New developments may increase traffic volumes on streets and intersections and at at-grade

crossings. This includes considering pedestrian circulation patterns or destinations with respect to railroad ROW and compliance with the Americans with Disabilities Act.

Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares with no at-grade rail crossings as that configuration provides the most extensive safety considerations to the public, improvements to existing at-grade crossings due to increase in traffic volumes, and continuous vandal-resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad ROW.

Field Diagnostic meetings are required at all impacted or potentially new crossings. The Field Diagnostic Team consists of staff and representatives from the City, the CPUC, VTA, or Caltrans, and other stakeholders. This review includes a detailed analysis of the crossing. During the field diagnostic review, the Field Diagnostic Team evaluates appropriate hazard elimination recommendations and determines whether the project's development is feasible.

Response A.2: The development of the Master Plan would increase traffic volumes on streets and intersections in the project vicinity, including those near at-grade crossings of the light rail tracks. An analysis of the project's effects on pedestrian access and circulation systems in the project vicinity is included on pages 94 through 96 of Appendix H to the Draft SEIR. A discussion of existing and proposed ADA facilities within the project vicinity is included on page 96 of Appendix H to the Draft SEIR. As noted on this page of Appendix H, most corners in the project vicinity meet current ADA curb ramp designs. Text has been added to clarify that the project (under either option) would include installation of ADA-compliant ramps at the Clyde Avenue/Maude Avenue and Logue Avenue/Maude Avenue intersections (refer to Section 5.0 Draft SEIR Text Revisions). Refer to Response C.11 for a discussion of Crime Prevention through Environmental Design considerations.

The City will take into consideration the measures suggested in the above comment when applications for zoning permits are made at which time specific building and site design details will be available. Additionally, the City will require the design of future development comply with all relevant safety standards including those in the City's Streets Design Standards and Guidelines, VTA's LRT Design Criteria Manual, VTA's LRT Standard Detail Manual, and California Manual on Uniform Traffic Control Devices. Some development and/or improvements may require permits from CPUC and/or VTA whom can further confirm compliance with these standards.

The project includes dedication of land for a future bicycle and pedestrian bridge overcrossing of the light rail line. No other new crossings of the light rail tracks are proposed. Future development in the Master Plan, such as, but not limited to, roadway improvements at the light rail crossing on Middlefield Road and safety upgrades around the light rail station would be subject to the Commission General Orders and, when those improvements are detailed, field diagnostic meeting(s) can be held to determine complete design requirements. The City and applicant will continue to engage CPUC and appropriate stakeholders during the permitting process for new development adjacent to the light rail. This comment does not raise any issues with the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT A.3: The Commission is the responsible agency under CEQA section 15381 regarding this project. As such, we appreciate and thank you for the opportunity to work with the City to improve public safety regarding crossings in Mountain View. We request that RCEB be informed of all developments associated with the Middlefield Park Master Plan. Meetings should be arranged with the Commission's RCEB staff to discuss relevant safety issues and conduct diagnostic reviews of any proposed and impacted crossing locations within the proposed Park Master Plan.

Response A.3: As noted in Response A.1 above, the project would require approval of permits (potential GO-88B process) from California Public Utilities Commission for midblock crossing of Middlefield Road at Middlefield Light Rail Station, and safety upgrades (refer to page 33 of the Draft SEIR). The City and applicant will coordinate with CPUC and obtain all necessary permits. This comment does not raise any issues with the adequacy of the Draft SEIR; therefore, no further response is required.

B. Santa Clara Valley Water District (dated June 8, 2022)

COMMENT B.1: The Santa Clara Valley Water District (Valley Water) has reviewed the Draft Supplemental Environmental Import Report (SEIR) for the Middlefield Park Master Plan (MPMP), received on April 2, 2022. Valley Water has the following comments:

The East Whisman Precise Plan EIR concluded that proposed development could result in water supply shortfalls of 18% in a single dry year and 20% in multiple dry years. Given this impact to water supply, Valley Water appreciates the City requiring new development to be dual plumbed and the project's commitment to the use of recycled water. In addition to the use of recycled water, the City should require the project to install individual water submeters for each unit to encourage the efficient use of water. Studies have shown that adding submeters can reduce water use 15% - 30%.

Response B.1: This project is subject to the building code, which requires every tenant within a multi-unit development to have their own water submeter. This comment does not raise questions regarding the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT B.2: Section 3.2.3.2, Building Heating and Cooling (Page 19): The paragraph on page 19 states that "…approximately 2,820 vertical bores of six inches in diameter, spaced 18 feet apart, would be drilled approximately 85 to 110 feet bgs of each proposed building." Valley Water recommends that this sentence be modified to clarify if there would be 2,820 borings for each building or 2,820 borings for the entire project site. Valley Water is also concerned about the number of borings in an area with significant groundwater contamination. The bottom of each boring should be completed within the regional aquitard to minimize the potential for cross contamination.

Response B.2: Page 19 of the Draft SEIR was revised to clarify that up to 2,820 bores would be drilled across the entire project site (refer to Section 5.0 Draft SEIR Text Revisions). Analysis of potential groundwater cross-contamination was completed and summarized on page 141 in Section 4.8 Hazards and Hazardous Materials of the Draft SEIR. A copy of the technical report is included in Appendix G of the Draft SEIR. The

analysis concluded that the use of the mud rotary drilling technique would prevent migration of groundwater along the vertical bore holes, thereby preventing any cross-contamination. Additionally, the applicant submitted a Project-Specific Agency Submittal (PSAS) with a Site Management Plan (SMP) dated November 9, 2021 to the EPA and RWQCB for preliminary review, which included information on the proposed borings, including the planned procedures for minimizing the potential for migration of shallow zone contamination to deeper groundwater. The EPA raised no concerns regarding the installation approach, and the RWQCB declined review of both documents. This comment does not raise questions regarding the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT B.3: Section 3.5 (Page 32): The list of permits that may be required includes "Review and permits may be required if wells or soil borings are required (for environmental clean-up, for example) or if abandoned wells or septic tanks are proposed to be destroyed during construction of the project" under the Santa Clara County Department of Environmental Health. Well construction and destruction permits, including soil borings greater than 45 feet in depth, are reviewed and issued by Valley Water. This table should be updated accordingly. Please note that well construction/destruction permits may also be required if it is necessary to destroy or move existing wells due to the project.

Response B.3: The text on page 33 of the Draft SEIR has been revised to clarify that Valley Water is the agency responsible for review and issuance of well construction, relocation, and destruction permits including any soil borings greater than 45 feet in depth (refer to Section 5.0 Draft SEIR Text Revisions). This comment does not raise questions regarding the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT B.4: Section 5.6.1.2 (Page 111) states the project is located within the Santa Clara Valley Subbasin and that the subbasin is 225 square miles in area. The name of the subbasin and size are incorrect. The project is located within the Santa Clara Subbasin (DWR Basin 2-9.02) and it covers a surface area of 297 square miles.

Response B.4: The text on pages 111 and 150 of the Draft SEIR has been revised with the basin name and size identified in the above comment (refer to Section 5.0 Draft SEIR Text Revisions). This text revision does not change the analysis, adequacy, or the findings of the Draft SEIR.

COMMENT B.5: Section 5.6.1.2 (Page 111) states, soil borings were performed at select properties within the site and ranged between six and 16 feet below ground surface. Valley Water recommends clarifying and expanding this sentence to more clearly state the depths of the borings and note if groundwater was encountered. The following revision is suggested, "Soil borings, completed at depths ranging from 6 to 16 feet below ground surface, were performed at select properties within the site."

Response B.5: The text on page 111 of the Draft SEIR has been revised for clarity (refer to Section 5.0 Draft SEIR Text Revisions). The text revision does not change the analysis, adequacy, or the findings of the Draft SEIR.

COMMENT B.6: Impact GEO-3 (Page 114): This section states that 57,600 to 115,200 gallons of shallow groundwater will be pumped each day during construction dewatering. These are large volumes of shallow groundwater that will be pumped. Valley Water recommends that dewatering be minimized to the greatest extent possible during construction. Valley Water also recommends that potential impacts to contaminant plumes, nearby creeks, and shallow groundwater be evaluated. Relevant best management practices from the City of Mountain View or the San Francisco Bay Regional Water Quality Control Board should also be considered, including reusing the water produced during construction dewatering for dust control, landscape irrigation, or other appropriate uses if possible.

Response B.6: As noted on pages 113 and 114 of the Draft SEIR, the project would be required (through COA GEO-1.1) to implement project-specific recommendations from a design level geotechnical investigation including measures such as shoring walls and waterproofing to minimize the amount of dewatering required during construction and prevent substantial impacts to aquifers and existing wells. Additionally, as discussed on page 22 of the Draft SEIR, project construction (including dewatering activities) would occur over four phases spanning approximately eight years and would not occur at one time.

The impacts to existing contaminated plumes are disclosed on pages 137 through 140 in Section 5.8 Hazards and Hazardous Materials, as well as summarized on page 153 in Section 5.9 Hydrology and Water Quality, of the Draft SEIR. Potentially polluted dewatered groundwater would be dealt with as part of the Site Management Plan (SMP) required by Precise Plan EIR MM HAZ-3.1. The SMP, along with any other required materials, will be reviewed by the EPA or the RWQCB via subsequent submittals of PSAS's by the applicant to the oversight agency. With the implementation of Precise Plan EIR MM HAZ-3.1, as well as EPA-required Record of Decision (ROD) measures, impacts associated with the contaminated plumes would be reduced to less than significant with proper management and remediation.

An analysis of impacts to nearby surface water bodies including creeks is described in Section 5.9 Hydrology and Water Quality under Impact HYD-1 (pages 151 through 152 of the Draft SEIR) and Impact HYD-3 (pages 154 through 155 of the Draft SEIR). In these impact discussions, there are no waterways on-site that will directly be impacted by the project and the project would comply with existing regulations (including the National Pollution Discharge Elimination System [NPDES] General Construction Permit, Municipal Regional Stormwater NPDES Permit [MRP], and Precise Plan design guidelines and standards pertaining to green infrastructure and stormwater management), implement construction best management practices that protect stormwater quality, and prepare and implement a Construction Sediment and Erosion Control Plan and Stormwater Management Plan to reduce stormwater runoff (which flows to Stevens Creek) water quality impacts to a less than significant level.

In addition, as required by COA AQ-1.1 on pages 42 and 43 of the Draft SEIR, the project would implement BAAQMD recommended best management practices to control fugitive dust and erosion during construction (as described in COA AQ-1.1), which would also reduce runoff water quality impacts. The text of COA AQ-1.1 on pages 42 and 43 of the Draft SEIR has been revised to allow for the reuse of dewatering effluent for dust suppression purposes, when appropriate (refer to Section 5.0 Draft SEIR Text Revisions).

The project's impacts to groundwater, including shallow groundwater, is discussed under Impact HYD-2 on pages 152 through 153 of the Draft SEIR. The project would result in an increase in pervious surfaces on-site compared to existing conditions, therefore, allowing more rainfall to percolate into the ground (instead of flowing to the storm drain system). The project would implement COA GEO-1.1 described on pages 113 through 114 of the Draft SEIR (and mentioned earlier in this response) to minimize the volume of groundwater removed during project construction. Refer to Response B.2 regarding the prevention of cross-contamination of aquifers. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT B.7: HAZ-2 (Page 137): HAZ-2 states that soil, soil vapor, and/or groundwater quality studies shall be conducted as warranted based on the findings of the property-specific Phase I ESAs. Furthermore, it states, a Site Management Plan (SMP) will be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities, which will be submitted to appropriate regulatory agency(s). Valley Water would like to be copied on all reports related to soil and groundwater quality.

Response B.7: As noted on page 131 of the Draft SEIR, a Phase II Subsurface Investigation was completed for the project site by Elevate Environmental Consulting in February 2021. The Phase II Subsurface Investigation included soil, soil vapor, and groundwater testing. A summary of the soil, soil vapor, and groundwater testing results is included on pages 132 and 133 of the Draft SEIR and in Appendix G to the Draft SEIR. Furthermore, as noted in Response B.2 above, an SMP has already been prepared in accordance with Precise Plan EIR MM HAZ-3.1. Should any additional soil or groundwater quality reports be completed for the project, the applicant shall provide these reports to Valley Water and the City. The City will also maintain copies of the reports, which Valley Water can request to review during normal business hours. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT B.8: Section 5.9.1.1 (Page 147) and Section 5.9.1.2 (Page 150): This section includes a subsection on Valley Water's 2016 Groundwater Management Plan. The subsection should be updated to reference Valley Water's updated 2021 Groundwater Management Plan which was adopted by the Board of Directors on November 21, 2021. The updated plan can be found at https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf. It should be noted that the Regional Water Quality Control Board (RWQCB) has renewed the Municipal Regional Stormwater NPDES Permit on May 11, 2022 (Order No. R2-2022-0018, NPDES Permit No. CAS612008).

Response B.8: CEQA Guidelines Section 15125 defines the baseline as the conditions in existence at the time the Notice of Preparation (NOP) is published. The Board of Directors of Valley Water adopted the 2021 Groundwater Management Plan (GWMP) on November 21, 2021, and the Regional Water Quality Control Board (RWQCB) renewed the Municipal Regional Stormwater NPDES Permit (MRP) on May 11, 2022, subsequent to the release of the NOP for the Middlefield Park Master Plan project on October 1, 2021. Nevertheless, text has been added to pages 147 and 148 of the Draft SEIR to acknowledge the recent adoption of the 2021 GWMP and renewed MRP. However, the renewed MRP does not materially change the analysis or impacts associated with the project as identified in the Draft SEIR. This text revision does not change the analysis, adequacy, or conclusions of the Draft SEIR.

COMMENT B.9: Section 5.9.1.1 (Page 147): Under the Water Resources Protection Ordinance and Well Ordinance section, the text should be revised as follows: "Valley Water operates as the flood protection agency for Santa Clara County. Valley Water also provides stream stewardship and is the wholesale water supplier throughout the county, which includes the groundwater recharge program."

Response B.9: The text on page 147 of the Draft SEIR has been revised per the above comment. The text revision does not change the analysis, adequacy, or the findings of the Draft SEIR.

COMMENT B.10: Section 5.9.1.1 (Page 147): Well construction and deconstruction permits, including borings 45 feet or deeper, are required under Valley Water's Well Ordinance 90-1. Under Valley Water's Water Resources Protection Ordinance, projects within Valley Water property or easements are required to obtain encroachment permits.

Response B.10: In the event that project would involve work on land owned by or land subject to an easement of Valley Water, the project applicant will coordinate with Valley Water to obtain an encroachment permit. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT B.11: Section 5.9.1.2 (Page 150). This section states, "The 225 square mile Santa Clara groundwater basin provides municipal, domestic, industrial, and agricultural water supply to the area. Valley Water recommends that this sentence be re-written as follows: "The 297 square mile Santa Clara Subbasin provides municipal, domestic, industrial, and agricultural water supply to the area."

Response B.11: This comment is addressed in Response B.4 above. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT B.12: Section 5.9.1.2 (Page 150): Under the Flooding section, the definition of Flood Zone X should be re-written as follows to reflect the FEMA definition: "Flood Zone X is defined as an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than

1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood."

Response B.12: The Draft SEIR summarizes the flood conditions at the project site. The text on page 150 of the Draft SEIR has been revised to define Flood Zone X verbatim per the FEMA flood map. This text revision does not change the analysis, adequacy, or the findings of the Draft SEIR.

C. Santa Clara Valley Transportation Authority (dated June 9, 2022)

COMMENT C.1: VTA appreciates the opportunity to comment on the Draft Supplemental Environmental Impact Report (DSEIR) for the Middlefield Park Master Plan (MPMP) project, as well as the Multimodal Transportation Analysis (MTA) report provided as Appendix H to the DSEIR. VTA has reviewed the documents and has the following comments:

Land Use

VTA supports the proposed land use intensification and mix of land uses that the Middlefield Park Master Plan project would bring to the East Whisman Precise Plan Area, close to the Middlefield Light Rail Station. This project represents a prime opportunity to implement shared City-VTA goals to intensify land use near transit and improve sustainable travel options. VTA encourages the City and applicant to explore opportunities to increase the density of the proposed uses in the Master Plan area beyond the current proposal over time, given the long duration of the project buildout.

> **Response C.1:** This comment suggests support for additional densification on the site but does not raise any issues with the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT C.2: Safety and Hazards

As VTA noted in our comments on the Notice of Preparation (NOP) for this environmental document, the 2019 CEQA Guidelines Appendix G checklist, Section XVII, calls for an analysis of potential hazards and safety issues. VTA has reviewed the safety analysis contained in the DSEIR and the MTA and we have the following comments:

Middlefield Light Rail Grade Crossing and Proposed Midblock Crossing B

As noted in our NOP comment letter, it is critical to determine the extent of queueing from nearby signalized intersections and if these queues will conflict with the light rail crossing at Middlefield Road. This is particularly important given the midblock pedestrian crossing of Middlefield Road ("midblock crossing B") proposed next to the light rail crossing, and the additional motor vehicle trips the project will generate. Under California law and other regulatory requirements, traffic signal pre-emption is a requirement when a traffic signal is within 200 feet of a railroad crossing, to minimize the possibility of any vehicles being on the trackway when a train approaches a crossing. Although the Logue Avenue intersection (228 feet away) and Ellis Street intersection (445 feet away) are more than 200 feet away from the crossing, the large size of this development may increase the queuing from these signalized intersections and possibly lead to hazards at the Middlefield Road light rail crossing.

Regarding queuing on the eastbound left turn approach to the Middlefield / Logue intersection, the MTA report states that "The project would increase the 95th percentile queue to 225 feet during the PM peak hour, which would extend past the storage lane by one vehicle… The extended queue is not expected to create any conflicts with the VTA rail safety operations as there are gate arms at the rail to prevent vehicles from approaching the crossing. However, to minimize the possibility of the eastbound vehicle queue extending to the LRT tracks, a signal should be installed for the midblock crossing B at the LRT tracks with preemptive signals that are interconnected and coordinated with the signal at Logue Avenue and Middlefield Road. A separate queuing analysis should be conducted to confirm

traffic signal coordination/operations" (MTA pp. 55-56). These recommendations are reiterated in the MTA section that discusses proposed midblock crossing B (MTA p. 60).

However, the DSEIR Transportation section makes no mention of the addition of a signal at midblock crossing B or the addition of signal preemption, interconnection and coordination. This omission is of concern given the chance of conflicts between vehicles and light rail operations at this crossing. To address safety impacts at the Middlefield Road light rail crossing, a mitigation measure should be added requiring the project to provide the necessary signal at the new mid-block crossing, and modifications to the Middlefield / Logue intersection to provide pre-emption, interconnection and coordination.

> **Response C.2**: The text on page 207 of the Draft SEIR has been revised to mirror the language in the MTA as noted in the comment above. The project will be required to implement the midblock crossing improvements recommended in the MTA, including the signalization at the Middlefield Road rail crossing. Additionally, as noted on page 33 of the Draft SEIR, the project would be required to obtain permits and submit applications pursuant to General Orders from VTA/CPUC on these improvements. These improvements would be reviewed pursuant to those General Order applications and any additional traffic, vehicle queuing, safety, and signal pre-emption requirements would be evaluated at the time of those General Order applications. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.3: Any modification to the Middlefield light rail crossing including the addition of a new parallel midblock crossing shall comply with CA MUTCD Section 8 guidance and with California Public Utilities Commission (CPUC) General Order 75 and 88 requirements. The potential mid-block crossing would require a thorough safety analysis and potential addition of new gates, channelization, and warning devices for pedestrian and bicyclist safety. Additional gate arms and push gates may be needed to prevent "wrong way" entrance from the sidewalk and bike lanes when the crossing protections are activated.

> **Response C.3**: The project shall comply with all applicable regulations, including the California Manual on Uniform Traffic Control Devices (MUTCD) and California Public Utilities Commission (CPUC) General Orders referenced in the above comment, for the proposed midblock crossing on Middlefield Road near the Middlefield Light Rail Station. Also, refer to Responses A.1 and C.2 for additional responses regarding compliance with the above referenced regulations and Response A.2 pertaining to safe design and safety standards. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.4: VTA Bus Duck-out on Middlefield Road West of Light Rail Crossing

As noted in the DSEIR (p. 207) and MTA (pp. 60-64), the City and VTA have had discussions about potential changes to the current duck-out bus stop on Middlefield Road west of the light rail crossing, due to the MPMP project. VTA has provided preliminary feedback on early proposals. As noted in the MTA report, modifications to this bus stop could have safety implications for pedestrians, bicyclists, or vehicles depending on the distance of the stop from the light rail crossing and proposed midblock

crossing B, whether buses stop in-lane or in a duck-out, whether a bus boarding island is provided, and whether a raised protected bicycle lane or buffered in-street bike lane is provided. To address safety impacts of modifying the VTA bus duck-out, a mitigation measure should be added requiring the project to provide necessary safety measures determined via coordination between the City, VTA and CPUC and through the CPUC GO 88-B process. In addition, VTA requests that the City coordinate with VTA regarding potential relocation of the bus stop on eastbound Middlefield Road east of Ellis Street to ensure safe operations with changes to the westbound duck-out and proposed midblock crossing B.

Response C.4: As stated on page 207 of the Draft SEIR, the preferred design of the bus stop on eastbound Middlefield Road (east of Ellis Street) along the project frontage has not been selected by VTA, CPUC, or the City and would require permits and approval from all three parties. The City and applicant will continue to coordinate with VTA (as well as the CPUC) regarding future modifications to the bus stop to ensure safe operations with changes to the westbound duck-out and proposed midblock crossing B. No mitigation is included or required as no CEQA impact has been identified. Also refer to Responses A.1, A.2 and C.2 that pertain to project compliance with the CPUC General Orders and safety standards. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.5: Bus Stop Safety Considerations

VTA Local Route 21 and the MVGo shuttle operate through the MPMP project area, and their routes and stop locations may be impacted by construction. Any route detours, stop closures or temporary stop relocations should be coordinated with VTA, and bus stop locations just before driveways or intersections should be avoided due to hazards from vehicles driving around a stopped bus and making a right hook turn.

The eastbound VTA Route 21 bus stop on Maude Avenue before Clyde Avenue has no paved boarding area and no sidewalk or crosswalk access. While the DSEIR and MTA state that the project would include pedestrian improvements such as “construction of wider sidewalks with landscaping along project frontages” (DSEIR p. 206), the documents do not address providing safe pedestrian access to this bus stop, which appears to be just beyond a parcel in the MPMP project area. VTA recommends that the City require the applicant to provide an accessible bus stop boarding area, sidewalk connection to the Maude / Clyde intersection, and crosswalk on the western leg of this intersection.

Response C.5: If project construction would temporarily affect VTA Local bus route 21 or MVGo shuttle operations or stop locations, the applicant shall coordinate with VTA. As part of subsequent site and building design review in the Master Plan, conflicts with driveways and bus stop locations will be reviewed by the City to ensure safe design.

The City cannot require the applicant to install a sidewalk or upgrade the eastbound VTA 21 bus stop on a property outside of the Master Plan area. However, with any permits for redevelopment or major improvements, the City can require the property owner of the parcel in front of where the stop is located to install a new sidewalk and comply with VTA bus stop requirements in place at that time. Additionally, as new

development occurs in the area, City staff can coordinate with VTA on whether the bus stop should be relocated and subsequently upgraded. This comment does not change the analysis, adequacy, or conclusions of the Draft SEIR.

COMMENT C.6: Safety at Bus Stops with Boarding Islands

The MTA states that "The project would implement Class IV protected bike lanes on Middlefield Road and Class II buffered bike lanes on Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue along the project frontages" (MTA p. 97). The Master Plan document states that "Subject to approval by the City of Mountain View and the VTA, the VTA bus stops on westbound Middlefield Road (just west of the VTA tracks) and westbound Maude Avenue (just west of Clyde Avenue) may be designed with floating passenger loading islands to eliminate conflicts between buses and bicyclists, following best practices for bike safety" (Master Plan p. 111). VTA supports improvements to bicycle accommodations at these locations, and notes that design of boarding islands needs to consider access and circulation for patrons with disabilities along with bus ramp deployment, and potential impacts to following traffic (i.e., waiting vehicles behind a stopped bus encroaching on the opposing lane to go around). Railings may be needed to separate bus patrons from the bike lanes. Please refer to VTA's Design Guidance for Bike Lanes and Cycle Tracks at Bus Stops and latest Transit Passenger Facilities Standards for in-lane stopping and cycle track configurations at bus stops. In addition, VTA requests that the City provide more information and coordinate with VTA regarding how bus stops will be treated at all locations planned for Class IV protected or Class II buffered bike lanes, including other stops on Middlefield Road, Logue Avenue and Maude Avenue.

Response C.6: Figures 15 through 17 on pages 61 through 64 of Appendix H to the Draft SEIR show possible design configurations for bus stop treatments and Class IV protected bike lanes along Middlefield Road. Design-level details of bus stops and Class IV and Class II bike lanes are not available at this time. When more design-level details are available, the City and applicant will continue to coordinate with VTA during design development of the bike lane and bus stops to ensure compliance with VTA's Design Guidance for Bike Lanes and Cycle Tracks at Bus Stops and Transit Passenger Facilities Standards where feasible. Design details for any bus stop enhancement on Maude Avenue are not available at this time, and the applicant will coordinate with VTA once design-level details are available for development in that area of the Master Plan. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.7: Safety Near Middlefield Light Rail Station and Along Light Rail Right-of-Way

It is likely that the pedestrian crossings of the tracks at the north end of the Middlefield station platform will need to have additional safety features (such as automatic swing gates and warning devices) added due to the increased volume of pedestrians generated by the development. Similar to the proposed mid-block crossing at the south end of the station, any modifications to grade crossings would require authorization through the CPUC General Order 88-B process, which VTA would be closely involved in.

Response C.7: The project shall comply with all applicable regulations, including the California Public Utilities Commission (CPUC) General Order 88-B process

referenced in the above comment, for the proposed midblock crossing on Middlefield Road near the Middlefield Light Rail Station. Refer to Responses A.2 and C.2 pertaining to safe design and safety standards. The comment does not raise any issues with the adequacy of the Draft SEIR; therefore, no further response is required.

COMMENT C.8: Currently the light rail Right-of-Way (ROW) has fencing protecting the ROW from unauthorized intrusion. Given the land use intensification and the linear open space proposed along the corridor, the development design should include clear and direct pedestrian paths and wayfinding to the station platform to prevent trespassing on the trackway. Whenever possible, pedestrian travel between the two sides of the trackway must be channeled towards the authorized crossings. The fencing along the western side of the light rail ROW should be raised if ball courts or other recreational uses are included in the linear park. Location of playgrounds and dog parks should be placed sufficiently away from the station entrance to prevent unattended children or pets from wandering onto the track zone. If trees are to be located outside the light rail ROW fencing, the City and applicant should consult with VTA to select species that are manageable for debris removal, to prevent overgrowth, and to ensure that their mature canopy does not come within 10 feet of the Overhead Contact System (OCS).

Response C.8: The project applicant will take into consideration the safety of the VTA light rail track bed, traction power, and railroad signal operations when planning and constructing any utility improvements near the VTA light rail tracks and performing any nearby excavation. As mentioned in the above comment, and identified on page 33 of the Draft SEIR, permits are required from VTA for any work within the VTA right-of-way or in proximity to the light rail station, where verification of the measures identified can be confirmed by VTA. Refer to Response A.2 pertaining to safety design and standards applicable to the project.

In addition, as mentioned in the above comment and on page 23 of the Draft SEIR, the project would include dedication of land for future development of a grade-separated bicycle and pedestrian overcrossing of the VTA light rail tracks. When this future overcrossing is proposed and designed, it would require review and approval from VTA and CPUC for encroachment over the light rail tracks. Separately, the Master Plan includes an optional private district utility system, which would require review and approval from VTA for encroachment of utilities under the VTA light rail lines. Additionally, VTA is required to inspect bus stop modifications at any VTA bus stop within the project boundary, including on Middlefield Road, and requires applicable permits for the proximity of construction activity to the light rail station, including safety upgrades such as those identified in the comment above. These future approvals and permits are identified on page 33 of the Draft SEIR. As required as part of the City's Conditions of Approval, prior to building permit issuance, the project applicant shall demonstrate that approval has been obtained from VTA, which includes incorporating design recommendations during the permit process to ensure safety near the light rail tracks and station. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.9: A pathway should be included for emergency vehicles and maintenance personnel along the light rail ROW, and authorized gate access to the trackway and other VTA equipment must be preserved. If there is parking alongside the fence line, bollards or other solid barriers need to be installed to prevent vehicles from impacting the fence into the trackway. The DSEIR notes that the proposed modifications to the bus duck-out west of the light rail crossing would include "a driveway with bollards to restrict access to emergency vehicles" (DSEIR p. 207). These bollards should be placed far enough to allow multiple emergency units to wait for the bollards to be unlocked and moved, and still be clear of the track zone, and preferably also clear of the bike lane and the bus stop. A turn around location should be included to prevent the need for emergency vehicles to reverse into traffic and onto the track zone.

> **Response C.9:** As described on page 23 in Section 3.2.7 Site Access, Circulation, Transit, and Parking of the Draft SEIR, vehicle (including emergency vehicle) access to the project site would be provided to the site from Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, Clyde Avenue. In addition, emergency vehicles can access the site via all service streets and via an emergency vehicle access path, doubling as a multi-use path, on the west side of the light rail tracks north of Middlefield Road. The emergency access road west of the light rail tracks is a 26-foot-wide driveable surface.[1] Non-emergency vehicle traffic would be prohibited within this emergency access road adjacent to the light rail tracks and no parking is proposed or would be allowed along the light rail fence line. Consistent with City fire requirements for emergency vehicle access, bollards or a similar alternative solid barrier would be installed at the entrance to prevent non-emergency vehicle access to the emergency access road. The bollards (or alternative barrier) would be designed to allow emergency vehicles to unlock and remove them in the event of an emergency and would be placed in a location clear of the track zone, bike lane, and bus stop. The emergency vehicle access is proposed to include through-access to prevent the need for emergency vehicles to reverse into traffic and onto the track zone. This comment does not change the analysis, adequacy, or conclusions of the Draft SEIR.

COMMENT C.10: Northbound US101 Off-Ramp / Ellis Street Intersection

The MTA report indicates that the MPMP project "would add 92 and 137 trips to the US 101 southbound off-ramp during the AM and PM peak hours, respectively, and 79 and 52 trips to the US 101 northbound off-ramp during the AM and PM peak hours, respectively… The project trips would contribute to the ramp operational/queueing issues identified in the EWPP EIR" (MTA p. 56). The Northbound US 101 Off-Ramp / Ellis Street intersection has an existing issue with the proximity of the crossing gates and stop bar limit line on the off-ramp approach. When the gates come down at this location, occasionally a vehicle on the off-ramp approach travels beyond the stop bar limit and gets hit by the closing gate. An increase in traffic due to the MPMP project would exacerbate this hazard. A reconfiguration of the striping and/or adjustment to the far-side clear out signal programmed visibility is needed at this location. VTA recommends that a mitigation measure be added to the DSEIR for the project to provide a fair share contribution to improvements to the striping and/or equipment at this

[1] City of Mountain View. *East Whisman Precise Plan*. November 2019. P. 152.

location. In addition, it is VTA's understanding that other improvements to the US 101/Ellis Street interchange area are being considered by the City and Google; VTA recommends that the City work with the applicant to provide a fair share contribution to any feasible improvements.

Response C.10: The City's recently adopted Nexus Fee Study (adopted by City Council on May 24, 2022) includes installation of new buffered bike lanes and undercrossing improvements to the Northbound US 101 Off-Ramp/Ellis Street intersection. VTA and the City can coordinate to determine if the suggested reconfiguration of the striping and adjustment to the far-side clear out signal could be completed with these improvements (which are currently anticipated to start construction in 2024-25). All projects within East Whisman Precise Plan, including the proposed project, are required to pay their proportional fair-share nexus fee that would fund improvements included in the Nexus Fee Study. This comment does not provide new information that would change the analysis, adequacy, or conclusions disclosed in the Draft SEIR.

COMMENT C.11: Other Safety and Hazards Considerations

The MPMP project development should take into account the following other considerations regarding safety and hazards:

- Any utilities that are being proposed under the VTA light rail trackway and any nearby excavation need to consider the safety of the track bed, traction power and railroad signals and provide protection from improper shoring, localized flooding, and stray electrical currents. As noted in DSEIR Section 3.5, encroachment of utilities below the VTA trackway will require VTA review and approval, and permits for construction activity in proximity to the rail right-of-way.
- The design of the future pedestrian-bicycle overcrossing must preserve emergency and maintenance access to the light rail crossover switches, be high enough to clear the OCS, and prevent objects from being thrown down the trackway.
- Appropriate accommodations for shared and personal bike and micro mobility devices should be located in convenient locations to prevent parking/abandonment of these conveyances inside the light rail station, bus stops or anywhere that can impede the track zone, bike lanes, pedestrian access or EVA lane.
- The design of the MPMP project should utilize Crime Prevention Through Environmental Design (CPTED) principles to make the area defensible and give users a sense of safety and security.

Response C.11: As noted on page 15 of the Draft SEIR, the proposed project includes dedication of land for future construction of a pedestrian-bicycle overcrossing of the light rail tracks. When this future overcrossing is proposed, the City will coordinate with VTA during design development of the bike-ped overcrossing to ensure compliance with requirements. Other design recommendations, to ensure safety within and adjacent to the light rail tracks, will be considered and incorporated into the proposed project, as feasible. Furthermore, during the design review process of each zoning permit under the proposed project, the City will consider designated locations for shared and personal bike and micro mobility devices and incorporation of Crime

Prevention Through Environmental Design principles. This comment does not change the analysis, adequacy, or findings of the Draft SEIR; therefore, recirculation of the Draft SEIR is not required.

COMMENT C.12: Bicycle Accommodations

The DSEIR and MTA both state that the project will implement a Class IV bikeway on Middlefield Road. However, these documents differ from the Master Plan, which identifies more roads as receiving Class IV bikeways. The Master Plan says Class IV bikeways will be built on "both sides of Maude Avenue west of SR 237" (p. 99) and "The Middlefield Park Project further proposes the implementation of Class IV separated bikeways along select segments of Middlefield Road, Logue, Maude, and Clyde Avenues" (p. 100). VTA requests that the DSEIR and MTA be revised to clarify which roadway segments will have Class IV bikeways implemented by the project.

Response C.12: Figure 7.5.1 on page 99 of Appendix A to the Draft SEIR has been revised for correctness. The description of the proposed Class IV bikeways is correct as described in the Draft SEIR and MTA and the current (August 2022) Master Plan matches. Refer to Section 5.0 Draft SEIR Text revisions for a revised figure showing the location of these proposed improvements.

COMMENT C.13: The DSEIR, MTA and Master Plan summarize the quantity of office building short-term bicycle parking provided by the MPMP project by referencing the standard in the East Whisman Precise Plan, which is based on square footage of office space. VTA recommends that the City and the applicant also reference VTA's Bicycle Technical Guidelines recommendations (a minimum of 4 short-term spaces per office building entrance, and a goal of 10 spaces per building entrance), and consider increasing the amount of short-term bicycle parking provided.

Response C.13: As noted on pages 25 and 211 of the Draft SEIR (as well as on page 91 and 93 of Appendix H to the Draft SEIR), the project, at minimum, would provide bicycle parking in accordance with the City's adopted East Whisman Precise Plan bicycle parking requirements. A comparison of the East Whisman Precise Plan bicycle parking requirements and the recommendations in the VTA's bicycle technical guidelines shows areas of similarity and overlap between the bicycle parking ratios. For example, the two guidelines share the same requirements for long-term bicycle parking for multi-family residential developments, while the East Whisman Precise Plan requirements are greater for short-term spaces for multi-family residential and retail sales/shopping center/financial institutions/supermarkets developments than VTA's guidelines. VTA's Bicycle Technical Guidelines for short-term office bike parking will be considered by the applicant and City at zoning permit review, when details on office building designs are available. This comment does not change the analysis, adequacy, or conclusions of the Draft SEIR.

COMMENT C.14: Vehicle Miles Traveled (VMT) and Transportation Demand Management (TDM)

VTA recognizes that the DSEIR finds that the MPMP project is consistent with the City's June 2020 VMT policy and its impacts would be less than significant in the area of VMT. However, VTA notes that the project will still generate a considerable amount of VMT and motor vehicle trips, so implementation of a robust TDM program will be important to address Greenhouse Gas reduction goals as well as to minimize impacts on the Congestion Management Program (CMP) system, including roadways, transit services, bike routes and pedestrian facilities.

VTA commends the applicant for proposing a robust TDM Plan for the MPMP project (documented in Appendix J to the MTA report) which builds on the TDM requirements established by the City in the East Whisman Precise Plan. VTA particularly supports the inclusion of strong TDM monitoring and data-sharing requirements, as this will be important as residential development is introduced to the East Whisman area, to demonstrate the effects of balancing jobs and housing in close proximity to each other. The DSEIR states that Residential TDM Monitoring "shall include parking counts to measure the peak parking demand and resulting parking rate" (DSEIR p. 27); VTA recommends that Residential TDM Monitoring should also include other measures such as surveys of residents, and collection of empirical data by third parties.

Response C.14: As noted on page 519 of Appendix H to the Draft SEIR and on page 93 of the East Whisman Precise Plan, the residential portion of the project (under either option) would be required to complete annual TDM monitoring conducted by a third-party including parking counts. The residential TDM monitoring, therefore, includes collection of empirical data by a third-party, as suggested by the above comment. No survey of residents is currently required as part of the East Whisman Precise Plan TDM monitoring requirements. This comment does not change the analysis, adequacy, or conclusions of the Draft SEIR.

COMMENT C.15: Congestion Management Program (CMP) System Effects and Offsetting Improvements

While VTA fully supports the City's use of VMT as the primary as metric for CEQA Transportation analysis in conformance with SB 743, and accompanying efforts to reduce VMT through land use mix and TDM requirements, as VTA noted in our comment letter on the NOP for this project, the City is still required to analyze the project's impacts on the CMP system using the adopted VTA Transportation Impact Analysis (TIA) Guidelines. While the MTA report does include analysis covering most topic areas in VTA's TIA Guidelines, the MTA does not identify specific improvements or contributions that would be required of the MPMP project in a number of areas with adverse effects.

Response C.15: The comment pertains to vehicle level of service which is not an impact on the environment under CEQA. Nonetheless, an analysis of the project's effects on study intersections, including those within VTA's Congestion Management Program is included on pages 31 through 66 of Appendix H to the Draft SEIR and summary of improvements identified and the project's contribution to those improvements is included on page 109 of Appendix H to the Draft SEIR.

The analysis confirmed that the project (which is consistent with the East Whisman Precise Plan) would contribute to and result in the same intersection level of service deficiencies identified and disclosed in the certified 2020 East Whisman Precise Plan Integrated Final EIR (Precise Plan EIR, State Clearinghouse [SCH] #2017082051). No new level of service deficiencies would result from the proposed project.

As noted on pages v and 2 of the Draft SEIR, the project tiers from the certified 2020 Precise Plan EIR. The project would contribute to the LOS deficiencies identified in the Precise Plan EIR to the intersections (CMP and non-CMP) identified in Table 30 of Appendix H to the Draft SEIR. The percentage of the project's contributions to these deficiencies were calculated based on the proportion of trips generated by the project to the total East Whisman Precise Plan trips as shown in Table 30 of Appendix H to the Draft SEIR.

The environmental impacts of the identified improvements were previously evaluated in the certified 2020 Precise Plan EIR. As discussed in Response C.10 above, this SEIR tiers off the EWPP EIR, and the project would implement a large portion of the adopted EWPP. The project would be required to pay its proportional fair-share nexus fee that would fund improvements located within the City limits and included in the City's recently adopted Nexus Fee Study (adopted by City Council on May 24, 2022). The other intersections are not located within the City of Mountain View jurisdiction and therefore, improvements at these intersections would not be funded by the project. The text of the Draft SEIR on page 210 has been revised to include a discussion of the project's payment of this nexus fee (refer to Section 5.0 Draft SEIR Text Revisions). This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT C.16: The East Whisman Precise Plan EIR disclosed that the buildout of the Precise Plan area would lead to adverse effects (at the time considered significant and unavoidable CEQA impacts) to numerous freeway segments near the plan area, as well as some CMP and local intersections. As noted in the 'Project Contributions to the EWPP' section of the MTA report (pp. 108-109), the MPMP project will contribute a considerable percentage of the overall trips expected from the buildout of the East Whisman Precise Plan. Therefore, VTA recommends that the project should provide voluntary, fair share contributions to nearby projects on the regional/CMP transportation system, as discussed in Attachment B to the East Whisman Precise Plan FEIR. Contributions could be directed to:

- Modifications to the SR 237/Maude/Middlefield ramps (which would include pedestrian and bicycle safety improvements at the ramp intersections)
- Improvements along SR 237 between US 101 and Mathilda Avenue which would help relieve a bottleneck affecting the Express Lanes segments east of Mathilda
- Ellis Street Shared Use path - future shared-use path planned on the west side of the Ellis Street at the US 101 undercrossing (a project led by the City of Mountain View)
- Bernardo Undercrossing of Caltrain and Central Expressway - joint effort by Sunnyvale, Mountain View, VTA, and Caltrain; this undercrossing will provide a vital future bike/ped

connection between the MPMP project and neighborhoods south of Central Expressway/Caltrain tracks

Response C.16: The certified 2020 Precise Plan EIR disclosed that the buildout of the Precise Plan (which includes the proposed project) would result in level of service deficiencies that conflicted with level of service policies, however these policy conflicts were not identified in the Precise Plan EIR as CEQA impacts pursuant to SB 743.

Appendix B to the East Whisman Precise Plan FEIR (Draft East Whisman Precise Plan) identified a new pedestrian and bicycle undercrossing of SR 237 between Middlefield and Central Avenue, and enhancement and widening of existing pedestrian and bicycle undercrossing of Highway 101 at the intersection of Ellis Street as planned transportation improvements to support growth in the Precise Plan area. Improvements along SR 237 between Highway 101 and Mathilda Avenue, and development of an undercrossing of Caltrain and Central Expressway at Bernardo Avenue, as noted in the comment letter, were not included in the East Whisman Precise Plan as planned transportation improvements. The Bernardo Avenue undercrossing identified in the last bullet in the above comment, however, is a joint project with the City, City of Sunnyvale, VTA and Santa Clara County Roads and Airports with multi-source funding reserved for the project.

The City recently adopted a Nexus Fee Study which presents a maximum allowable fee for all land uses to fund part of the costs of East Whisman Potable Water, Local Transportation, Sewer, and Recycled Water Improvements and requires the project (and other future development in the Precise Plan area) to pay a proportional fair-share contribution to identified roadway improvements. The undercrossing of SR 237 and enhancement and widening of the existing Highway 101 undercrossing are not included in the Nexus Fee Study. The City cannot require the project pay fees due to its contribution to level of service deficiencies because level of service is no longer an impact under CEQA. Additionally, some of the listed projects do not have identified improvements and/or associated cost estimates for the improvements with a fair-share contribution structure identified. Therefore, the project does not propose to pay voluntary contributions to these improvements. As discussed in Response C.16 above, the project would contribute to and result in the same level of service deficiencies that were identified in the certified 2020 Precise Plan EIR. The project would not result in any additional traffic above what was already accounted for in the Precise Plan EIR. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

D. Mountain View Whisman School District (dated June 9, 2022)

COMMENT D.1: The Mountain View Whisman School District ("District") hereby submits its comments on the City of Mountain View's ("City") Draft Supplemental EIR ("Draft EIR") for the Middlefield Park Master Plan ("Project"). The District's comments concern the need to provide assurances that funding for new schools to serve the area will be in place and the unstudied impacts of the project on the District's schools will be analyzed. As a result, the Draft EIR needs revision and recirculation to disclose the significant new information to the public and allow comment on the new information.

Although this letter is technical in nature due to the subject matter, the District wishes to emphasize that its comments are meant to help the City fully evaluate and mitigate the potential impacts to the schools – not to be critical or confrontational. Instead, the District desires to continue cooperating and collaborating with the City to ensure the continued high quality of life in the City and education in its schools.

Draft EIR Comments

Although the Project will generate almost 600 new students to the District's schools, the Draft SEIR fails to analyze any impacts on the District's schools except to say that the Developer Fees will mitigate any impacts. Since school facilities are a critical part of any residential development and are a critical part of this development, impacts on the District's schools should have been considered, and need to be considered, throughout the Draft SEIR impact categories.

Response D.1: The project's impact to schools was previously disclosed in the certified 2020 East Whisman Precise Plan Project Environmental Impact Report (SCH# 2017082051) (Precise Plan EIR). The Precise Plan EIR concluded that the elementary school students generated by the buildout of the Precise Plan (which includes development of the proposed project) would exceed the capacity of the local elementary schools and the payment of school impact fees would reduce impacts to a less than significant level, pursuant to Government Code Section 65995(h).

The discussion on page 185 of the Draft SEIR estimated that the project would generate 247 elementary, 153 middle, and 190 high school students for a total of 590 students. The number of students estimated to be generated by the project is consistent with the estimated number of students projected in the Precise Plan EIR. The project is required to pay school impact fees, which constitutes full and complete mitigation, pursuant to Government Code Section 65995(h).

No new or expanded school facilities are proposed; therefore, it is speculative to analyze the environmental impacts of additional school facilities. CEQA prohibits speculative analyses. A general discussion of potential impacts from construction of additional school facilities has been included on page 187 of the Draft SEIR (refer to Section 5.0 Draft SEIR Text Revisions). Based on previous analyses for new or expanded public school facilities on developed South Bay Area locations, typical measures are required to reduce potential effects to a less than significant level. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.2: I. Air Quality

The Air Quality analysis fails to analyze potential air quality impacts on the District's Jose Vargas Elementary School ("Jose Vargas"), which is only 0.38 miles from the Project site. The air quality analysis acknowledges that ROG emissions would exceed BAAQMD thresholds due to construction emissions. Thus, since Jose Vargas is in very close proximity to the project site and students will be walking, biking, and traveling to and from Jose Vargas, the ROG emissions' impacts on Jose Vargas and its students need to be analyzed and presented in a revised, recirculated draft EIR.

Response D.2: An analysis of the project's air quality impacts is included on pages 41 through 70 of the Draft SEIR (as well as detailed in Appendix C to the Draft SEIR). A discussion of the health effects associated with the project's significant ROG emissions is included on pages 49 through 53 of the Draft SEIR and concludes that the project would not cause a measurable increase in health effects associated with the project's ROG emissions.

Furthermore, the community health risk from project construction and operation emissions is discussed on pages 56 through 58 of the Draft SEIR. The analysis found that the health risks would be significant at the maximally exposed individual (MEI) (i.e., future residences located at 400 Logue Avenue within approximately 50 to 100 feet of the project site) and less than significant at all other sensitive receptors located further away (including receptors at Jose Vargas Elementary School located approximately 2,000 feet from the project site) with the implementation of standard conditions of approval and mitigation measure MM AQ-1.1. The Jose Vargas School is well beyond the Bay Area Air Quality Management District's (BAAQMD) 1,000-foot area of influence where potential impacts would be highest. In addition, students traveling to and from the school would either be outdoors or in automobiles when in route, and therefore, would not be exposed to significant construction-related air emissions for these short periods of time. This assessment was based on the BAAQMD 2017 Air Quality Guidelines, which are the latest guidance for assessing construction health risk impacts and operational ROG impacts. While new GHG emissions thresholds were adopted by BAAQMD on April 20, 2022 (after the NOP was released for this SEIR), those changes did not affect the 2017 criteria pollutant and health risk guidelines and thresholds.

This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.3: II. Public Services

The Draft EIR states that the Project would not result in substantial adverse physical impacts associated with the need for new or physically altered governmental facilities and that there is sufficient capacity at the schools to accommodate Project-generated students. (Draft EIR, p. 187) However, the Project would generate 247 elementary school students, 153 middle school students, and 190 high school students, an additional nearly 600 students to the District's schools.

Table 5.14-1 presents enrollment and capacity data for the District's Jose Vargas and Edith Landels Elementary ("Landels") Schools, Graham Middle School, and Mountain View High School

("Receiving Schools"). The analysis assumes that half of the new elementary school students would attend Jose Vargas and the other half would attend Landels. The District has its own process for determining which students attend which schools, and it is incorrect to assume that the students would be evenly split between Jose Vargas and Landels. Landels can only accommodate an addition 62 students without being over capacity, which means the other 185 students must attend Jose Vargas. The addition of 185 students would put Jose Vargas very near capacity. Similarly, Mountain View High School is already over capacity, and the Project will increase capacity at the high school by an additional 190 students. Thus, the Project actually exacerbates the impacts to the District's school facilities. The District is not equipped to house these excess students, and additional analysis is needed to analyze housing options for these students.

Accordingly, this section of the Draft EIR must be revised and recirculated in a new draft EIR.

Response D.3: Table 5.14-1 and page 185 of the Draft SEIR has been revised to reflect the distribution of elementary school students per the above comment (refer to Section 5.0 Draft SEIR Text Revisions). As shown in the revised Table 5.14-1 and noted in the above comment, based on current school capacity, current student enrollment, and the assumption that the project would be constructed and fully occupied immediately, Edith Landels Elementary School would be at capacity, Vargas Elementary School would be near capacity, and Mountain View High School would be above capacity with implementation of the project. However, the project would not be fully constructed or occupied immediately. The project would be constructed over a period of at least 8.5 years with residential buildings being constructed in Phases I and III (as noted on page 22 of the Draft SEIR). It is expected that student enrollment will fluctuate during the timeframe the project is built-out and that the estimated student generation from the project would not be realized immediately.

Refer to Response D.1 regarding how the project's impact to school is the same impact that was disclosed in the certified 2020 Precise Plan EIR. Pursuant to state law (California Government Code Section 65996(h), as disclosed in the Precise Plan EIR and the Draft SEIR for this project, payment of school impact fees constitutes full and complete mitigation for developments' impact on schools. As stated on page 182 of the Draft SEIR, per state law, the school district is responsible for implementing specific methods for mitigating school impacts. The City has no authority under state law to require additional contributions for this impact. As mentioned in Response D.1, a general discussion of potential impacts from construction of additional school facilities has been included on page 187 of the Draft SEIR (refer to Section 5.0 Draft SEIR Text Revisions).

As noted at the beginning of Section 4.0 of this document (on page 5), recirculation of an EIR is required when significant new information is added after public notice of the availability of the Draft SEIR for public review, when there are changes to the EIR in a way that deprives the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the project. Recirculation of the Draft SEIR is not required in this case because there is no change in environmental impacts. These comments do not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.4: The Draft EIR also states that payment of Developer Fees will fully and completely mitigate all school impacts and that the Project would contribute to the repayment of local general obligation bonds that would provide financing for capital projects at the schools assigned to the Project. Even though payment of Developer Fees legally mitigates capacity needs at schools, the reality is Developer Fees are sorely lacking to construct new classrooms. Further, payment of Developer Fees does not mitigate the Project's significant impacts on the District's schools concerning air quality, noise, pedestrian safety, utilities, and other environmental impact. These must be analyzed and provided for in a recirculated draft EIR.

Response D.4: Refer to Response D.3 above. Pursuant to California Government Code Section 65996(h), payment of school impact fees constitutes full and complete mitigation of a project's effect on school facilities under CEQA.

It is unclear what the commenter is referring to as "the Project's significant impacts on the District's schools concerning air quality, noise, pedestrian safety, utilities, and other environmental impact." Section 4.1 Air Quality in the Draft SEIR includes an air quality analysis that describes emissions generated by the project during construction and operation as well as the health effects associated with these emissions (refer to pages 36 through 69 of the Draft SEIR). A discussion of the project's noise impacts is included in Section 5.12 Noise on pages 165 through 178 of the Draft SEIR. A discussion of the project's transportation impacts are discussed in Section 5.16 Transportation on pages 195 through 212 of the Draft SEIR, with a detailed analysis of the project's effects on pedestrian and bicycle safety included on pages 96 through 101 of Appendix H to the Draft SEIR. The project's impacts to utilities are discussed in Section 5.18 Utilities and Service Systems on page 216 through 226 of the Draft SEIR.

This comment does not provide substantial evidence that the project would result in a significant air quality, noise, pedestrian safety, or utility impact on schools not already disclosed in the Draft SEIR. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.5: The City's General Plan Policy POS 5.2 states the City will collaborate with the District on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds; POS 5.3 states that the City will ensure school facilities are constructed to serve community needs to the extent allowed by state law; and POS 5.4 states that the City will collaborate with local school districts on their facility needs and provide information on development and growth trends. Because the District's schools are at or near capacity, and the project will increase capacity, in line with the above policies, the City should consult with the District to ensure that school facilities that need to be expanded as a result of the Project are adequately funded to meet these General Plan policies.

Response D.5: The City coordinates with local school districts on opportunities to support needs for facilities, open space, and programs, and has developed opportunities for assistance consistent with the General Plan policies noted in the comment. However, state law limits the extent by which a city can provide direct assistance to a

school district, as the school district is the entity responsible for implementing specific methods for mitigating school impacts. The City will continue discussions with the MVWSD on any opportunities to further support and assist. Refer also to Responses D.1 and D.3 above for additional responses pertaining to project impacts on school facilities. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.6: III. Recreation

Although the Recreation section discusses various General Plan policies to avoid significant impacts due to recreation impacts and discusses the City's recreational facilities, it omitted a discussion and analysis of the Project's impacts on the District's recreational facilities. Per the General Plan, the District owns about two-thirds of the City's park acreage, 85 out of 133 acres to be exact (General Plan, p. 145), and joint use agreements with the City allows use of 12 school park sites for recreational use outside of school hours. Further, Policy POS 5.2 requires the City to collaborate with the District on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds. Thus, with an increased population to the area, which deteriorates facilities, the Draft EIR needs to include an analysis of the Project's potential impacts on the recreational facilities at Jose Vargas since the site is less than half a mile from the Project site.

Response D.6: Using the City's park land requirement for new residential development in Chapter 41 of the City Code, the project is required to provide approximately 9.12 acres of parkland. As discussed on pages 188 and 192 through 194 of the Draft SEIR, although the project would increase demand for and use of existing parks and recreational facilities, the project includes 10.15-acres of new park land (2.87 acres of privately owned and publicly accessible open space to be developed by the applicant and 7.28 acres to be dedicated to the City for future parks). Text has been added to the Draft SEIR on pages 188 and 192 to clarify that the project would be subject to the City's Park Land Dedication Ordinance. Therefore, it was concluded in the Draft SEIR that the project would not result in significant impacts to recreational facilities including open space facilities at Jose Antonio Vargas Elementary School, as the project is providing the required amount of open space for new residential development closer to residents than the Jose Antonio Vargas Elementary School open space. Given the distance from the site and the limited function of the open space at the Jose Antonio Vargas Elementary School, any additional use of the Jose Antonio Vargas Elementary School open space by project residents would not be substantial. Furthermore, this same impact was disclosed in the certified 2020 Precise Plan EIR. This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.7: IV. Transportation

Although CEQA no longer considers vehicle delay as a significant impact, potential educational disruption and safety impacts are still required where increased traffic and congestion causes secondary impacts to students' education and safety hazards for pedestrians, bicyclists, and other traffic. The District is concerned with the Project's potential addition to, and delay on, bus and automobile drop-off and pick-up activities at the Receiving Schools. The added delay could disrupt the educational

delay and contribute to more frequent absences. Such disruptions would detract from the most effective educational program.

Considering that the Project will generate almost 600 new students into the District, the Draft EIR needs to include analysis of the safety impacts of increased vehicle traffic and student pedestrian traffic to and from the District's school sites. Specifically, impacts on the Receiving Schools should have been analyzed because these are the schools that would serve the Project site. Thus, the Draft EIR must be revised with an analysis of the Project's impacts on the vehicle movement to and from the Receiving Schools, impacts on pedestrian traffic to and from the routes and safety of students traveling to and from the school during construction and Project operation. Without the additional analysis, there is no way to confirm whether the Project will have less than significant transportation impacts upon the Receiving Schools' operations.

The General Plan's MOB 6.1 and 6.2 policies promote Safe Routes to School programs for all schools serving the City and prioritizes projects to ensure that bicycle and pedestrian safety improvements include projects to enhance safe accessibility to schools. Thus, the Draft EIR needs to include an analysis of the Project's potential student pedestrian impacts to ensure that the Project does not compromise adequate, accessible sidewalks, bike lanes, and protected crosswalks for the students walking or biking to and from the Project site from Jose Vargas.

Response D.7: As noted in the comment above, vehicle (including bus) delay is not an impact under CEQA. Pursuant to Senate Bill 743, level of service is no longer an impact on the environment under CEQA. The purpose of CEQA is to evaluate the environmental impacts of a project. CEQA does not require the evaluation of social effects, such as school attendance. For these reasons, the suggested effects of vehicle delay on educational delay and school absences in the above comment are not evaluated as CEQA impacts in the SEIR.

The environmental impacts associated with the estimated number of vehicle trips generated by the project is accounted for in the Draft SEIR analysis and the estimated project trips include trips to and from area residences and other land uses (including places of work) to pick up and drop off students at school.

As mentioned in Response D.4, a summary of the project's effects on pedestrian and bicycle safety is included on pages 195 through 212 of the Draft SEIR as revised (refer to Section 5.0 Draft SEIR Text Revisions). Although the project site is located adjacent to Middlefield Light Rail Station and bus stops, pedestrian access to some land uses would require crossing busy arterial streets which may be uncomfortable for some pedestrians. The project would increase pedestrian activity in the area and proposes wider sidewalks along the project frontages, as well as enhanced midblock crossings, and a network of multi-use paths through the site to enhance pedestrian safety within the project area. Similarly, bicycle activity in the area would increase as a result of the project as well. The project proposes new multi-use paths and buffered and protected bike lanes within the project area to provide for safer and more direct connections for bicycles between Ellis Street and Clyde Avenue and between Middlefield Road and Maude Avenue. For these reasons, the project would not result in adverse effects on pedestrian or bicycle safety. Also refer to the discussion under Impact TRN-3 on page

209 of the Draft SEIR that explains that the project would not substantially increase hazards due to a geometric design feature or incompatible use.

This comment does not change the analysis, adequacy, or the conclusions of the Draft SEIR.

COMMENT D.8: V. Conclusion

The District desires that the Project's potential significant impacts to the students, parents, faculty, and staff of the District's schools are fully analyzed and mitigated. Given the lack of analyses in the Draft EIR, the District respectfully requests that the Draft EIR be revised to include those analyses and mitigation measures, as set forth herein and recirculated per the requirements of the California Environmental Quality Act.

Response D.8: Refer to Responses D.1 through D.7 above. None of the comments provide new information, as defined by CEQA, that would change the analysis or conclusions disclosed in the Draft SEIR. Pursuant to CEQA Guidelines Section 15088.5, recirculation of the Draft SEIR is not required.

SECTION 5.0 DRAFT SEIR TEXT REVISIONS

This section contains revisions to the text of the Middlefield Park Master Plan Draft SEIR dated April 25, 2022. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

Page ix The following row has been **ADDED** after the Impact AQ-4 row:

Impact AQ-C: Both Project Options: The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact. **(New Impact [Less than Significant Cumulative Impact with Mitigation Incorporated])**	*Implementation of the 2017 CAP* Refer to Precise Plan EIR MM AQ-3.1, MM AQ-1.1 *Net Increase in Criteria Pollutants* Refer to MM AQ-1.1 *Exposure of Sensitive Receptors to Substantial Pollutant Concentrations* Refer to Precise Plan EIR MM AQ-3.1, MM AQ-1.1 and MM AQ-1.2

Page ix The following text has been **ADDED** to the second column of the Impact HAZ-2 row:

Impact HAZ-2: Both Project Options: The project (under either option) would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Same Impact as Approved Project. [Less than Significant Impact with Mitigation])**	**Precise Plan EIR MM HAZ-3.1: Both Project Options:** Prior to the start of any redevelopment activity, a property-specific Phase I ESA shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents. At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soils, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the project-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an

	Environmental Professional and submitted to the overseeing regulatory agency (e.g., EPA, RWQCB and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.

Page 5 The text under the Project Description heading has been **REVISED** as follows:

Implementation of the proposed project would allow for the demolition of the existing improvements (i.e., approximately 684,645 square feet of office uses, related surface parking areas, and landscaping) and development of:

- Up to 1,317,000 square feet of office uses (resulting in a net increase of 632,355 square feet of office square footage compared to existing conditions),
- Up to 1,900 residential units (including up to 380 affordable units), and
- Up to ~~30,000~~50,000 square feet of ground floor active uses (e.g., retail, community space, civic uses, neighborhood commercial, services, etc.) space~~, and~~.
- ~~Up to 20,000 square feet of community/civic uses.~~

Page 6 The text has under the Buildings subheading has been **REVISED** as follows:

The project includes the following buildings:

- Five office building locations (see buildings O1 through O5 on Figure 3.2-4)[2]
- Two affordable residential building locations (see buildings R4 AFF and R6 AFF on Figure 3.2-4)
- ~~Seven~~Five residential mixed-use building locations (see buildings R1 – ~~R6~~R5 on Figure 3.2-4)[3]
- Two, shared district parking structures (see Figure 3.2-4)
- One community/civic building located within Ellis Park

[2] Up to two buildings could be constructed on each building location for a total of up to 10 office buildings on-site.
[3] Up to two buildings could be constructed on each residential building location, excluding R6 AFF, for a total of up to 11 residential buildings.

Page 15 The text under Parks and Open Space heading has been **REVISED** as follows:

The MPMP project includes a network of privately-owned publicly accessible open space, dedicated public park land, and private open space. Four parks (Ellis Park, Maude Park, ~~CanopyWalk~~Bridge Open Space, and Gateway Park, totaling up to 10.15 acres) are planned within the project site as described below and shown in Figure 3.2-7.

- Ellis Park would be up to 2.87-acres of POPA open space located adjacent to Buildings R1, R2, O1, and the light rail tracks. It would include a plaza area with outdoor seating, recreational amenities, flexible open area for temporary uses and events, as well as a landscaped multi-use path connecting to a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The recreational amenities may include bike parking, exercise equipment, communal/educational garden, sport courts, and a 1,000 square foot community room/restroom building. Ellis Park would be constructed by the project applicant concurrent with Buildings R1, R2, and O1.
- The project applicant would dedicate up to 7.28-acres to the City of Mountain View for the future development of the remaining public parks (~~Canopy Walk~~Bridge Open Space, Maude Park, and Gateway Park). Design-level details for ~~Canopy Walk~~Bridge Open Space, Maude Park, and Gateway Park are unknown at this time; therefore, this document provides a programmatic analysis of these parks. Subsequent environmental review will be completed if required when the designs of these parks are known and proposed by the City.

The land dedicated to the City for ~~Canopy Walk~~Bridge Open Space is anticipated to include a future bicycle/pedestrian bridge overcrossing of the VTA light rail line. The future overcrossing would provide connection to the Hetch-Hetchy/TOD Trail to the west, through the project site into Sunnyvale via Maude Avenue to the east. Design-level details of the bridge overcrossing are unknown at this time; therefore, this document provides a programmatic analysis of the overcrossing and subsequent environmental review will be required when design-level details are known and proposed by the City.

Page 17 The text under Municipal Utilities has been **REVISED** as follows (including footnote 8):

The preferred option for the project is to connect to existing utility lines in Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, and Clyde Avenue for water, fire service water, wastewater, and stormwater service. The project would connect to the existing electrical transmission infrastructure for electrical service. ~~Ground floor retail areas of Buildings R1 and R2 would connect to existing PG&E natural gas lines in Ellis Street.~~[8] The remaining residential and commercial buildings on-site would be 100 percent electric. Based on the anticipated increase in load demand for the project, PG&E would install 12 kilovolt (kV) underground circuits to the project site via a connection at Ellis Street for distribution to the rest of the MPMP buildings. An existing private nitrogen gas line that runs through the north end of the project site would be relocated during project construction. Additionally, the project would include undergrounding of some existing electrical utility lines within the project boundaries. The City is currently analyzing the feasibility of extending the municipal recycled water system to the Precise Plan area. The feasibility report was not completed during the preparation of this EIR; therefore, recycled water is not included in the municipal utilities option for the project.

Footnote 8: ~~[8] Per City Code Chapters 8, 14, and 24, an exception to the City's Reach Code is required to include natural gas for retail uses.~~

Page 19 The text under the Building Heating and Cooling heading has been **REVISED** as follows:

Construction of the geothermal system would include drilling and installation of the vertical geo bores beneath each of the proposed buildings and connection of the distribution system. It is estimated that up approximately 2,820 vertical bores would be drilled on the project site. Each bore would be~~of~~ six inches in diameter, spaced 18 feet apart, and ~~would be~~ drilled approximately 85 to 110 feet bgs ~~of each proposed building~~.

Page 20 The text under the Microgrid System heading has been **REVISED** as follows (including Footnote 12):

The proposed buildings would be all electric – no natural gas would be used~~,~~. ~~With the potential exception of Building R1 and R2 where natural gas connections would be provided in the ground floors for commercial/restaurant uses.[12]~~

Footnote 12: ~~[12]Per City Code Chapters 8, 14, and 24, all new construction buildings are required to be electric. Natural gas may be used for commercial spaces and specialized equipment that cannot operate with electric service (e.g., a restaurant with a pizza oven) subject to City approval.~~

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Page 22 Text in the table on this page has been **REVISED** as follows:

Table 3.2-1: Construction Phasing for Proposed Project & District Systems Option

Phase	Buildings to be Constructed	Estimated Start Date	Estimated End Date
I	R1, R2, R6 AFF, and the southern half of Ellis Park	11/1/2022	05/01/2025
II	O1[1], O2, and northern half of Ellis Park	11/01/2024	07/13/2029
III	R3, R4, R4 AFF[2], and R5	01/01/2026	02/01/2030
IV	O3, O4, O5, P1, and P2	04/01/2026	04/19/2031

[1] If the District Utilities System Option is constructed, the CUP would be constructed with Building O1. The thermal wastewater treatment plant would be delivered to the site pre-manufactured and would be assembled within Building O1.

[2] Land parcel R4 AFF may be delivered to the City in Phase I, but construction is assumed to remain in Phase III.

Page 23 **ADD** the following bullet to the beginning of the bulleted list under the Site Access, Circulation, Transit, and Parking heading:

- Installation of ADA-compliant ramps at the Clyde Avenue/Maude Avenue and Logue Avenue/Maude Avenue intersections.

Page 25 The second to last row of the table on this page has been **REVISED** as follows:

Table 3.2-2: Precise Plan Bicycle Parking Requirements		
Land Use	**Short-Term**	**Long-Term**
Residential	1 space per 10 units	1 space per unit
Office	1 space per 20,000 square feet or minimum 4 spaces, whichever is greater	1 space per 2,000 square feet or minimum 4 spaces, whichever is greater
Neighborhood Commercial Uses (Retail/Community/Civic/Active Uses)	4 per 5,000 square feet or minimum 2 spaces, whichever is greater	1 per 5,000 square feet or minimum 2 spaces, whichever is greater
Source: City of Mountain View. *East Whisman Precise Plan.* November 2019. P. 90.		

Page 28 Text under the Zoning subheading has been **REVISED** as follows:

The project proposes to construct approximately 632,355 square feet of net new office space, up to 1,900 new residential units, up to ~~30,000 square feet of new retail space, and up to 20,000~~50,000 square feet of ~~community/civic space~~active use space (e.g. retail, community space, neighborhood commercial, civic, etc.), representing 31.6 percent of the two million net new square feet of planned office development, 38 percent of the planned 5,000 residential units, and 50 percent of the planned 100,000 net new square feet of neighborhood commercial space previously identified in the adopted Precise Plan. The project proposes the type and scale of development envisioned in the Precise Plan for the Mixed-Use and Employment Character Areas and would be required to comply with the applicable standards and guidelines in the Precise Plan.

Pages 32 The last and second to last rows of the table on this page has been **REVISED** as follows:

US Environmental Protection Agency (EPA)	Review of site contamination related to the Middlefield-Ellis-Whisman Superfund Site or other site contamination oversight, including any required remediation actions or protective measures for new construction. Review of site contamination related to the Hewlett-Packard and E/M Lubricants TCE groundwater plume.
~~Santa Clara County Department of Environmental Health (DEH)~~	~~Review and permits may be required if wells or soil borings are required (for environmental clean-up, for example) or if abandoned wells or septic tanks are proposed to be destroyed during construction of the project.~~

Page 33 The last and second to last rows of the table on this page have been **REVISED** as follows:

Valley Water (SCVWD)	Approvals of proposed geobores. Review and approval may be required if wells are required or if abandoned wells are proposed to be destroyed during construction of the project. Review and issue well construction, relocation, and destruction permits, including soil borings greater than 45 feet in depth.
California Public Utilities Commission (CPUC)	~~Approval of permits (potential GO 88B process) for the midblock crossing of Middlefield Road at Middlefield Light Rail Station, and safety upgrades. Some approvals may be in tandem with VTA approval.~~ In addition to the compliance with design criteria in the California Manual of Uniform Traffic Control Devices (MUTCD), the following regulatory CPUC General Orders (GO) may apply to the project for the midblock crossing of Middlefield Road at Middlefield Light Rail Station, safety upgrades, or crossings of the light rail tracks: • GO 26-D – regulations governing clearances on railroads and street railroads with reference to side and overhead structures, parallel tracks, and the crossing of public roads, highways, and streets • GO 72-B – rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads, and highways • GO 75-D – regulations governing standards for warning devices for at-grade highway rail crossings. • GO 88-B – rules for altering public highway-rail crossings • GO 95 – rules for overhead electrical line construction • GO 118 – regulations governing the construction, reconstruction, and maintenance of walkways adjacent to railroad trackage and the control of vegetation adjacent thereto. Some of these approvals may be in tandem with VTA approval.

Pages 42 and 43 The Standard Condition of Approval has been **REVISED** as follows:

Standard Condition of Approval with project-specific additions and recommendations from BAAQMD:

COA AQ-1.1: Both Project Options: ~~Basic~~ Air Quality Construction Measures. The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by BAAQMD to reduce fugitive dust emissions. There shall be a designated on-site coordinator and monitor to ensure implementation of the below dust control measures. Emission reduction measures will include, at a minimum, the following measures which also include additional measures identified ~~Additional measures~~ in the project-specific air quality analysis and ~~may be identified~~ by BAAQMD~~s appropriate, such as~~:

- When the air quality index forecast exceeds 100 for particulates for the project area and the reading exceeds 100 for particulates by 10:00 a.m. for the project area, prohibit grading activities for that day.
- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at a frequency of no less than two times per day in order to maintain adequate soil moisture for dust control. Dewatering effluent extracted from the site may be utilized for watering all exposed surfaces, if found to meet VOC and Fuel General Permit NPDES permit requirements pursuant to the Site Management Plan required per Precise Plan EIR MM HAZ-3.1 in Section 5.8 Hazards and Hazardous Materials.
- Minimize the amount of excavated material or waste materials stored at the site or cover them with tarpaulin.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and loaded material shall not extend above the walls or back of the truck bed.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Prohibit off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of Mountain View and the on-site coordinator/monitor regarding dust complaints. The on-site coordinator/monitor shall respond and take corrective action within 48 hours. BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph and visible dust extends beyond site boundaries.
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction adjacent to sensitive receptors. Wind breaks should have at maximum 50 percent porosity.

- Where applicable, vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. Dewatering effluent extracted from the site may be utilized for watering all exposed surfaces, if found to meet VOC and Fuel General Permit NPDES permit requirements pursuant to the Site Management Plan required per Precise Plan EIR MM HAZ-3.1 in Section 5.8 Hazards and Hazardous Materials.
- Excavation, grading, and ground-disturbing construction activities shall be phased in accordance with the phasing plan to reduce the amount of disturbed surfaces at any one time.
- Avoid tracking of visible soil material on the public roadways by employing the following measures if necessary: (1) Site accesses to a distance of 100 feet from public paved roads shall be treated with 6 to 12-inch compacted layer of wood chips, mulch, or gravel and (2) washing truck tires and construction equipment of soil prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Page 61 Text under Impact AQ-3 has been **REVISED** as follows:

As discussed under Impact AQ-1 above, project (under either option) would result in exposure of sensitive receptors near the project site to TAC emissions in excess of BAAQMD risk thresholds for excess cancer cases and annual $PM_{2.5}$ concentrations primarily from construction emissions. Implementation of mitigation measures Precise Plan EIR MM AQ-3.1, MM AQ-1.1, MM AQ-1.2, and conditions of approval COA AQ-1.1 and COA AQ-1.2 identified under Impact AQ-1 would reduce the health risk but not to a less than significant level, and therefore, the impact is significant and unavoidable. Project operations would not exceed the thresholds for cancer risk, annual $PM_{2.5}$ concentrations, and HI emissions. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**

Page 65 The text under the Section 4.1.2.2 Cumulative Impacts heading has been **REVISED** as follows:

Impact AQ-C:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact. **(New Impact [~~Less than~~ Significant, Unavoidable Cumulative Impact with Mitigation Incorporated])**

Pages 68 and 69 The text in rows for AQ-3, AQ-4, and AQ-C in the table has been **REVISED** as follows:

AQ-3	**Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations.	No	S	Precise Plan EIR MM AQ-3.1, MM AQ-1.1, and MM AQ-1.2	SU
AQ-4	**Project:** The project ~~(under either option)~~ would not result in other emissions (such as those leading to substantial odors) adversely affecting a substantial number of people.	Yes	LTS	None	N/A
	Project with District Utilities System Option: The project with District Utilities System Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No	S	MM AQ-4.1 and 4.2	LTSMM
AQ-C:	**Both Project Options:** The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact.	No	S	Precise Plan EIR MM AQ-3.1, MM AQ-1.1, and MM AQ-1.2	SU~~LTS~~

Abbreviations: S-Significant, LTS – Less than Significant, LTSMM – Less than Significant with Mitigation Incorporated, SU – Significant, Unavoidable Impact

Page 75 The text under the Impact AES-1 subheading has been **REVISED** as follows:

Additionally, the project includes design objectives for all building designs within the project area, which are consistent with the Precise Plan design guidelines and standards and the project exterior building, site lighting, and street lighting would be designed in accordance with City's Building Code, Public Works' Standard Design Criteria, other City regulations, and Caltrans requirements (if applicable). Furthermore, consistent with City standard procedures, the project would be required to comply with the following standard conditions of approval.

- ~~**Both Project Options:**~~ **Rooftop Deck Lighting.** Proposed lighting fixtures on the rooftop decks and courtyards shall not be visible from ground level on adjacent public streets. Any string lighting shall be designed to include shades to avoid light spillover and be screened so they are not visible from off-site. Limited pedestrian-scale/building-mounted lighting along pathways may be permitted subject to review and approval of photometric lighting plan submitted as part of the building permit drawings.

Page 111 The text under the Groundwater heading has been **REVISED** as follows:

Groundwater

The project site is located in the Santa Clara ~~Valley~~ Subbasin (DWR Basin 2-9.02), a groundwater subbasin that is ~~225~~297 square miles in area. The project site is not located within or adjacent to any groundwater recharge facilities used by Valley Water.

Soil borings were performed at depths ranging from 44.5 feet to 102.5 feet at select properties within the site and based on subsurface investigations, groundwater on-site ~~and~~ ranges~~d~~ from between six to 16 feet below ground surface (refer to Appendix F for more specific details on the subsurface investigations completed).

Page 125 The text under the Impact GHG-2 heading has been **REVISED** as follows:

- TDM requirements for ~~commercial~~nonresidential and residential development;

Page 130 The text under the Moffett Federal Airfield Comprehensive Land Use Plan (CLUP) subheading has been **REVISED** as follows:

The project site has an elevation ranging from ~~62~~60 amsl in the southeast corner of the site to ~~50~~47 feet amsl in the northwest corner. In addition to height, the Moffett Field CLUP restricts land use and density per acre within turning safety zones.

Page 135 The text under the Other Hazards subheading has been **REVISED** as follows:

The elevation of the project site ranges from ~~50~~47 to ~~62~~60 feet amsl and the proposed project would have a maximum height of 16 to 125 feet above grade, therefore, the proposed buildings would be reviewed for consistency with the 182-foot amsl threshold and, depending on the amsl at the building location, may require consultation with the FAA to determine if the project would create an avian hazard.[4]

Page 145 Text under Impact HAZ-5 has been **REVISED** as follows:

The project (under either option) proposes buildings ranging from 16 to 125 feet in height on a site with an elevation that ranges from ~~50~~47 to ~~62~~60 feet amsl.

[4] Santa Clara County, Airport Land Use Commission. November 18, 2016. *Comprehensive Land Use Plan: Moffett Federal Airfield.* Accessed November 16, 2021. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/ALUC_NUQ_CLUP.pdf

Pages 147, 148 Text under the Regulatory Framework heading has been **REVISED** as follows:

Subsequent to the publication of the NOP and circulation of the Draft SEIR ~~I~~in May 2022, ~~it is anticipated~~ the RWQCB ~~will consider~~ adopted ~~ion of~~ a renewed MRP. ~~If adopted, any~~ The proposed ~~new~~ development would be subject to the regulations under the renewed MRP.

Water Resources Protection Ordinance and District Well Ordinance

Valley Water operates as the flood control agency for Santa Clara County. ~~Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge.~~ Valley Water operates as the flood protection agency for Santa Clara County. Valley Water also provides stream stewardship and is the wholesale water supplier throughout the county, which includes the groundwater recharge program. Permits for well construction and destruction, ~~work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.~~ including borings 45 feet or deeper, are required under Valley Water's Well Ordinance 90-1. Under Valley Water's Water Resources Protection Ordinance, projects within Valley Water property or easements are required obtain encroachment permits.

2016 Groundwater Management Plan

The 2016 Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, which are located entirely in Santa Clara County. Valley Water manages a diverse water supply portfolio, with sources including groundwater, local surface water, imported water, and recycled water. About half of the county's water supply comes from local sources and the other half comes from imported sources. Imported water includes Valley Water's State Water Project and Central Valley contract supplies and supplies delivered by the SFPUC to cities in northern Santa Clara County. Local sources include natural groundwater recharge and surface water supplies. A small portion of the county's water supply is recycled water.

Local groundwater resources make up the foundation of the county's water supply, but they need to be augmented by Valley Water's comprehensive water supply management activities to reliably meet the county's needs. These include the managed recharge of imported and local surface water and in-lieu recharge through the provision of treated surface water, acquisition of supplemental water supplies, and water conservation and recycling.

Subsequent to the publication of the NOP for the project, the Board of Directors of Valley Water adopted the 2021 GWMP which replaces the 2016 GWMP as the comprehensive groundwater management plan for the Santa Clara and Llagas subbasins. The proposed project (under either option) would be subject to the provisions of the 2021 GWMP.

Page 150 Text under the Groundwater subheading has been **REVISED** as follows:

Groundwater

The Precise Plan area (including the project site) overlies the Santa Clara subbasin. The ~~225~~297 square mile Santa Clara groundwater basin provides municipal, domestic, industrial, and agricultural water supply to the area.

Valley Water's GWMP ~~prepared a Groundwater Management Plan~~ for the Santa Clara and Llagas subbasins (recently updated in 2021) ~~in 2016,~~ describe~~s~~ing its comprehensive groundwater management framework including objectives and strategies, programs and activities to support those objectives, and outcome measures to gauge performance. The GWMP ~~Groundwater Management Plan~~ is the guiding document for how Valley Water will ensure groundwater basins within its jurisdiction are managed sustainably. The Santa Clara subbasin has not been identified as a groundwater basin in a state of overdraft.

The project site is underlain by two aquifers located between two and 30 feet bgs and between 55 and 160 feet bgs, respectively.[5] Depth to groundwater on the project site varies between six to 16 feet bgs, as discussed in Section 5.6 Geology and Soils.

Flooding

The project site is located within Flood Zone X, an area with reduced flood risk due to a levee, which is not a Special Flood Hazard Area as identified by FEMA FIRM.[6] According to the FEMA FIRM, ~~F~~flood Zone X is defined as areas of "0.2% Annual Chance Flood Hazard. Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile." The FEMA FIRM also has an overlay designation on the project site designating it as an "Area with Reduced Flood Risk due to a levee." ~~an area determined to be outside the one percent and 0.2 percent annual chance floodplains, indicative of a minimal flood hazard.~~

Page 155 Text under Impact HYD-2 has been **REVISED** as follows:

In conclusion, with implementation of the above Precise Plan measures and condition of approval GEO-1.1, ~~for construction dewatering the~~ project (under either option) would not substantially decrease groundwater supplies or interfere with implementation of the sustainable groundwater management plan for the Santa Clara Valley Groundwater basin.

[5] Schlumberger. *2020 Annual Progress Report – Middlefield-Ellis-Whisman Fairchild and Regional Groundwater Remediation Programs, Mountain View, California.* April 15, 2021. Accessed October 11, 2021. https://semspub.epa.gov/work/09/100023585.pdf

[6] Federal Emergency Management Agency. Flood Insurance Rate Map, Community Panel No. 06085C0045H. Effective Date May 18, 2009.

Page 156 Text under Impact HYD-5 has been **REVISED** as follows:

Percolation of precipitation within recharge areas replenishes groundwater and contributes to the recharge of principal aquifers.[7] There are no recharge facilities, pump plants, or drinking water treatment plants in the Precise Plan area, and therefore, in the project site.[8]

Page 160 Text under the East Whisman Precise Plan subheading has been **REVISED** as follows:

The project (under either option) proposes non-residential FARs ranging from 0.39 to 1.0 and residential/mixed-use FARs ranging from 1.12 to 1.66 with maximum building heights of 16 to 123~~125~~ feet.

Page 161 Text under the Moffett Field CLUP subheading has been **REVISED** as follows:

The proposed land uses (office, parking, and ~~retail/community/civic space~~active uses) ~~and~~with densities of 200 people per acre or less are consistent with the CLUP as confirmed with Santa Clara County Department of Planning and Development on July 15, 2021.

Page 172 Text under the Construction Noise subheading has been **REVISED** as follows:

- ~~**Construction Practices and Noticing**~~ **Disturbance Coordinator**. The project applicant shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise.

Page 185 Text in the Table 5.14-1: 2019-2020 School Enrollment and Capacity on this page has been **REVISED** as follows:

Table 5.14-3: 2019-2020 School Enrollment and Capacity

School	Capacity	Enrollment	Estimated Number of Project-Generated Students
Vargas Elementary School[1]	492	293	~~123~~185*
Edith Landels Elementary School[1]	504	442	~~124~~62*
Graham Middle School[2]	1,294	871	153
Mountain View High School[3]	1,640	2,183	190

[7] California Department of Water Resources. *Santa Clara Valley Groundwater Basin, San Mateo Subbasin*. February 2004. and Santa Clara Valley Water District. *Groundwater Management Plan.* ~~November 2016~~November 19, 2021.

[8] Santa Clara Valley Water District. *Groundwater Management Plan.* ~~November 2016~~November 19, 2021. P 4-4.

Notes: * Approximate student generation per elementary school provided by Mountain View Whisman School District comment letter dated June 9, 2022. ~~assuming half of elementary students attend each school.~~

1 Cunningham, Elona. Jack Schreder & Associates, Inc. Personal Communication. October 19, 2021.

2 Westover, Rebecca. Principal, Graham Middle School. Personal Communication. January 19, 2022.

3 Mathiesen, Mike. Associate Superintendent, MVLASD. Personal Communication. December 9, 2021.

Page 187 Text under Impact PS-4 has been **REVISED** as follows:

The project (under either option) includes up to 1,900 residential units, which would generate approximately 4,045 residents.[9] It is estimated the project would generate a total of 247 elementary school students, 153 middle school students, and 190 high school students.[10] Based on ~~the~~ current capacity and~~,~~ enrollment at the local schools, and the estimated number of project-generated students at full buildout ~~at the local schools~~ (refer to Table 5.14-1), there is sufficient capacity at the schools to accommodate project-generated elementary and middle school students. However, the number of high school students generated by the project (under either option) exceed the existing high school capacity. Even without the addition of project-generated high school students, the high school is over capacity by 543 students. Per direct communication with MVLASD and as noted in Table 5.14-1, if the existing enrollment stays the same, the project's 190 high school students equates to 34 percent of the total number of students above the high school's existing capacity. Additional capacity at the high school will be provided once the planned Mountain View High School campus expansion is complete.[11]

Per the Precise Plan EIR and state law, the project shall pay school impact fees. The MVSD has a Level 1 fee program in place and the project would be subject to payment of applicable developer fees. Payment of the adopted developer fees by the applicant would, in accordance with Section 65995(h) of the California Government Code, fully and completely mitigate all school impacts. In addition, the project would contribute to the repayment of local general obligation bonds that would provide financing for capital projects at the schools assigned to the project.

The State Legislature provided authority for school districts to assess impact fees for both residential and nonresidential development projects. Those fees, as authorized under Education Code Section 17620(a) and Government Code Section 65995(b), are collected by municipalities at the time building permits are issued and conveyed to the affected school district in accordance with a defined fee structure. The Legislature has declared that the payment of those fees constitutes full mitigation for the impacts generated by new development.

[9] Resident generation estimates for the project (under either option) were calculated based on the service population estimates for the Precise Plan EIR Transportation analysis. The project (under either option) proposes 1,900 residential units, which is 38 percent of the residential development assumed in the Precise Plan. Therefore, project was assumed to generate 38 percent of the residents assumed. Source: Fehr and Peers. East Whisman Precise Plan Project-Level Transportation Analysis. August 2019. P. 172.

[10] Based on the student generation rates provided by the Jack Schreder & Associates. December 8, 2021. K-5 = 0.085
(0.308 affordable), 6-8 = 0.039 (0.247 affordable), High School = 0.047 (0.312 affordable).

[11] City of Mountain View. *East Whisman Precise Plan: Integrated Final Environmental Impact Report*. State Clearinghouse Number 2017082051. January 2020. P. 180.

No new or expanded school facilities are proposed at this time. In the event that new or expanded school facilities are proposed, they are subject to separate CEQA review. Based on previous analyses for new or expanded public school facilities on developed South Bay locations, typical measures similar to the conditions of approval identified in Sections 4.1 Air Quality, 5.3 Biological Resources, 5.4 Cultural Resources, 5.6 Geology and Soils, 5.8 Hazards and Hazardous Materials, 5.9 Hydrology and Water Quality, 5.12 Noise, and 5.17 Tribal Cultural Resources of this Draft SEIR would be required to reduce potential construction-related effects to less than significant levels.

Consistent with Government Code 65996 and the Precise Plan EIR, the project (under either option) would pay state-mandated school impact fees to offset impacts to local schools, reducing impacts to a less than significant level. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Page 188 Text under Impact PS-4 has been **REVISED** as follows.

The project (under either option) proposes a network of privately-owned publicly accessible open space, private open space, and land dedication for new public parks totaling 10.15 acres. Additionally, per the Precise Plan, the project (under either option) would be subject to the City's Park Land Dedication Ordinance and is a Master Plan that meets the requirements for the Neighborhood Park Master Plan area. Specifically, the project meets the requirements for a Neighborhood Park Master Plan because it identifies surrounding development and opportunity sites for a two- to three- acre park, dedicates land to the City for a neighborhood park, includes an illustrated park access network consistent with the Precise Plan Mobility Chapter, provides an implementation strategy, and is compliant with Moffett Field Comprehensive Land Use Plan noise compatibility policies. Project-related impacts to parks are discussed further in Section 5.15 Recreation below and are concluded to be less than significant. This is the same impact as disclosed in the Precise Plan EIR. **(Same Impact as Approved Project [Less than Significant Impact])**

Page 193 Text under Impact REC-1 and REC-2 has been **REVISED** as follows:

The addition of 10.15-acres of park land included in the project would offset the demand for recreational facilities by future employees and residents living and working on-site. The dedication of land and POPA open space and compliance ~~would be consistent~~ with the City's Park Land Dedication Ordinance and would reduce impacts to a less than significant level. For these reasons, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This is the same impact as disclosed in the Precise Plan EIR. **[Same Impact as Approved Project (Less than Significant Impact)]**

Page 207 Text under Transit Facilities has been **REVISED** as follows:

In order to accommodate a fire and emergency access lane for the project and accommodate a new midblock crossing on Middlefield Road, the project would be required to modify the existing VTA bus stop on Middlefield Road along the project frontage. The preferred design has not been selected by

VTA, CPUC, or the City and would require permits and approval from all three parties. The bus stop improvements would include:

- A new midblock pedestrian crossing to connect the north and south ends of an existing VTA multi-use path along the west side of the light rail tracks;
- A new bus shelter and bench;
- A driveway with bollards to restrict access to emergency vehicles;
- A 120-foot in-lane bus stop or bus duck-out (out-of-lane) stop (to be decided)*;*
- A raised protected bike lane along the bus stop or buffered on-street bike lane (to be decided)*;*
- A bus island for loading/unloading passengers (to be decided); and
- Maintaining the existing stop location or shifting the stop westward toward Ellis Street intersection (to be decided).

Once a preferred design is selected, the project applicant would be required to obtain permits from VTA/CPUC in accordance with applicable General Orders. These improvements would be reviewed pursuant to those General Order applications and any additional traffic, vehicle queuing, safety, and signal pre-emption requirements would be evaluated at the time of those General Order applications.

Page 210 Text under Vehicle Queuing has been **REVISED** as follows:

Pursuant to SB 743, LOS and corresponding vehicle queuing are no longer a significant impact under CEQA, therefore, improvements that increase vehicle queuing capacity are not required under CEQA. In addition, as noted above, the City of Mountain View does not have adopted significance thresholds for assessing vehicle queuing impacts. The queuing analysis for these movements is discussed in detail in Appendix H. The project ~~can, however, pay a proportional fair-share contribution to the necessary roadway improvements as a condition of approval. Otherwise, the City is currently undergoing a nexus study for the East Whisman Precise Plan to determine a new development impact fee that contributes towards roadway and other transportation improvements in the area, anticipated to be considered by the City Council in mid-2022. If adopted, the project could provide proportional fair-share with payment of the impact fee.~~ would pay its appropriate proportion to fund these improvements through the City's recently adopted Nexus Fee Study (approved by City Council on May 24, 2022, following circulation of this Draft SEIR).

Page 224 Text under the Electric Power, Natural Gas, and Telecommunications subheading has been **REVISED** as follows:

The project (without District Utilities System Option) would connect to existing electric power, ~~natural gas,~~ and telecommunications lines.

Page 225 Text under the Electric Power, Natural Gas, and Telecommunications subheading has been **REVISED** as follows:

The project without District Utilities System Option would connect to existing electric power, ~~natural gas,~~ and telecommunications lines, and would be adequately served by them.

Page 226 The last column in the UTIL-1 row in the table has been **REVISED** as follows:

UTIL-1	**Both Project Options:** The project (under either option) would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	Yes	S	Precise Plan EIR MM UTIL-1.1	LTS<u>MM</u>

Page 240 The title of the figure on this page has been **REVISED** as follows:

Figure 9.2-1: ~~Rearranged~~<u>Alternative or Smaller</u> Project ~~Alternative~~ Site

Appendix A Figure 7.5.1 on page 99 has been **REPLACED** with the following:

7.5 Bicycle network

Regional connections

Building on the bike network improvements identified in the EWPP and VTA's Santa Clara Countywide Bike Plan (2018), Middlefield Park reinforces access to key cross-region routes. Expanding the Hetch Hetchy Trail eastward into Middlefield Park provides a low-stress, off-street connection to the 21-mile-long Stevens Creek Trail. The Project proposes to dedicate land to the City of Mountain View to implement a Class I shared-use path between Ellis Street and Clyde Avenue via the future bridge across the VTA tracks and future multi-use path to be implemented by the City through Maude Park. The Project will provide a multi-use path on the north side of the O5/P1 buildings and on the south side of the P2 parking structure.

A new north-south shared-use path will also be implemented through Ellis Park, replacing the existing multi-use path parallel to the VTA tracks. The Project also proposes a new pedestrian mid-block crossing on Middlefield Road connecting the Ellis Park multi-use path to the existing multi-use path south of Middlefield Rd parallel to the VTA tracks and future protected bike lanes on Middlefield Road.

The Project proposes implementation of Class II buffered bike lanes on both sides of Maude Avenue west of SR 237. The proposed Maude Avenue improvements will connect to future Maude Avenue bikeway improvements into the City of Sunnyvale at SR 237 interchange.

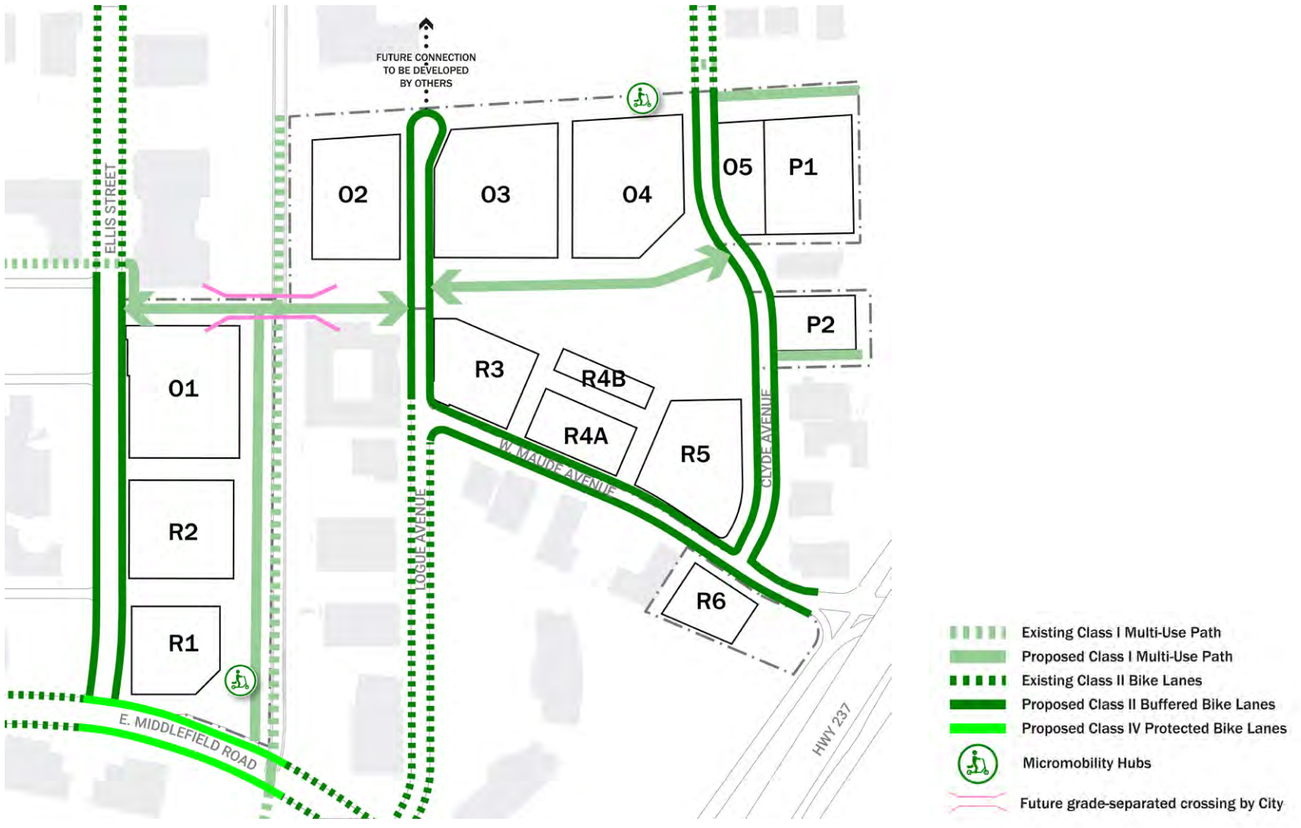

Figure 7.5.1 Proposed Bike Network Improvements

Appendix C Page 38 Mitigation Measure AQ-1 has been **REVISED** as follows:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at a frequency of no less than two times per day in order to maintain adequate ~~to maintain minimum~~ soil moisture for dust control ~~of 12 percent~~. ~~Moisture content can be verified by lab samples or moisture probe.~~

Appendix H Appendix H has been **REVISED** as follows.

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Middlefield Park Master Plan

Vehicle Miles Traveled and Multi-Modal Transportation Analysis

Prepared for:

David J. Powers & Associates, Inc.

~~April 13~~August 12, 2022

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Table of Contents

Executive Summary i
1. Introduction 1
2. Vehicle Miles Traveled Analysis 11
3. Existing Transportation Conditions 16
4. Motor Vehicle Operations Analysis 31
5. Site Access, Circulation, and Parking 67
6. Pedestrian, Bicycle, and Transit Facility Assessment 94
7. Other Transportation Issues 103

Appendices

Appendix A Traffic Counts
Appendix B Volume Summary
Appendix C Level of Service Calculations
Appendix D Background Developments
Appendix E Signal and Stop Warrant Analysis
Appendix F Pedestrian Midblock Crossing Treatment Analysis
Appendix G Pedestrian Flow Estimates
Appendix H ARUP Loading Space Demand Analysis
Appendix I Local Parking Surveys for Offices and Apartments
Appendix J Transportation Demand Management (TDM) Plan

List of Tables

Table 1 Signalized Intersection Level of Service Definitions Based on Average Control Delay 7
Table 2 Unsignalized Intersection Level of Service Definitions Based on Average Delay 8
Table 3 Existing Transit Services 20
Table 4 Existing Intersection Levels of Service 29
Table 5 Project Trip Generation Estimates 32
Table 6 Existing Plus Project Intersection Levels of Service 45
Table 7 Background Plus Project Intersection Levels of Service 47
Table 8 Signal Warrant Analysis Summary 49
Table 9 Queuing Analysis Summary 52
Table 10 Pedestrian Midblock Crossing Treatment Summary 58
Table 11 Driveway Queuing Analysis 72
Table 12 Driveway Signal Warrant Analysis Summary 73
Table 13 Required Loading Spaces for Residential Uses 76
Table 14 Required Loading Spaces for Non-Residential Uses 76
Table 15 Recommended Loading Spaces Based On Peak Demand 77
Table 16 Flex Zone Recommendations 78
Table 17 East Whisman Precise Parking Maximums and Minimums 82
Table 18 Office Parking Demand Based on Local Survey 84
Table 19 Retail/Community/Civic Use Parking Demand Based on ITE Rates 85
Table 20 Affordable Residential Unit Parking Demand by State Law 86
Table 21 Market Rate Residential Scenario 1: No Shared, No Unbundled Parking Demand 87
Table 22 Market Rate Residential Scenario 2: No Shared, With Unbundled Parking Demand 88
Table 23 Market Rate Residential Scenario 3: Shared and Unbundled Parking Demand 89

Table 24 Maude Park Shared Parking Analysis 90
Table 25 Recommended Vehicle Parking Rates 91
Table 26 Bicycle Parking Requirements 93
Table 27 Transit Vehicle Delay in Study Area 102
Table 28 Recommended Changes to Draft MPMP 105
Table 29 Construction Phase Improvments 106
Table 30 EWPP Intersection Improvements and Project Contributions 109

List of Figures

Figure 1 Project Location and Study Intersections 2
Figure 2 Proposed Area Plan 3
Figure 3 City of Mountain View Residential VMT Map 12
Figure 4 City of Mountain View Employee VMT Map 13
Figure 5 Existing Transit Services 19
Figure 6 Existing Bicycle Facilities 22
Figure 7 Existing Lane Configurations 24
Figure 8 Existing Traffic Volumes 27
Figure 9 Project Trip Distribution 35
Figure 10 Project Trip Assignment 36
Figure 11 Existing Plus Project Traffic Volumes 39
Figure 12 Background Traffic Volumes 41
Figure 13 Background Plus Project Traffic Volumes 43
Figure 14 Proposed Midblock Crossing Locations 59
Figure 15 VTA Bus Duck Out Option – Bus Turn-Out with Bus Island 62
Figure 16 VTA Bus Duck Out Option – In-Line Bus Stop with Bus Island 63
Figure 17 VTA Bus Duck Out Option – Bus Stop without Island 64
Figure 18 Proposed Driveway Access Points 68
Figure 19 Project Driveway Trips 71
Figure 20 Emergency Vehicle Access Routes 75
Figure 21 Proposed Flex/Loading Zones 79
Figure 22 Proposed Pedestrian and Bicycle Network, Shuttle Stops, and Microbility Hubs 95
Figure 23 Existing Pedestrian Quality of Service 98
Figure 24 Existing Bicycle Level of Traffic Stress 100
Figure 25 Street C Proposed by EWPP 104
Figure 26 Construction Phasing 107

Executive Summary

This report presents the results of the vehicle miles traveled (VMT) analysis and multimodal transportation analysis (MTA) conducted for the proposed Middlefield Park Master Plan (MPMP) in Mountain View, California. The plan area is located within the Mixed-Use Character Area and Employment Area North Character Area of the East Whisman Precise Plan (EWPP) with frontages on Middlefield Road, Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. The southern portion of the plan area is immediately west and adjacent to the Middlefield Light Rail Transit (LRT) Station operated by the Santa Clara Valley Transportation Authority (VTA). The project abuts the city limit with the City of Sunnyvale.

The MPMP proposes to demolish 23 existing buildings (totaling approximately 685,000 square feet), surface parking lots, and landscaping, to redevelop an approximately 40-acre plan area with 1,317,000 square feet (s.f.) of office space (632,000 s.f. net new) within five office buildings, up to 1,900 dwelling units within seven residential buildings, up to 41,000 square feet of ground floor retail space in the residential buildings, 9,000 square feet of ground floor community/civic uses, and two office parking structures[1]. Additionally, the project would dedicate land for new public parks and open space. The project would be developed in four phases. Site access to the proposed buildings in the MPMP would be provided via Ellis Street, Logue Avenue, Clyde Avenue, and Maude Avenue. As part of the development, Logue Avenue would be extended northward from the existing cul-de-sac to the boundary of the property of the City and County of San Francisco (referred to as the SFPUC or Hetch-Hetchy right of way) with a new cul-de-sac that would provide access to the new service streets along the northern MPMP area boundary.

Because the project is located within the EWPP area, for which an Environmental Impact Report (EIR) was completed in 2019, and is consistent with the EWPP, this MTA focuses on evaluating the project's transportation effects under near-term conditions. The project's cumulative transportation impacts were evaluated in the EWPP EIR.

The purpose of this report is to satisfy the requirements of the City of Mountain View, the Congestion Management Program (CMP) of the VTA, and the California Environmental Quality Act (CEQA). Per California Senate Bill 743 (SB743) and CEQA Guidelines, the study includes a VMT analysis. The MTA

[1] The Master Plan proposes ~~30,000 s.f. of retail and 20,000~~50,000 s.f. of active uses, which include a mix of retail, services, neighborhood commercial, and community/civic uses. ~~However, some~~ The land uses proposed ~~under the community/civic uses~~ would result in traffic patterns ~~more similar to retail uses. Therefore, this analysis~~that are conservatively assume~~d~~s to be 41,000 s.f. of retail and 9,000 s.f. community/civic uses.

also evaluates potential transportation effects of the project in accordance with the standards and methodologies set forth by the City of Mountain View and the VTA. The VTA administers the CMP.

VMT Analysis

The Mountain View VMT Policy establishes screening criteria for developments that are expected to cause a less-than-significant transportation impact under CEQA, which confirm no further VMT analysis is required. The proximity to transit screening criterion was developed based on the CEQA Guidelines Section 15064.3, subdivision (b)(1), which states lead agencies generally should presume that certain projects proposed within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT.

The project is located in a transit proximity area because it is located within a half mile of the Middlefield LRT Station, which is considered a major transit stop, and complies with the Mountain View VMT Policy. Additionally, the project is consistent with the EWPP EIR VMT analysis. Therefore, the project has a less-than-significant impact on VMT.

Project Trip Estimates

Trip generation estimates for the proposed project were based on trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition and the trip caps for new office developments in the EWPP area.[2] Internal and transit trip reductions were applied to the project according to the 2014 VTA *Transportation Impact Analysis (TIA) Guidelines*. After applying the applicable trip reductions and existing trip credits, the net new project trips would be 10,812 daily trips, including 998 AM peak hour trips (487 inbound trips and 511 outbound trips), and 1,061 PM peak hour trips (539 inbound trips and 522 outbound trips). The AM peak hour of traffic is between 7:00 and 10:00 AM, and the PM peak hour is between 4:00 and 7:00 PM.

Intersection Traffic Operations

The results of the intersection level of service analysis show the Grant Road/SR 237 and El Camino Real intersection would operate at LOS F under existing and background conditions. However, the added project traffic would not result in an adverse effect at the intersection. All other signalized study intersections would operate at an acceptable level of service.

At the unsignalized intersections, the results show the Ellis Street and Manila Drive intersection would operate at LOS F during the AM peak hour under background conditions with and without the project. The peak-hour volume signal warrant analysis indicates the intersection would meet the thresholds that warrant signalization under both existing and background conditions during both AM and PM peak hours. To address the deficiency, the EWPP EIR recommends signalizing the intersection with a protected left turn lane and shared through/right lane for each approach. Thus, the project should contribute to the improvement identified by the EWPP EIR~~. This contribution may be met~~ with payment of the East Whisman Precise Plan (EWPP) Development Impact Fee~~ currently being under review by the City (EWPP Nexus Study) and anticipated to be considered for adoption by City Council in mid-2022~~.

[2] For a consistent comparison with the EWPP EIR, the ITE 10th Edition Manual was used, in lieu of the 11th Edition Manual.

Turn Pocket Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis for intersections where the project would add a substantial number of trips to the left-turn movements. The queuing analysis indicates, the project would increase the 95th percentile queue for the southbound left-turn movement by three vehicles under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by six vehicles in the AM peak hour at the Ellis Street and Fairchild Drive intersection. The EWPP EIR analyzed the Ellis Street corridor at the US 101 interchange. The EIR identified during the AM peak hour, the southbound queue at Fairchild Drive would extend to the US 101 southbound ramp intersection and cause extensive queuing and vehicle delays on the southbound off ramp. However, the EIR indicates that due to right-of-way and funding constraints, there are no feasible improvements to improve operations and vehicle queuing along Ellis Street at the interchange. Since adoption of the EWPP EIR, the City has identified lane restriping and median modifications that can minimally improve this intersection, for which the improvement costs were included in the EWPP Development Impact Fee. So, payment of the fee by the applicant would contribute to these improvements.

At the Ellis Street and Middlefield Road intersection, the queuing analysis indicates the project would increase the 95th percentile queue for the eastbound left-turn movement by one vehicle under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by five vehicles in the AM peak hour and one vehicle in the PM peak hour. The EWPP EIR identifies the need for an improvement at this intersection, specifically along the eastbound direction to improve queuing. The EWPP EIR recommends adding an eastbound left-turn lane with overlap signal phasing. Thus, the project should contribute to this improvement, which could be met by payment of the EWPP Development Impact F~~fee should it be adopted~~.

Freeway Ramp Operations

A freeway ramp operations analysis was performed to identify the effects of project traffic on the vehicle queues at the metered on-ramps and the signal-controlled off-ramps during the AM and PM peak hours of traffic. At the US 101/Ellis Street interchange, the EWPP EIR identified that during the AM peak hour, due to the southbound queue at Fairchild Drive and the northbound queue at the US 101 Northbound Ramp extending to the US 101 Southbound Ramp intersection, the northbound and southbound off ramp queues are expected to frequently extend to the end of the ramps under background conditions, which could negatively affect freeway operations. During the PM peak hour, the US 101 southbound on-ramp is expected to be fully occupied and spill back onto Ellis Street, blocking the Fairchild Drive intersection. The US 101 northbound off-ramp queue is expected to extend to the end of the ramp due to the limited operational capacity of the westbound left-turn at the end of the ramp. The project trips would contribute to the ramp operation/queueing issues identified in the EWPP EIR. However, due to right-of-way and funding constraints, the EWPP EIR indicates that there are no feasible improvements to improve operations and queuing issues at the interchange.

Although the interchange cannot be physically improved, the project would improve pedestrian and bicycle access and connection by providing multi-use paths in the project area and improving bike lanes adjacent to and within the Master Plan. It would also expand the Google employee shuttle system (GBus) to the project area to reduce employee vehicle trips. These project features are expected to increase alternative modes of travel and reduce vehicle trips on the surrounding street system.

Traffic Control at Midblock Pedestrian Crossings

The project proposes midblock pedestrian crossings on Ellis Street north of Building O1, on Middlefield Road adjacent to the LRT tracks, on Logue Avenue north of Building R3, on Clyde Avenue south of

Buildings O4 and O5/P1, and on Clyde Avenue north of Building R5. Midblock crosswalks are proposed to maximize east-west pedestrian/bicycle connection from Ellis Street, north of Building O1, to Logue Avenue and the proposed open space (Maude Park) to Clyde Avenue.

Based on the estimated peak-hour traffic volumes under background plus project conditions and the pedestrian volumes estimated by the pedestrian flow model, the recommended traffic control treatments for the pedestrian midblock crossings are summarized below:

- **Ellis Street Crossing north of Building O1**: Provide a traffic signal on Ellis Street at the Quad Campus driveway (365 N Whisman Road/464 Ellis Street) and relocate the proposed crossing to the south leg of the intersection. Eliminate the existing Ellis Street crossing north of the Quad Campus driveway. This would result in the proposed crossing being located further north than currently proposed in the Master Plan.
- **Middlefield Road Crossing at the LRT tracks**: Provide a signal for the crossing generally parallel to the LRT tracks. Interconnect and coordinate the pedestrian signal with the signal at Logue Avenue and Middlefield Road. Provide signal preemption for Logue/Middlefield signals to further improve pedestrian crossing and rail operations.
- **Logue Avenue Crossing north of Building R3**: Install an active crosswalk with RRFB and install infrastructure (e.g., conduits, lighting, etc.) to facilitate the installation of a future signal for a future pedestrian-bicycle bridge to be designed and constructed by others.
- **Clyde Avenue Crossing south of Buildings O4 and O5/P1**: Install a signalized crosswalk at least 100 feet from the driveway to Building O5/P1.
- **Clyde Avenue Crossing north of Building R5**: Install an active crosswalk with RRFB at the P2 driveway, at least 300 feet from the Clyde Avenue crossing south of Building O5/P1.

Additional engineering analysis is recommended based on the actual pedestrian volumes and/or field observations of pedestrian delay gaps in roadway traffic flow to be conducted at the appropriate construction phase of the project, particularly for Ellis Street and Clyde Avenue.

Private Service Street Entrance/Driveway Operations

The service streets and driveways to the project buildings/garages are not expected to cause any on-site or on-street queuing issues, as the service street entrances/driveways are expected to provide a minimum queue storage of two vehicles for both inbound and outbound movements. It is unknown whether the driveway to Building O5/P1 would be located on the north or south side of the building. However, it is recommended the O5/P1 service street be on the north side of Building O5/P1 to align with the service street north of Buildings O3 and O4, creating an intersection.

The service street on Ellis Street to Buildings O1/R2 would meet the signal warrant as it provides access to garages serving Building O1 and Buildings R1/R2. None of the other driveways/private service street entrances would meet signal warrants under background plus project conditions during either of the peak hours.

To minimize the project's traffic effect on Maude Avenue and delay for vehicles accessing Building R6, the following design and control measures can be considered based on driveway location:

- If the driveway is located west of the intersection, then the driveway should be restricted to right-in and right-out only;
- If the driveway is located east of the intersection, between Building R6 and Gateway Park, then vehicles could make a left turn into the driveway without affecting traffic on Maude Avenue; or

- The driveway could be aligned with the Clyde Avenue/Maude Avenue intersection and the intersection would still operate at an acceptable level with an all-way stop.

Flex/Loading Zone Locations

The project proposes on-street flex zones and on-site loading zones in various locations for passenger pick-up/drop-off and delivery loading. The following flex/loading zones proposed by the project could be retained: (a) on-street flex zone at Building O2 on Logue Avenue, (b) on-site loading zones within the parking garages or service streets/driveways at Buildings R1/R2, R6, and O1.

The flex zone for the O2 building would be located in the on-street parking lane near the cul de sac. It is assumed the cul de sac would be large enough to accommodate truck maneuver within the cul de sac without interfering with the parking lane on Logue Avenue. It is recommended the flex zone be located directly adjacent to the cul de sac, so vehicles could access the flex zone easily.

It is recommended to relocate the proposed on-street flex zones at R3, R4/R4 affordable (R4 aff), R5, and O3, O4, and O5 to be on each respective site as on-site loading spaces or zones and provided adequate turnaround space within the service streets for vehicles to exit onto the adjacent roadways.

Parking

A parking study was conducted to evaluate appropriate parking ratios for the project, due to the Precise Plan's parking maximums and the applicant's request to evaluate a parking reduction for retail parking, unbundled residential parking, and reduced loading spaces. The study also included a shared parking analysis between residential and ~~retail/community space~~active use parking within each mixed-use building and between district office parking and park users. The study results provide recommended parking ratios based on land use and parking conditions (shared and/or unbundled).

Office Use Parking. The project should provide 2.0 spaces per 1,000 s.f. for office use, based on the surveyed utilization rates of similar office developments plus the availability of the GBus employee shuttle program. This parking rate is within the maximum parking of 2.9 spaces per 1,000 s.f allowed in the EWPP. Per the draft Master Plan, the project provides an adequate number of total parking spaces for office use within a district parking arrangement.

~~Retail/Community/Civic~~Active Use Parking. Based on the *ITE Parking Generation Manual*, the project should provide 3.68 spaces per 1,000 s.f. for ~~retail/community/civic~~active uses (e.g. retail, services, neighborhood commercial, and community/civic uses), which is a reduction from the required minimum of 4 spaces per 1,000 s.f for neighborhood commercial uses per the EWPP. In some parking scenarios discussed below, the draft Master Plan may not be providing enough parking per mixed-use building to accommodate the ground-floor ~~commercial~~ active uses and residential parking. For the P2 structure, 15 additional parking spaces would be required for the ~~retail/community~~active use space, and for the Ellis Park Fairchild Barns, an additional 4 spaces would be required in the R1/R2 garage.

Affordable Multi-Family Residential Use Parking. Based on the State Density Bonus Law (Assembly Bill 1763), the project is assumed to provide 0.5 spaces per affordable residential unit. Parking proposed in Building R4 affordable (R4 aff) would be 63 spaces more and for Building R6 would be 51 spaces more than what would be required by State Density Bonus Law.

Market-Rate Multi-Family Residential Use Parking. Multi-family residential parking for the market-rate units was evaluated in three scenarios, based on whether residential parking is unbundled and if ~~retail/community~~active use parking was shared with the residential parking in the same building. Each scenario identifies an appropriate parking rate and notes any parking count differences per building location based on the draft Master Plan.

Scenario 1: No Shared, No Unbundled Parking

The project should provide one space per unit (equivalent to 0.72 spaces per bedroom) for market rate units, based on the local surveyed utilization rates and adjacency to transit, retail services, and open spaces. This parking rate is within the maximum parking allowed of 1 space per studio/1 bedroom unit and 2 spaces per 2 or more-bedroom units in the EWPP.

Based on Scenario 1, assuming no shared parking with the ~~retail/community/civic~~active uses, the project would need to provide 1,689 parking spaces for the market-rate residential buildings, which is 351 spaces more than included in the draft Master Plan.

Scenario 2: No Shared, With Unbundled Parking

The project should provide 0.85 spaces per unit (equivalent to 0.61 spaces per bedroom) for market rate, based on the parking demand reduction found in the GreenTRIP Parking Database and CAPCOA *Handbook for Analyzing Greenhouse Gas Emission Reductions* for unbundled parking. This parking rate is within the maximum parking allowed of 1 space per studio/1 bedroom unit and 2 spaces per 2 or more bedroom units in the EWPP.

Based on Scenario 2, with fully unbundled residential parking provided separate from ~~retail/community~~active use parking, the project would need to provide 1,463 parking spaces for the market-rate residential buildings, which is 125 spaces more than included in the draft Master Plan.

Scenario 3: Shared and Unbundled Parking

The parking rate applied to the market rate units is the same as Scenario 2. Assuming that the ~~retail~~ active use parking could be used by residents at night, the project would need to provide 1,294 parking spaces for the market-rate residential buildings, which is 44 spaces fewer than included the draft Master Plan.

Park Use Parking. The project would not be required to provide separate parking for the public parks/open space. However, a shared parking analysis was conducted for the P1 and P2 garages to evaluate the number of parking spaces that could be shared between the office and park users outside of the office peak hours. The shared analysis shows the office parking demand would peak from 10:00 to 11:00 AM on weekdays when there would be no available parking spaces to share. During the rest of the weekday and weekend, when the office parking demand is lower, it is expected the available parking spaces in the parking garages would be sufficient to accommodate the parking demand for office and park users.

Loading Spaces. Based on a study prepared by ARUP, the project would provide 18 loading spaces for office use and 15 loading spaces for the ground-floor ~~commercial~~ active uses, in lieu of providing the zoning required 67 loading spaces for office use and 2 spaces for the ground-floor ~~commercial~~ active uses.

Pedestrian and Bicycle Operations

Ellis Street, Maude, Logue, and Clyde Avenues, and Fairchild Drive in the project area have a pedestrian quality of service (PQOS) score greater than 2, which indicates a low quality of service. The project would have an adverse effect on the PQOS because it would add new vehicle trips to these street segments. However, the project is a mixed-use development that provides a variety of land uses within close proximity and includes new pedestrian, bicycle, and multi-use paths with direct pedestrian~~s~~ and bicycle routes to transit/shuttle stops, jobs/housing/retail services, open space, existing trail networks, and street segments. The project also would provide enhanced midblock pedestrian crossings to ensure a continuous network of pedestrian facilities across streets and new on-street bike lane improvements. The

project would also provide wider sidewalks with landscaping for streets along the project frontages to enhance the pedestrian environment. Taking these factors into account, the project is expected to improve the PQOS along Ellis Street, Clyde Avenue, Maude Avenue, and Logue Avenue within the plan area.

Ellis Street and Middlefield Road in the project area have a bicycle level of traffic stress (BLTS) score greater than 2, which indicates that the bikeway is only comfortable for a more confident adult. The project would have an adverse effect on the BLTS because it would add new vehicle trips to these street segments. However, the project would improve the bike lanes along the project frontage on Ellis Street, Logue Avenue, Clyde Avenue, and Maude Avenue to a Class II buffered on-street bike lane, and upgrade Middlefield Road to Class IV protected bike lanes along the project frontage. Implementing the protected bike lanes on Middlefield Road and buffered bike lanes on Ellis Street is expected to lower the BLTS score, as protected/buffered bike lanes would provide more space between vehicular traffic and bicyclists.

Removal of Street C from the EWPP

The EWPP proposes a Street C that extends midblock between Logue Avenue and Clyde Avenue from Maude Avenue northward toward the Hetch Hetchy right of way and ends in a cul-de-sac. Because Street C would end in a cul-de-sac, it would not serve through traffic and would only serve properties along the new street. The project would provide direct access to the proposed buildings in the area bounded by Logue, Maude, and Clyde Avenues via new service streets on Maude Avenue (for buildings R3, R4/R4 aff, and R5), Clyde Avenue (buildings O5/P1), the new service street running along the northern boundary (buildings O2, O3, and O4). Therefore, Street C is not necessary for vehicular access to these buildings. Although Street C would provide pedestrian/bicycle midblock public access between Logue Avenue and Clyde Avenue, the project would also provide multiple north-south, multi-use paths/paseos for the public from Maude Avenue and the service street along the northern project boundary to the future City park. Thus, Street C is not necessary for vehicular or pedestrian circulation. Replacing Street C with multi-use paths/paseos would be consistent with the EWPP. As the City goes through the park design process for Maude Park, specific pedestrian and bicycle connectivity will be considered.

Other Transportation Issues

Hexagon has the following additional recommendations resulting from the site access and circulation evaluation.

- The EWPP proposes to remove parking along one side of Logue, Maude, and Clyde Avenues to provide buffered bike lanes. It is recommended that on-street parking on the east side of Logue Avenue, the north side of Maude Avenue, and the east side of Clyde Avenue along the project frontages be removed. Also, parking along the R6 street frontage at the intersection shall be removed to maintain intersection safety.
- Fifteen-foot curb segments adjacent to the driveways and service streets on Maude Avenue, Logue Avenue, and Clyde Avenue should be painted red to prohibit parking to provide adequate sight distance.
- The bike and scooter share hubs should be well-lit and positioned near (generally within 50 feet) of the main building entrances or at key destinations within the plan area.

1. Introduction

This report presents the results of the vehicle miles traveled (VMT) analysis and multimodal transportation analysis (MTA) conducted for the proposed Middlefield Park Master Plan (MPMP, plan area) in Mountain View, California. The plan area is located within the Mixed-Use Character Area and Employment Area North Character Area of the East Whisman Precise Plan (EWPP) with frontages on Middlefield Road, Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. The southern portion of the plan area is immediately west and adjacent to the Middlefield Light Rail Transit (LRT) Station operated by the Santa Clara Valley Transportation Authority (VTA) (see Figure 1). The project abuts the city limit with the City of Sunnyvale.

The MPMP proposes to demolish 23 existing buildings (totaling approximately 685,000 square feet), surface parking lots, and landscaping, to redevelop an approximately 40-acre plan area with 1,317,000 square feet (s.f.) of office space (632,000 s.f. net new) within five office buildings, up to 1,900 dwelling units within seven residential buildings, up to 41,000 square feet of ground floor retail space in the residential buildings, 9,000 square feet of ground floor community/civic uses, and two office parking structures (see Figure 2)[3]. Additionally, the project would dedicate land for new public parks and open space. The project would be developed in four phases. Site access to the proposed buildings in the MPMP would be provided via Ellis Street, Logue Avenue, Clyde Avenue, and Maude Avenue. As part of the development, Logue Avenue would be extended northward from the existing cul-de-sac to the boundary of the property of the City and County of San Francisco (referred to as the SFPUC or Hetch-Hetchy right of way) with a new cul-de-sac that would provide access to the new service streets along the northern MPMP area boundary.

Because the project is located within the EWPP area, for which an Environmental Impact Report (EIR) was completed in 2019, and is consistent with the EWPP, this MTA focuses on evaluating the project's transportation effects under near-term conditions. The project's cumulative transportation impacts were evaluated in the EWPP EIR.

[3] The Master Plan proposes ~~30,000 s.f. of retail and 20,000~~50,000 s.f. of active uses, which include a mix of retail, services, neighborhood commercial, and community/civic uses. ~~However, some~~The land uses proposed ~~under the community civic uses~~ would result in traffic patterns ~~more similar to retail uses. Therefore, this analysis~~that are conservatively ~~assumes~~ assumed to be 41,000 s.f. of retail and 9,000 s.f. community/civic uses.

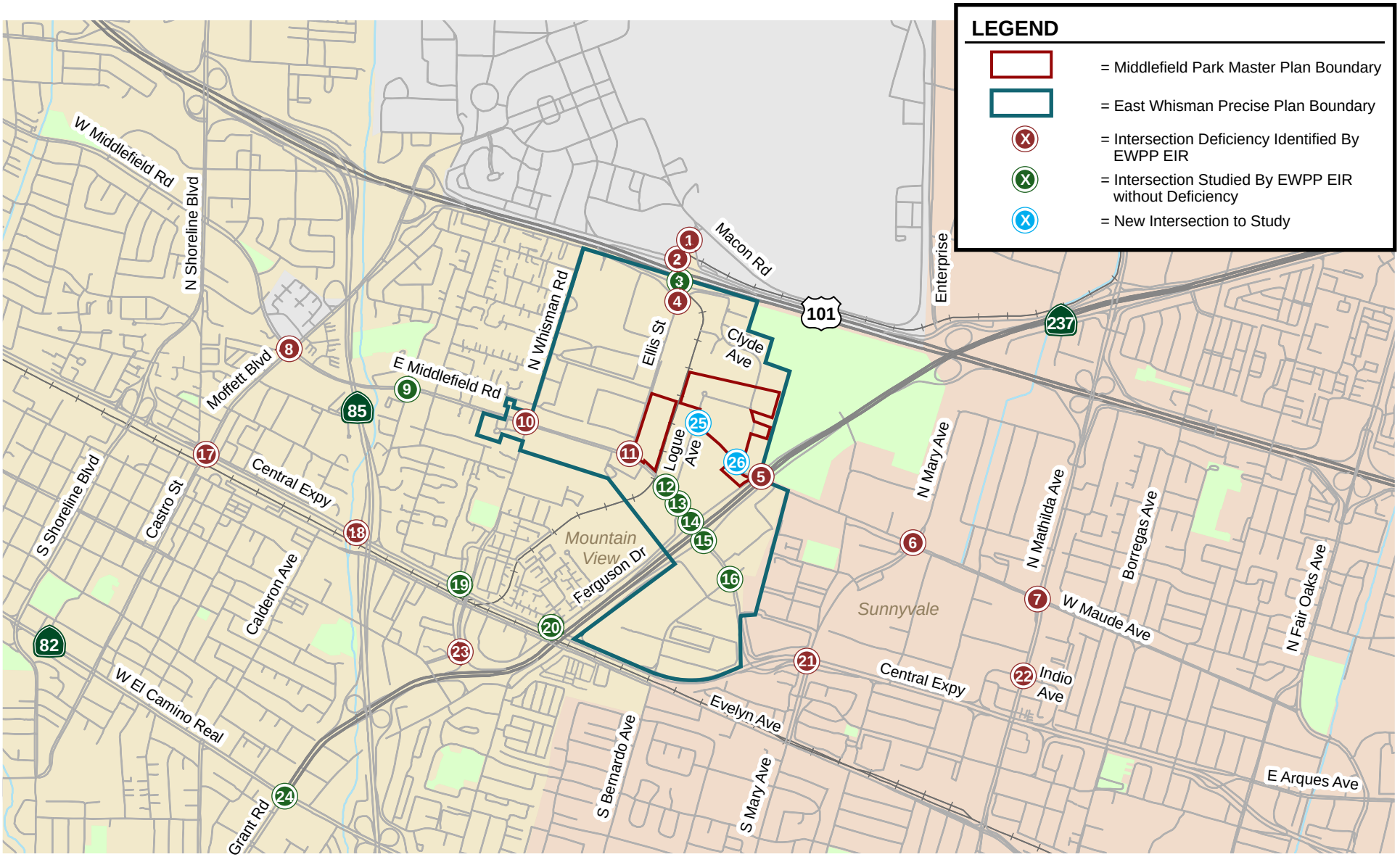


Figure 1
Project Location and Study Intersections

NORTH
Not to Scale

Source: Middlefield Park Master Plan

Figure 2
Proposed Area Plan

NORTH
Not to Scale

Scope of Study

The purpose of the MTA is to satisfy the requirements of the City of Mountain View, the Congestion Management Program (CMP) of the VTA, and the California Environmental Quality Act (CEQA). Per California Senate Bill 743 (SB743) and CEQA Guidelines, the study includes a VMT analysis. The MTA also evaluates potential transportation effects of the project in accordance with the standards and methodologies set forth by the City of Mountain View and the VTA. The VTA administers the CMP.

Vehicle Miles Traveled (VMT) Analysis

Per California Senate Bill 743, the California Natural Resources Agency, with assistance from the Governor's Office of Planning and Research (OPR), adopted new CEQA guidelines in December 2018. The new guidelines state that automobile delay, as measured by level of service (LOS), will no longer constitute a significant environmental impact under CEQA, and that VMT is considered the most appropriate metric to evaluate a project's transportation impacts. The new CEQA guidelines became effective July 1, 2020. The evaluation of VMT for this project is based on the City's VMT Policy adopted on June 30, 2020, and the EWPP EIR VMT analysis, which was prepared in 2018-19.

Multimodal Transportation Operations Analysis

The MTA includes an analysis of the traffic operational effects of the project on the key intersections and freeway ramps in the project area, an evaluation of traffic operational conditions at proposed midblock crossings and driveways, an evaluation of potential adverse effects on transit services and pedestrian and bicycle facilities, and a review of site access, circulation, parking, and conformance with the EWPP.

Study Intersections

The following 26 study intersections (see Figure 1) were selected based on the intersections studied in the EWPP EIR and in accordance with VTA's *Transportation Impact Analysis (TIA) Guidelines* (October 2014). The intersection list was reduced by removing intersections that did not have a level of service deficiency identified in the EWPP EIR and by removing intersections where the project is not expected to add 10 trips or more per lane. Two unsignalized intersections (#25 and #26) that were not studied in the EWPP EIR but are within the project vicinity and would provide primary access to the project sites were added to the study.

1. Ellis Street and Manila Drive (Mountain View)
2. Ellis Street and US 101 Northbound Ramps (Mountain View)
3. Ellis Street and US 101 Southbound Ramps (Mountain View)
4. Ellis Street and Fairchild Drive (Mountain View)
5. SR 237 Ramps and Maude Avenue (Mountain View)
6. N. Mary Avenue and Maude Avenue (Sunnyvale)
7. W. Maude Avenue and N. Mathilda Avenue (Sunnyvale / CMP)
8. Moffett Boulevard and W. Middlefield Road (Mountain View)
9. Easy Street and E. Middlefield Road (Mountain View)
10. N. Whisman Road and E. Middlefield Road (Mountain View)
11. Ellis Street and E. Middlefield Road (Mountain View)
12. Logue Avenue and E. Middlefield Road (Mountain View)
13. Ferguson Drive and E. Middlefield Road (Mountain View)
14. SR 237 Westbound On-Ramp and E. Middlefield Road (Mountain View)
15. SR 237 Eastbound Off-Ramp and E. Middlefield Road (Mountain View)
16. Bernardo Avenue and E. Middlefield Road (Mountain View)
17. Moffett Boulevard and Central Expressway (Santa Clara County / CMP)
18. SR 85 Southbound Off-Ramp and Central Expressway (Santa Clara County)

19. Whisman Station Drive and Central Expressway (Santa Clara County / CMP)
20. Ferguson Drive and Central Expressway (Santa Clara County / CMP)
21. N. Mary Avenue and Central Expressway (Santa Clara County / CMP)
22. N. Mathilda Avenue and Indio Avenue (Sunnyvale)
23. S. Whisman Road and SR 237 Westbound Ramps (Mountain View)
24. Grant Road/SR 237 and El Camino Real (Mountain View)
25. Logue Avenue and Maude Avenue (Unsignalized) (Mountain View)
26. Clyde Avenue and Maude Avenue (Unsignalized) (Mountain View)

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of traffic. Locally, the AM peak hour of traffic is usually between 7:00 and 10:00 AM, and the PM peak hour is typically between 4:00 and 7:00 PM. It is during these periods that the most congested traffic conditions occur on an average weekday.

Intersection traffic conditions were evaluated for the following scenarios:

- ***Existing Conditions.*** Existing AM and PM peak-hour traffic volumes were obtained from turning-movement counts conducted in 2019 and 2020 pre-COVID-19. New turning movement counts were conducted for intersections with counts older than 2019 and for three intersections with recent counts to be used as baselines. A baseline adjustment factor was applied to the new counts to adjust to typical conditions (pre-COVID-19). A growth rate of 2.5 percent annually was applied to adjust preexisting traffic counts to a 2021 condition.
- ***Existing Plus Project Conditions.*** Existing plus project traffic volumes were estimated by adding the additional traffic generated by the project.
- ***Background Conditions*.** Background traffic volumes were estimated by adding to existing traffic volumes the projected volumes from approved but not yet constructed developments in the vicinity of the project. Lists of approved but not yet constructed developments were obtained from the Cities of Mountain View and Sunnyvale.
- ***Background Plus Project Conditions.*** Background plus project traffic volumes were estimated by adding the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project adverse effects.

Midblock Crossing Locations

The study also evaluated five proposed midblock bike/pedestrian crossings on Ellis Street, Middlefield Road, Logue Avenue, and Clyde Avenue (see Figure 2). These midblock crossings were evaluated to determine the best types of traffic control based on the anticipated roadway traffic and number of pedestrians.

A. Midblock crossing on Ellis Street north of Building O1
B. Midblock crossing on Middlefield Road at the VTA light rail tracks
C. Midblock crossing on Logue Avenue north of Buildings R3
D. Midblock crossing on Clyde Avenue south of Buildings O4 & O5/P1
E. Midblock crossing on Clyde Avenue north of Buildings R5

Private Service Street Entrance/Driveway Intersections

The proposed private service street entrances/driveways on Ellis Street, Maude Avenue, and Clyde Avenue (see Figure 2) were evaluated for intersection traffic operations, as listed below. ~~These~~ All private street entrances were evaluated as stop-controlled intersections with signal warrant analysis.

1. Private service street entrance on Ellis Street between Buildings O1 and R2
2. Driveway entrance on Ellis Street at Buildings R1 and R2
3. Private service street entrance on Logue Avenue for Building O2
4. Private service street entrance on Logue Avenue and Clyde Avenue for Buildings O3 and O4
5. Private service street entrance on Maude Avenue between Buildings R3 and R4/R4 affordable (R4 aff)
6. Private service street entrance on Maude Avenue between Buildings R4/R4 aff and R5
7. Driveway entrance on Maude Avenue for Building R6
8. Private service street entrances on Clyde Avenue for Buildings O4 and O5/P1
9. Driveway entrance on Clyde Avenue to P2

Study Freeway Ramps

Based on VTA's *TIA Guidelines*, a transportation analysis should include a queuing analysis for freeway on-ramps with existing or planned ramp meters and off-ramps controlled by signals at junctions with local streets. The US 101/Ellis Street, SR 237/Maude Avenue, and SR 237/Middlefield Road interchanges provide access to the freeway system from the project area. Therefore, a freeway ramp traffic operations analysis was conducted for these interchanges.

Freeway Segments

Freeway segment analysis was not included for the study because the project is within the development and trip assumptions of the EWPP, for which the freeway segment deficiencies have been identified by the EWPP EIR.

Other Transportation Issues

The study includes an evaluation of potential operational deficiencies to transit services and pedestrian and bicycle facilities, and a review of vehicular site access, truck access and circulation, and parking. In addition, a review of the removal of Street C from the EWPP was conducted.

Intersection Operations Analysis Methodology

This section presents the methods used to determine traffic conditions at the study intersections. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, the City of Mountain View, the EWPP, and Google Earth. The following data were collected from these sources:

- Intersection traffic volumes,
- Lane geometries,
- Signal timing and phasing, and
- A list of approved but not yet constructed developments.

Intersection Level of Service Methodologies and Standards

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays.

Signalized Intersection

The Cities of Mountain View and Sunnyvale evaluate level of service at signalized intersections based on the 2000 *Highway Capacity Manual (HCM)* level of service methodology. This HCM method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. This average delay can then be correlated to a level of service. Table 1 presents the level of service definitions for signalized intersections.

Table 1
Signalized Intersection Level of Service Definitions Based on Average Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B+ B B-	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0
C+ C C-	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0
D+ D D-	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lenghts, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0
E+ E E-	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p10-16.
VTA Traffic Level of Service Analysis Guidelines (June 2003), Table 2.

This study utilizes TRAFFIX software to determine intersection levels of service based on the 2000 HCM methodology. Since TRAFFIX is approved by VTA as the level of service analysis software for CMP signalized intersections, the Cities of Mountain View and Sunnyvale employ the CMP defaults values for the analysis parameters. TRAFFIX software was used to analyze intersection operations and intersection adverse effects based on the increases in critical-movement delay and the volume-to-capacity ratio (v/c) between no-project and project scenarios.

According to the City's February 2021 MTA Handbook, the standard for signalized intersections is LOS D, except for CMP intersections, County Expressway intersections, and intersections in the Downtown and San Antonio Center planning areas in Mountain View, where the standard is LOS E. Therefore, the LOS D standard applies to all City-controlled intersections.

The City of Sunnyvale has set forth LOS D as the minimum standard, except at CMP intersections and intersections on roadways considered "regionally significant" within Sunnyvale, which have a standard of LOS E. Study intersections within Sunnyvale along Central Expressway and Mathilda Avenue are considered regionally significant.

Unsignalized Intersections

Level of service analysis at unsignalized intersections is generally used to determine the need for modifications in the type of intersection control (i.e., all-way stop or signalization). As part of the evaluation, traffic volumes, delays and traffic signal warrants are evaluated to determine if the existing intersection control is appropriate.

For unsignalized intersections, level of service depends on the average delay experienced by vehicles on the stop-controlled approaches. For side street stop-controlled intersections (i.e., two-way or T-intersections), operations are defined by the average control delay experienced by vehicles entering the intersection from the stop-controlled approaches on minor streets or from left-turn approaches on major streets; the level of service is reported based on the average delay for the worst approach. For the all-way stop-controlled intersections, the level of service is based on the average delay for all the intersection approaches. The level of service definitions for unsignalized intersections are shown in Table 2. This study utilizes TRAFFIX software to determine intersection levels of service based on the 2000 HCM methodology for unsignalized intersection.

The City of Mountain View does not have an adopted level of service standard for unsignalized intersections. However, the City strives to maintain LOS D for unsignalized intersections.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Average Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	10.1 to 15.0
C	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

Traffic Signal Warrant

An assessment of the need for signalization was conducted for the unsignalized intersections. For this study, the need for signalization is based on the Peak Hour Volume Warrant (Warrant 3) described in the

California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD), Part 4, Highway Traffic Signals, 2014. This method provides an indication of whether traffic conditions and peak-hour traffic levels are, or would be, sufficient to justify installation of a traffic signal. Note that this is just one tool used to evaluate whether installation of a traffic signal would be justified. Additional analysis is recommended and may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions. Ultimately, the City's professional engineering judgment will be used in the final determination of traffic control devices and improvements.

Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at study intersections where the project would add a substantial number of vehicle trips to the left-turn movements. The analysis provides a basis for estimating future left-turn pocket storage requirements at the study intersections and is presented for informational purposes only, since Mountain View has not defined a policy related to queuing. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

P (x=n) = probability of "n" vehicles in queue per lane
n = number of vehicles in the queue per lane
λ = average # of vehicles in the queue per lane (vehicles per hr per lane/signal cycles per hr)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles for a particular left-turn movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the left-turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at intersections.

For signalized intersections, the 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles or a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Thus, turn pocket storage designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time for a signalized movement. Vehicle queuing at unsignalized intersections is evaluated based on the delay experienced by each turning movement.

Definition of Adverse Operational Effects

Adverse operational effects on signalized intersections are based on the Cities of Mountain View and Sunnyvale and CMP level of service standards. For the unsignalized intersections, the City of Mountain View has applied adverse effect criteria in other traffic studies even though there is no formally adopted level of service policy for unsignalized intersections.

Signalized Intersections

According to the Cities of Mountain View and Sunnyvale and CMP level of service standards, a development is said to create an adverse operations effect on traffic conditions at a signalized intersection if, for either peak hour, either of the following conditions occurs:

1. The level of service at the intersection drops below its respective level of service standard (LOS D or better for all local intersections in Mountain View and Sunnyvale and LOS E or better for CMP and regionally significant intersections in Sunnyvale) when project traffic is added, or
2. An intersection that operates below its level of service standard under no-project conditions experiences an increase in critical-movement delay of four (4) or more seconds, and an increase in critical volume-to-capacity ratio (v/c) of one percent (0.01) or more when project traffic is added.

The exception to this criterion is when the addition of project traffic reduces the amount of average control delay for critical movements, i.e., the change in average control delay for critical movements are negative. In this case, the criterion is when the project increases the critical v/c value by 0.01 or more.

Unsignalized Intersections

The City of Mountain View does not have an adopted level of service standard or adverse effect criteria for unsignalized intersections. However, based on other transportation studies prepared for the City, the project is said to create an adverse operational effect on traffic conditions at an unsignalized intersection in the City of Mountain View if for either peak hour:

1. The addition of project traffic causes the average intersection delay for all-way stop-controlled or the worst movement/approach for side-street stop-controlled intersections to degrade to LOS F, and
2. The intersection satisfies the California Manual of Uniform Traffic Control Devices (CA MUTCD) peak-hour volume signal warrant.

Report Organization

This report includes:

- An executive summary.
- Chapter 1 presents the project introduction and analysis/regulatory thresholds.
- Chapter 2 presents the VMT analysis.
- Chapter 3 describes existing conditions including the existing roadway network, transit service, bicycle, and pedestrian facilities.
- Chapter 4 describes the vehicle operational analysis, including the method by which project traffic is estimated, the intersection operations under existing plus project, background, and background plus project conditions, freeway ramp operations, midblock pedestrian crossing assessment, and effects on surrounding neighborhood streets.
- Chapter 5 presents the analysis of site access, circulation, driveway operations, and parking.
- Chapter 6 presents the assessment of bicycle, pedestrian, and transit facilities.
- Chapter 7 presents analysis of other transportation-related issues, including the evaluation of removal of the EWPP proposed Street C, construction phasing, and the project contribution to the EWPP improvements.

2. Vehicle Miles Traveled Analysis

City VMT Policy

The City of Mountain View VMT Policy establishes screening criteria for developments that are expected to cause a less-than-significant transportation impact under CEQA with no further VMT analysis required. Any project that does not meet all of the screening criteria is subject to further VMT analysis. The proximity to transit screening criterion was developed based on the CEQA Guidelines Section 15064.3, subdivision (b)(1), which states that lead agencies generally should presume that certain projects proposed within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT. A major transit stop is defined as an existing rail station, bus rapid transit station, or as the intersection of 2 or more major bus routes with a frequency of service interval of 15 minutes or less during peak commute periods. Based on the CEQA guidelines, the City developed a transit proximity map, which shows areas in Mountain View where this screen applies (see Figures 3 and 4). In addition to proximity to a major transit stop, the project characteristics must meet the following criteria:

- Contain a floor area ratio (FAR) greater than 0.75;
- Provide reduced parking compared to the maximum parking required by the City;
- Is consistent with Plan Bay Area 2050; or
- Does not replace affordable residential units with a fewer number of moderate- or high-income residential units.

Proximity to Transit

The project is located in a transit proximity area because it is located within a half mile of the Middlefield Light Rail Transit (LRT) Station, which is considered a major transit stop.

Floor Area Ratio

The FAR is calculated as the gross floor area divided by the site area. The project would have an FAR of 1.46. Thus, the development meets the minimum requirement to be considered a transit supportive project.

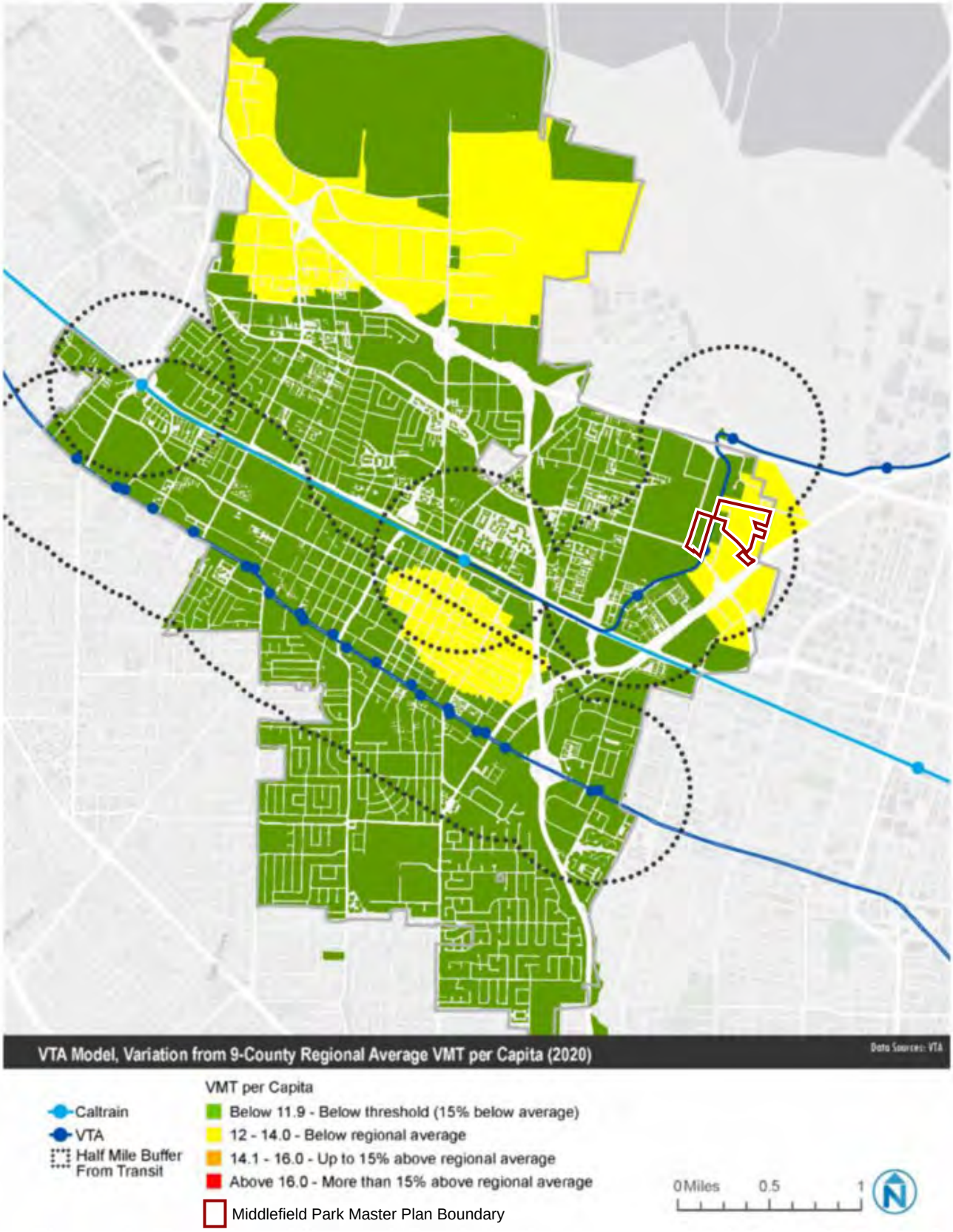


Figure 3
City of Mountain View Residential VMT Map

NORTH
Not to Scale

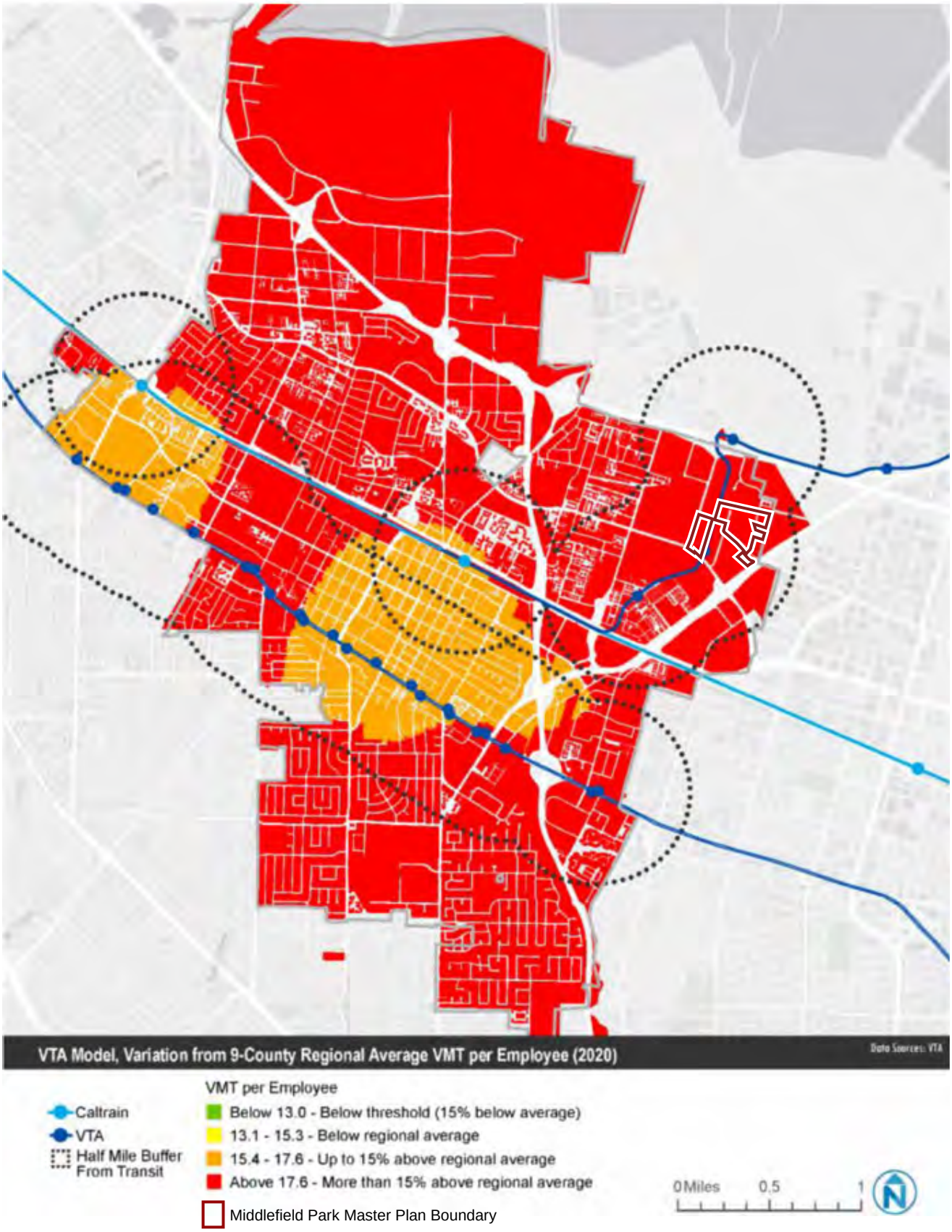


Figure 4
City of Mountain View Employee VMT Map

Parking Requirement

Transit supportive projects may not include more parking for use by residents, customers, or employees of the project than required by the City Code. The project would provide fewer parking spaces than the maximum parking required by the EWPP for residential and office uses and provide fewer parking spaces than the minimum required for ~~retail/community/civic~~active uses by the EWPP (e.g. neighborhood commercial) and City zoning code.

Plan Bay Area

Plan Bay Area is the Bay Area's regional plan to comply with Senate Bill 735, the State's Sustainable Communities Strategy (SCS) law. SB 735 requires regional metropolitan planning organizations in California to develop SCSs, or long-range plans, that align transportation, housing, and land use decisions toward achieving greenhouse gas (GHG) emissions reduction targets set by the California Air Resources Board (CARB). Plan Bay Area integrates land use and transportation planning and mandates both a GHG emissions from passenger vehicles and light trucks and the provision of adequate housing for the region's projected population growth.

The project is consistent with Plan Bay Area 2050 because it would provide more housing within the EWPP area within walking distance of the Middlefield LRT Station and with bicycle facilities within and adjacent to the project area. The project would also implement a transportation demand management (TDM) program~~s~~ to promote alternative modes of transportation and reduce vehicle trips and GHG emissions.

Affordable Housing

Affordable housing has been shown to generate fewer vehicle miles traveled per capita than market rate housing. Accordingly, the City's VMT Policy states that transit supportive projects must not replace affordable residential units with a smaller number of affordable units, and any replacement units must be at the same level of affordability. The site currently is developed with office buildings only. The project would replace the existing office buildings with a mix of market-rate and affordable residential units, as defined by the City's Below-Market-Rate program, office uses, open space, and ~~retail/community~~active uses (e.g. retail, services, neighborhood commercial, and community/civic uses).

EWPP EIR VMT

The EWPP EIR was certified in November 2019 prior to the development and adoption of the City's VMT Policy in June 2020. The VMT impact for the EWPP EIR was evaluated based on the total project-generated VMT per service population (residents and employees), while the adopted VMT Policy evaluates VMT impacts based on the home-based trip VMT per capita for residential uses and home-based work trip VMT per employee for employment uses for developments that do not meet the screening criteria.

The EWPP EIR evaluated the VMT impact in two ways to determine whether (1) the project-generated VMT would result in a VMT impact by comparing to the citywide and countywide VMT thresholds (15 percent below existing conditions) and (2) the EWPP's effect on the change in travel on roadways within the City and County by comparing the change in VMT with and without EWPP. For the project-generated VMT, the EIR states the EWPP would result in a project-level and cumulative VMT impact because project generated VMT would be greater than the citywide and countywide thresholds. However, the EIR also states the EWPP would not have an effect on travel on roadways within the City or County because citywide and countywide VMT with the EWPP would be lower than the VMT without the EWPP. Since the project is within the EWPP development area and is included in the EWPP EIR trip assumptions, the project is consistent with the conclusions regarding VMT in the EWPP EIR.

Findings

Per the City's VMT Policy adopted on June 30, 2020, the project meets the proximity to transit screening criterion by having a FAR of 1.46, providing fewer residential and nonresidential parking spaces than the maximum required by the City, fewer active use~~retail~~ parking spaces than the minimum required by the City, being consistent with Plan Bay Area, and providing affordable housing units. Therefore, the project is expected to have a less-than-significant impact on VMT based on the adopted City Policy. Also, the project would not result in additional impact than the VMT impact identified in the EWPP EIR as it is consistent with the development assumptions.

3. Existing Transportation Conditions

This chapter describes existing conditions for transportation facilities within and in the vicinity of the plan area including the roadway network, transit services, pedestrian and bicycle facilities, and traffic operations at the study intersections.

Existing Roadway Network

Regional access to the project site is provided by US 101, SR 85, SR 237, and Central Expressway. Local access to the project site is provided via Middlefield Road, Ellis Street, Maude Avenue, Logue Avenue, and Clyde Avenue. Other listed roadways are included as routes to primary streets that access the project site, such as Moffett Boulevard, Whisman Road, Mary Avenue, and Mathilda Avenue. For the purposes of this study, US 101, Middlefield Road, and all parallel streets are considered to run east-west, and cross streets, such as SR 237 and Logue Avenue, are considered to run north-south.

US 101 is eight lanes wide with three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction in the vicinity of the project site. US 101 provides access to the plan area via full interchanges at Ellis Street and SR 237.

SR 85 is a north-south freeway that begins at US 101, east of N. Shoreline Boulevard, extends south towards San Jose, and terminates at US 101 east of the Silicon Valley Boulevard/Bernal Road interchange. SR 85 is six lanes wide (two mixed-flow lanes and one HOV lane in each direction) in the vicinity of the project site. SR 85 provides access to the project site via an interchange at SR 237

SR 237 is a four-lane to six-lane freeway within the vicinity of Sunnyvale that extends west to El Camino Real and east to I-880 in Milpitas. East of Mathilda Avenue, SR 237 has two mixed-flow lanes and one HOV lane in each direction. West of Mathilda Avenue, SR 237 has two mixed-flow lanes in each direction. SR 237 provides access to the project site via full interchanges at Middlefield Road and Maude Avenue.

Central Expressway is an east-west, four-lane to six-lane expressway. It begins at Trimble Road in the east, crosses Sunnyvale, extends westward and transitions into Alma Street. In the study area, Central Expressway has two eastbound lanes and two westbound lanes and a posted speed limit of 50 mph. Central Expressway is mostly grade-separated within Sunnyvale except at Mary Avenue. The Mary Avenue intersection has crosswalks with pedestrian push buttons and signal heads across all legs. There are no sidewalks or bike lanes along Central Expressway, but bikes are allowed to ride on the shoulders. On-street parking is not permitted on this roadway.

Middlefield Road is a mostly east-west four-lane arterial that runs parallel to US 101. It begins at the intersection of Central Expressway in Mountain View and traverses north then westward through Redwood City. Middlefield Road has landscaped medians with left-turn pockets at intersections and has

bike lanes and sidewalks on both sides of the street. The bike lanes on Middlefield Road between Thaddeus Drive and Logue Avenue are part-time bike facilities that are used as bike lanes from 2 AM to 7 PM on weekdays and are used for on-street parking for the remaining hours (7 PM to 2 AM) and on weekends. The speed limit is 35 mph. Middlefield Road provides access to project site via its intersections with Ellis Street and Logue Avenue.

Maude Avenue is an east-west arterial street between Logue Avenue in the west and Wolfe Road in the east. Maude Avenue has two lanes west of the SR 237 eastbound frontage road. Between the SR 237 eastbound frontage road and San Angelo Avenue, Maude Avenue has four lanes. Bike lanes exist along both sides of the street for the entire street. Sidewalks exist along both sides of the street except between the SR 237 westbound frontage road and Macara Avenue on the north side and between east of Logue Avenue and the SR 237 westbound frontage road on the south side. West of Clyde Avenue, on street parking is permitted along both sides of the street except between 2 AM and 6 AM. The posted speed limit is 25 mph between Logue Avenue and SR 237. The speed limit increases to 35 mph east of SR 237. Maude Avenue provides direct access to the R2, R3, R4, and R6 buildings of the project site.

Moffett Boulevard is a north-south arterial that extends northward from Central Expressway to US 101. South of Central Expressway, it becomes Castro Street that runs through Downtown Mountain View. The four-lane roadway has a raised median with left-turn pockets at intersections north of Middlefield Road and has a center turn lane with left-turn pockets at intersections south of Middlefield Road. Bike lanes are present on both sides of Moffett Boulevard north of Leong Drive, but do not continue to Middlefield Road. Moffett Boulevard has sidewalks on both sides of the street except the section between the SR 85 southbound on-ramp and Leong Drive where there is no sidewalk on the west side of the road. On-street parking is prohibited north of Middlefield Road and permitted south of Middlefield Road. The speed limit is 40 mph north of Middlefield Road and 35 mph south of Middlefield Road.

Whisman Road is a north-south arterial between Fairchild Drive in the north and Dana Street in the south. Whisman Road has two lanes north of Middlefield Road with landscaped medians and left-turn pockets at intersections. South of Middlefield Road, Whisman Road is a four-lane road with landscaped medians beginning south of Pacific Drive. Bike lanes and sidewalks exist on both sides of the entire street. On-street parking is prohibited along both sides of the street south of Flynn Avenue. On-street parking is permitted along the west side of the street between Fairchild Drive and Flynn Avenue. The speed limit is 35 mph.

Ellis Street is a north-south four-lane arterial between Macon Road in the north and Middlefield Road in the south. Ellis Street has multiple landscaped medians and a two-way left turn lane at driveways with left turn pockets at intersections. Bike lanes exist along both sides of the street south of Fairchild Drive. Sidewalks exist along both sides of the street south of Fairchild Drive. Sidewalks also exist along the west side of the street between Manila Avenue and Fairchild Drive. On-street parking is prohibited along both sides of the entire street. The posted speed limit is 40 mph. Ellis Street provides direct access to the O1, R1, and R2 buildings of the project site.

Logue Avenue is a north-south two-lane local street starting at Middlefield Road in the south and ends with a cul-de-sac north of Maude Avenue. Bike lanes exist along both sides of the street south of Maude Avenue with the southbound bike lane terminating approximately 230 feet before Middlefield Road. Sidewalks exist along both sides of the street, except for a short segment near the cul-de-sac along the west side of the street. On-street parking is permitted along both sides of the street. The posted speed limit is 25 mph. Logue Avenue provides direct access to the O2 and O3 buildings of the project site.

Clyde Avenue is a north-south two-lane local street starting at Maude Avenue in the south and continuing as Fairchild Drive in the north. Bike lanes and sidewalks exist along both sides of the street. On-street parking is permitted along both sides of the street. The posted speed limit is 25 mph. Clyde Avenue

provides direct access to the O4 and O5 buildings and the two parking garages (P1 and P2) of the project site.

Mary Avenue is a six-lane roadway south of Central Expressway and a four-lane roadway north of Central Expressway. Mary Avenue travels in the north-south direction. It is classified as a collector north of Central Expressway and an arterial south of Central Expressway. It extends from Almanor Avenue in the north to Homestead Road in the south. Bike lanes exist along the entire street. There are sidewalks on both sides of the street for the whole length of the roadway. On-street parking is prohibited in the project vicinity. It has a posted speed limit of 30 mph in the project vicinity.

Mathilda Avenue is a six to eight-lane roadway. It is classified as an arterial. It extends from E. Caribbean Drive south past El Camino Real, where it transitions to Sunnyvale-Saratoga Road and extends south into Cupertino and Saratoga. Bike lanes exist along both sides of the street north of Washington Avenue in the project vicinity and along the east side of the street north of between Washington Avenue and Iowa Avenue. There are sidewalks on both sides of the street in the project vicinity, except between California Avenue and Washington Avenue as it is grade separated in this area. On-street parking is prohibited in the project vicinity. It has a posted speed limit of 45 mph in the project vicinity.

Existing Transit Services

Existing public transit services in the study area are provided by the VTA and the Mountain View Transportation Management Association (TMA). VTA operates bus and light rail transit (LRT) services in Santa Clara County, and the TMA provides free MVgo shuttle service between the Mountain View Transit Center and corporate campuses in the North Bayshore and Whisman areas.

The VTA bus and LRT routes and MVgo shuttle routes in the project vicinity and the bus/shuttle stops near the project site are summarized in Table 3 and shown on Figure 5.

VTA Bus Service

VTA Local Route 21 serves the project area with bus stops in each direction on Maude Avenue west of Clyde Avenue, on Logue Avenue between Middlefield Road and Maude Avenue, and on Middlefield Road at Ellis Street. The bus stops along Maude Avenue would be the closest stops for Buildings O4, O5, R4, R5, and R6. The bus stops along Middlefield Road would be the closest stops for Buildings O1, R1, and R2. The Logue Avenue bus stops would be the closest stops for Buildings O2, O3, and R3. Table 4 summarizes the distance from the closest buildings to the closest bus stops. Route 21 also stops at the Mountain View Transit Center, approximately 2.0 miles from the plan area. The Mountain View Transit Center provides connections to Caltrain, VTA LRT, several VTA bus routes (21, 40, and 52), MV community shuttle, and MVgo shuttle routes.

VTA Light Rail Transit (LRT)

The LRT Orange Line serves the plan area with the Middlefield LRT Station in the project area. The Middlefield LRT Station is approximately 300 feet from the closest building, Building R1, and approximately 2,500 feet of walking distance (0.47 mile) from the farthest building, Building O5/P1. The Orange Line travels between the Mountain View Transit Center and Alum Rock.

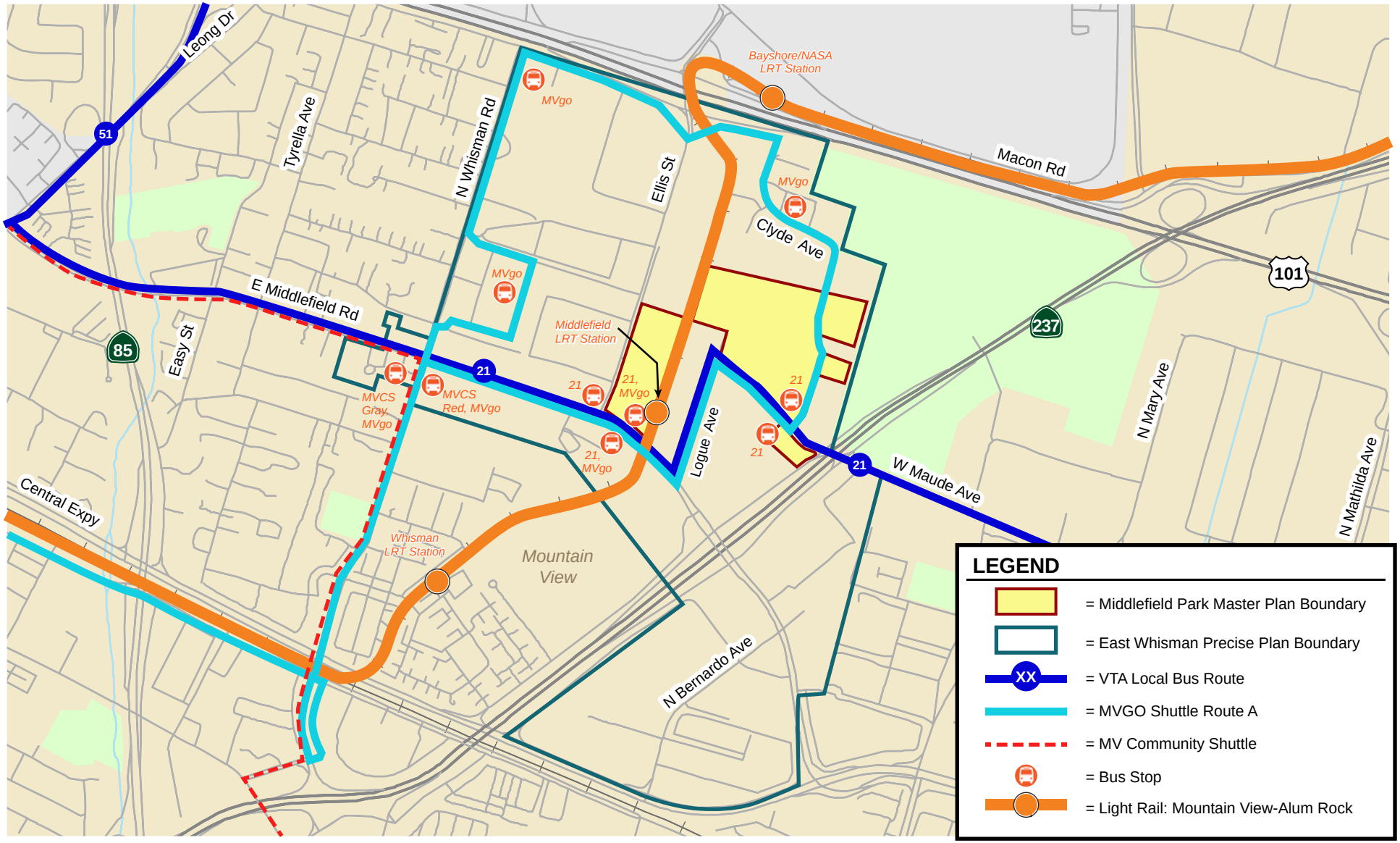


Figure 5
Existing Transit Services

Table 3
Existing Transit Services

Route	Route Description	Weekday Hours of Operation	Headways[1] (minutes)	Nearby Bus Stops	Walking Distance from Nearest Stop to Nearest Building
VTA Bus Route					
Local Route 21	Stanford Shopping Center - Santa Clara Transit Center	5:30 AM - 9:05 PM	30	Maude Avenue west of Clyde Avenue Middlefield Road at Ellis Street Logue Avenue between Maude and Middlefield Road	50 feet to R5 260 feet to R1 740 feet to R3
Mountain View Shuttles					
Mvgo Route A[2]	Whisman, Clyde and Middlefield	7:05 AM - 10:00 AM, 4:15 - 7:55 PM	30-60	Clyde Avenue east of Clyde Court Middlefield Road east of Ellis Street	1,015 feet to O4/O5 400 feet to R1
MV Community Shuttle[3]	Through out Mountain View, along Middlefield and Whisman	10:00 AM - 6:00 PM	30	Whisman Road south of Middlefield Road	1,975 feet to to R1
VTA Light Rail Transit					
LRT Orange Line	Mountain View - Alum Rock	5:30 AM - 12:45 AM (next day)	20	Middlefield LRT Station	300 feet to R1

Notes:
1. Headways during weekday peak periods as of November 2021
2. Operated by Mountain View Transportation Management Association. It provides free transportation connections between Mountain View Transit Center and the Bayshore/Whisman areas.
3. Operated by Mountain View and Google. It provides free transportation connections between many residential neighborhoods, senior residences and services, city offices, library, park and recreational facilities, medical offices, shopping centers, and entertainment venues throughout Mountain View.

Mountain View Transportation Management Association (TMA) Shuttles

The TMA operates the MVgo shuttle system. This shuttle system is provided through the collection of TMA member dues. MVgo operates four shuttle routes that provide service to employment areas from the Mountain View Transit Center. Three routes serve the North Bayshore area, and one route serves the N. Whisman area. The shuttles are timed to meet Caltrain arrivals during the AM and departures during PM commute periods. MVgo shuttle Route A provides service to the project area, with two bus stops within the vicinity of the area. One bus stop is on Middlefield Road east of Ellis Street, approximately 400 feet from the closest building, Building R1. Another bus stop is on Clyde Avenue, east of Clyde Court at the Samsung Building (665 Clyde Avenue), approximately 1,015 feet north of Buildings O4 and O5/P1. It is likely that patrons in Buildings O1, O2, R1, R2, and R3 would utilize the stop on Middlefield Road, and patrons in Buildings O3, O4, O5 would utlize the stop on Clyde Avenue. The distance between the two bus stops is similar from Buildings R4, R4 aff, R5, and R6.

Google Employee Shuttle

Google operates an employee shuttle system called GBus. Google employees can ride GBus for free to Google office buildings in Mountain View and Sunnyvale. GBus functions as both an inter-office shuttle between various local building locations and a long-haul commute shuttle system. GBus can serve the project area with an existing stop within the Quad Campus parking lot between Whisman Road and Ellis Street. As part of the transportation demand management (TDM) plan, a ~~second~~ new GBus stop would be added in the project area within the proposed private service street north of Buildings O3 and O4.

Existing Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks, which are present along most study area roadways, and at signalized and unsignalized study intersections. Pedestrian signal heads and push buttons are present at the signalized study intersections. Crosswalks are present along the north leg of the unsignalized study intersection of Logue Avenue and Maude Avenue and along the north leg of the unsignalized intersection of Clyde Avenue and Maude Avenue. High-visibility midblock crosswalk curb extensions exists on Logue Avenue between Middlefield Road and Maude Avenue to access the existing path to the Middlefield LRT Station and a midblock crosswalk on Clyde Avenue north of the plan area boundary (in front of 580 Clyde Avenue) is present. Two enhanced midblock crosswalks with rapid rectangular flashing beacons (RRFB) exist on Ellis Street: north of the plan area boundary (in front of 475 Ellis Street) and in front of the proposed Building R2 (in front of 500 E. Middlefield Road). Sidewalks are missing on the north side of Maude Avenue between the SR 237 westbound frontage road and Macara Avenue and on the south side of Maude Avenue between Logue Avenue and the SR 237 westbound frontage road. Sidewalks are also missing along the west side of Logue Avenue near the cul-de-sac.

Within a typical walking distance (a half mile or 10 minutes), pedestrian facilities are present between the plan area and the surrounding land uses, including bus stops in the area. However, continuous sidewalks across a long street block are not equivalent to good pedestrian connectivity. In addition, long distances (wider roads), heavier traffic volumes, and high posted speed limits discourage pedestrian activity. The street network in the project area consists of long blocks: between Ellis Street and Logue Avenue, between Middlefield Road and Maude Avenue, and between Maude Avenue and Clyde Avenue. As discussed in Chapter 7, the project would create better network connectivity through the provision of new pedestrian and bicycle paths and shorter block lengths.

Existing Bicycle Facilities

The bicycle facilities that exist within one mile of the project area (see Figure 6) include a multi-use trail (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes/boulevards (Class III bikeway). Bike paths or multi-use trails are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are signed bike routes where bicyclists share a travel lane with motorists. Bike boulevards are modified bike routes with additional treatments that offer convenient and efficient through-routes for bicyclists of all skill levels.

The existing Hetch Hetchy Trail extends from N. Whisman Road and connects to the Stevens Creek Trail. The trail can be accessed from Whisman Road, approximately 0.9 mile from the plan area. East of Whisman Road, the trail connects to a multi-use path between N. Whisman Road and Ellis Street, through the existing Quad Office Campus.

The Stevens Creek Trail extends from the Bay, under US 101 and Middlefield Road, and ends at Dale Avenue/Heatherstone Avenue. The trail can be accessed from a point on Easy Street at the Gladys Avenue intersection, about 1.0 mile from the plan area, from the sidewalk on the south side of Middlefield Road, or from the Hetch Hetchy Trail.

A multi-use path also exists along the west side of the LRT tracks between the northwest corner of the proposed Building O2, across Middlefield Road, into the South Whisman and Whisman Station neighborhoods. The path can be accessed by Middlefield Road, Ellis Street and Logue Avenue through pedestrian walkways that run between these streets and the Middlefield LRT Station. It should be noted that no crosswalk exists on Middlefield Road to connect the existing multi-use path north and south.

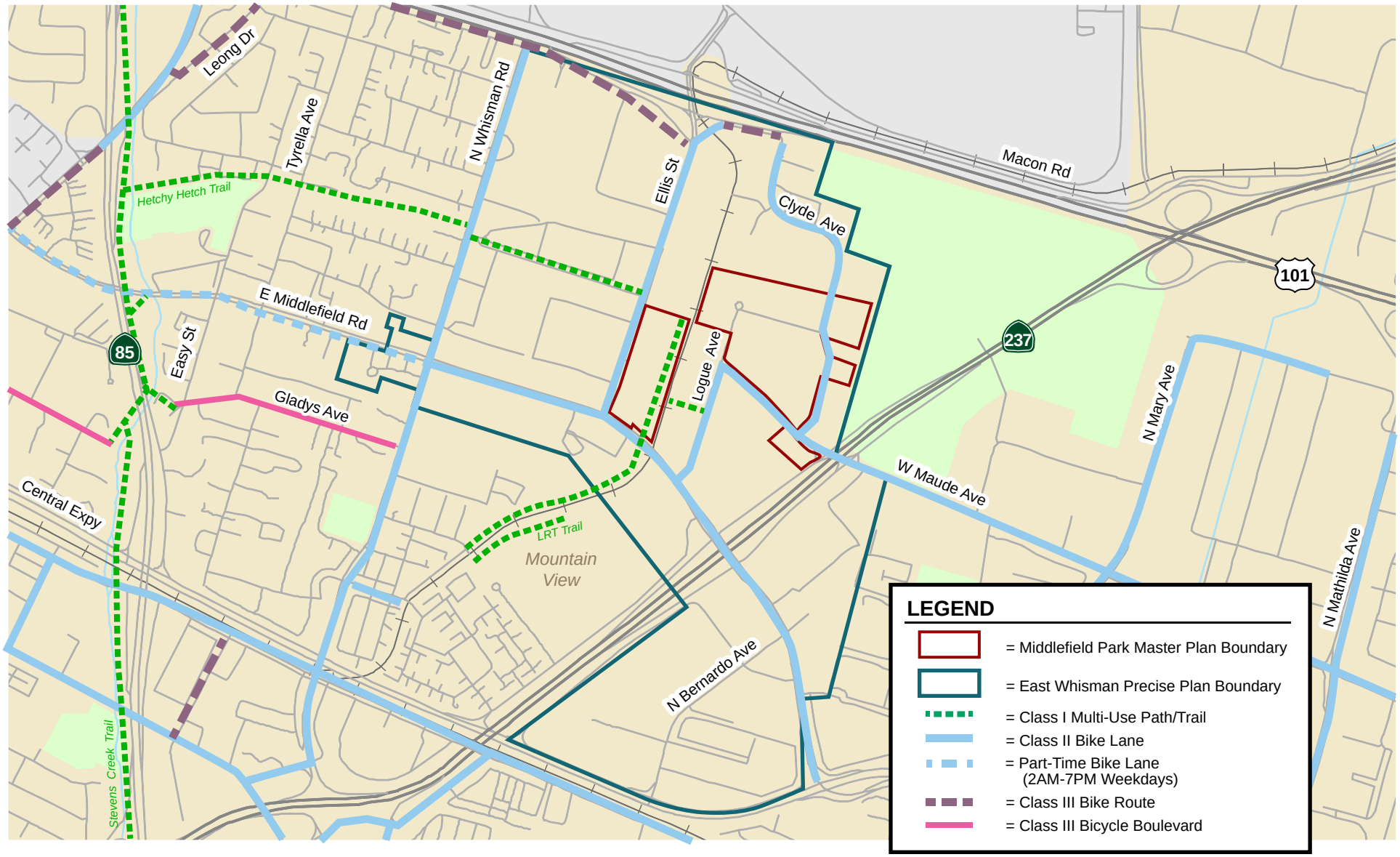


Figure 6
Existing Bicycle Facilities

Striped bike lanes are present along the following street segments:

- Logue Avenue between Middlefield Road and Maude Avenue
- Maude Avenue, except for a short segment between Clyde Avenue and SR 237 eastbound frontage road
- Middlefield Road, between Whisman Road and Bernardo Avenue
- Middlefield Road, west of Whisman Road (part time 2 AM – 7 PM on weekdays)
- Whisman Road, for the entire street
- Ellis Street, for the entire street
- Clyde Avenue, for the entire street
- Evelyn Avenue, east of Hope Street
- Mary Avenue, for the entire street
- Mathilda Avenue, south of Ahwanee Street
- Moffett Boulevard, north of Leong Drive

Some of these streets, while having bike lanes, are more suitable for experienced riders because of the traffic speed. The bike lanes on Middlefield Road west of Whisman Road are part-time bike facilities that are used as bike lanes from 2 AM to 7 PM on weekdays and are used for on-street parking for the remaining hours (7 PM to 2 AM) and on weekends. Because the bike lanes are available only on weekdays, they are primarily suited to bicycle commuters and not to casual riders.

Bike routes are typically designated with sharrows (shared-lane pavement markings) and bikes may take the travel lane. Bike routes are appropriate for low-volume streets with slow travel speeds, especially those on which motorist volumes are low enough that passing maneuvers can use the full street width; on roadways with bicycle demand but without adequate space for bike lanes; and as “gap fillers” where there are short breaks in bike lanes due to right-of-way constraints. The City’s Bike Map shows Leong Drive and Fairchild Drive are designated as existing bike routes. However, there are no sign or sharrows on either street to indicate a bike route.

The City’s Bike Map shows Central Avenue and Gladys Avenue are designated as existing bike boulevards. There are signs on Gladys Avenue at Whisman Road and along Central Avenue to indicate bike boulevards. Bike boulevards prioritize convenient and safe bicycle travel through traffic calming strategies, wayfinding signage, and other measures. One key feature is stop signs are “flipped” - removed from the boulevard and placed on cross streets - to favor the bicycle direction of travel. This change improves bicyclists’ average speed by minimizing unneeded stops. Bicycle boulevard improvements are coupled with traffic calming features to discourage motor vehicle speeding.

As discussed in Chapter 7, the project would provide additional network connectivity through the provision of new pedestrian and bicycle paths and improve the existing bike lanes in the project area.

Existing Intersection Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were obtained from field observations and previous traffic studies (see Figure 7).

Existing traffic volumes were obtained from previous traffic studies in 2019 and 2020 (pre-Covid) and new turning movement counts collected in September 2021, between 7:00 and 10:00 AM and between 4:00 and 7:00 PM on a typical weekday.

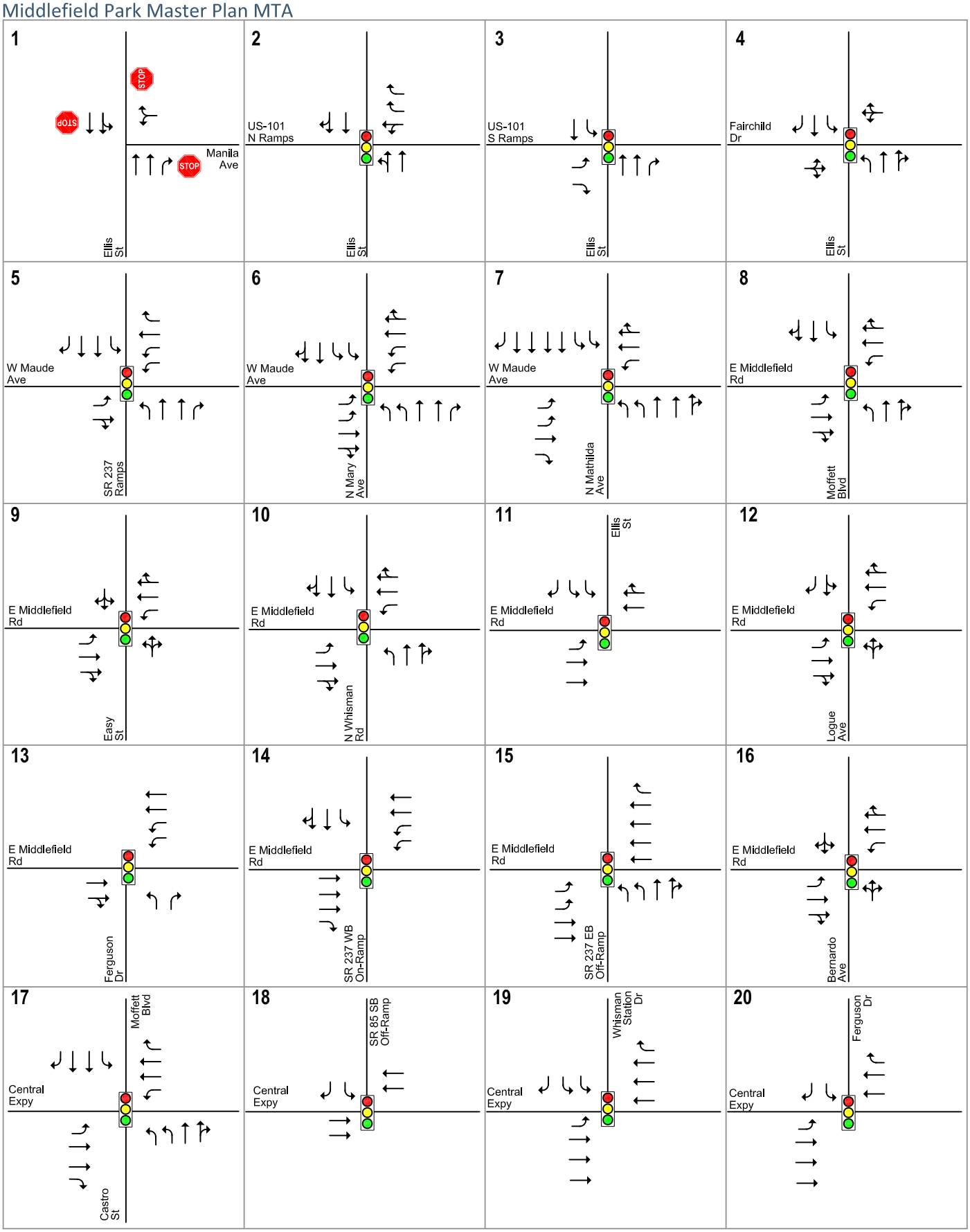
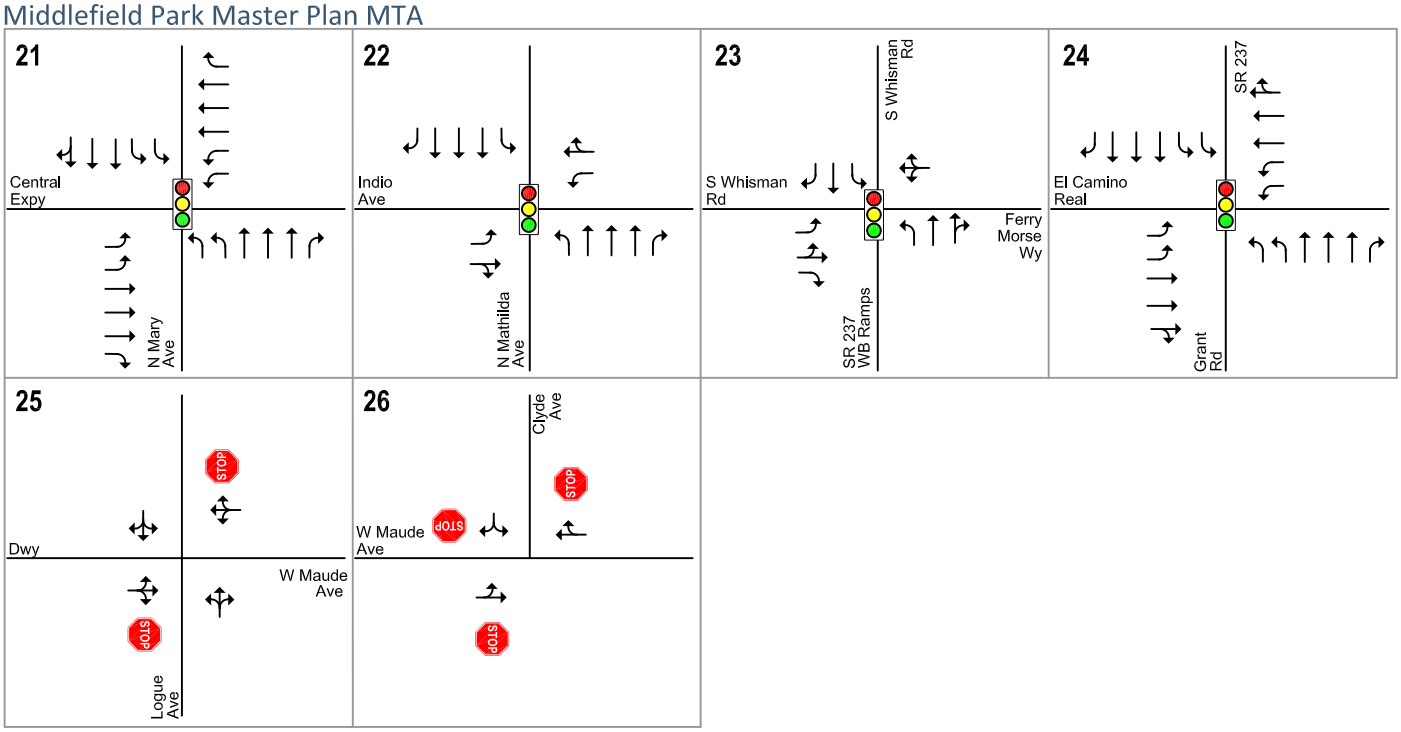


Figure 7
Existing Lane Configurations



LEGEND

STOP = Stop Sign

= Signalized Intersection

Figure 7
Existing Lane Configurations

Of the 26 study intersections, 17 intersections have turning movement counts conducted prior to Covid-19 in 2019 and 2020. Counts conducted in 2019 were increased by a factor of 2.5 percent per year from 2019 to 2021 (for an overall total of 5.0 percent) to derive the existing volumes. At the Moffett Boulevard and Central Expressway intersection, the PM peak-hour count was collected in 2018 by the CMP. However, due to the street closure on Castro Street, a new PM peak-hour count was not collected, and the 2018 CMP count was increased by a factor of 2.5 percent per year from 2018 to 2021 (for an overall total of 7.5 percent) to derive the existing volumes.

The following intersections did not have recent counts, and traffic volumes were counted on September 28, 2021:

- Mathilda Avenue and Maude Avenue (PM peak hours only)
- SR 85 SB Off Ramp and Central Expressway
- Whisman Station Drive and Central Expressway
- Ferguson Drive and Central Expressway
- Mary Avenue and Central Expressway (PM peak hours only)
- Grant Road/SR 237 and El Camino Real
- Logue Avenue and Maude Avenue
- Clyde Avenue and Maude Avenue

New traffic counts at the above intersections were lower than typical conditions due to Covid-19. Therefore, intersection counts for the Mary Avenue/Maude Avenue, Mary Avenue/Central Expressway, and Mathilda Avenue/Indio Avenue intersections were also conducted on September 28, 2021 to be used as baselines. The baselines determined an adjustment factor to be applied to the new volume counts between current conditions and typical conditions (i.e., pre-Covid-19). Based on the comparison of the 2020 counts and new counts, factors of 2.83 and 2.86 for the AM and PM peak hours, respectively, were applied to the new counts at the Mathilda Avenue/Maude Avenue, Logue Avenue/Maude Avenue, and Logue Avenue/Maude Avenue intersections based on the new counts collected at the Mary Avenue/Maude Avenue intersection. The new counts at these intersections are much lower than the 2020 pre-Covid counts because most employees of the office buildings in the area ~~still~~ continue to work remotely. Factors of 1.67 and 1.62 for the AM and PM peak hours, respectively, were applied to the new counts at the remaining intersections based on the new counts collected at the Mary Avenue/Central Expressway, and Mathilda Avenue/Indio Avenue intersections.

The existing peak-hour intersection volumes are shown in Figure 8. The intersection turning-movement counts conducted for this analysis are presented in Appendix A. Traffic count dates and sources and the adjustment applied to the study intersections are summarized in Appendix B.

Existing Intersection Levels of Service

The results of the intersection level of service show that all study intersections are currently operating at acceptable levels of service except the Grant Road/SR 237 Ramp and El Camino Real intersection, which is operating at LOS F during both the morning and evening peak hours (see Table 4). The intersection levels of service calculation sheets are included in Appendix C.

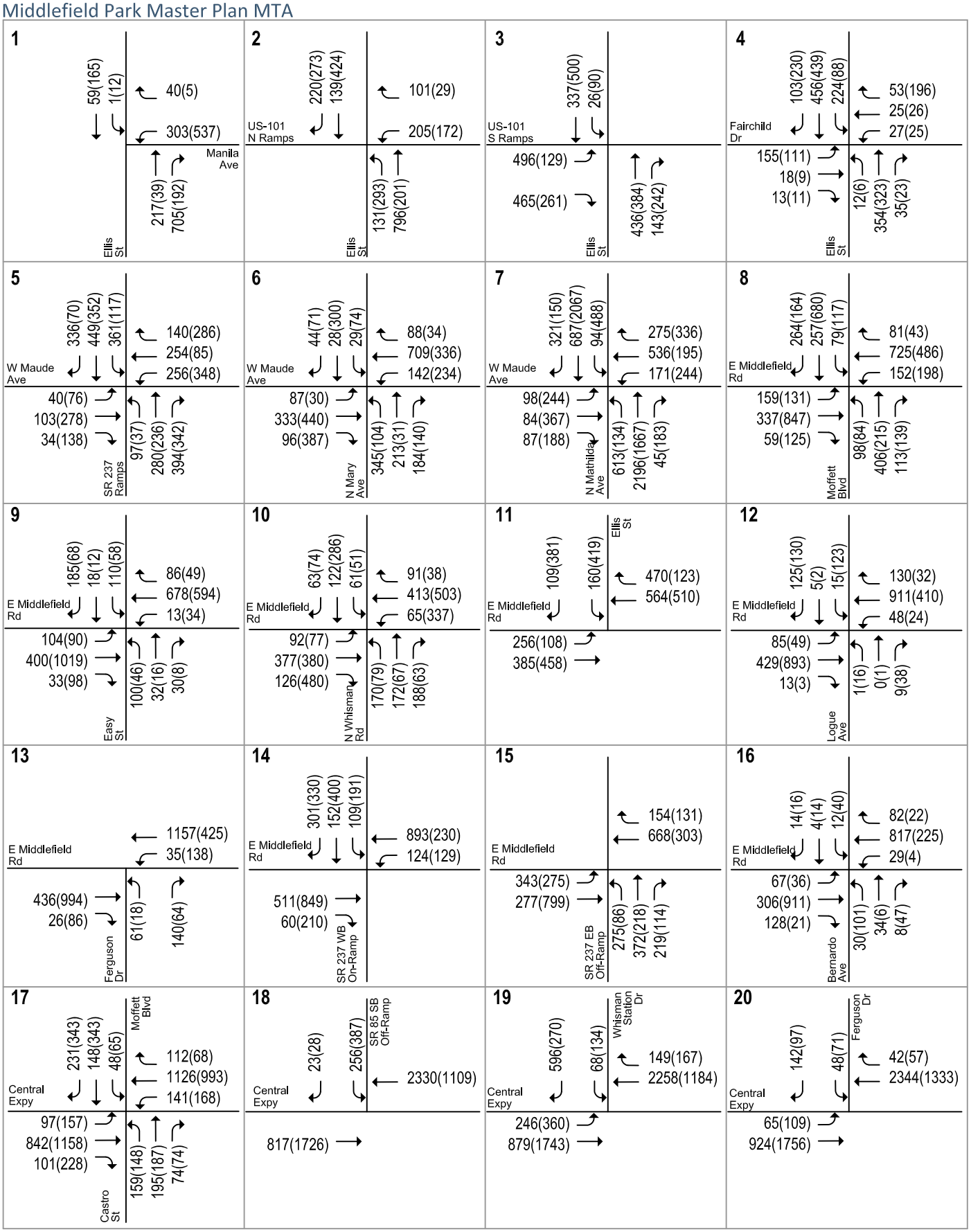


Figure 8
Existing Traffic Volumes

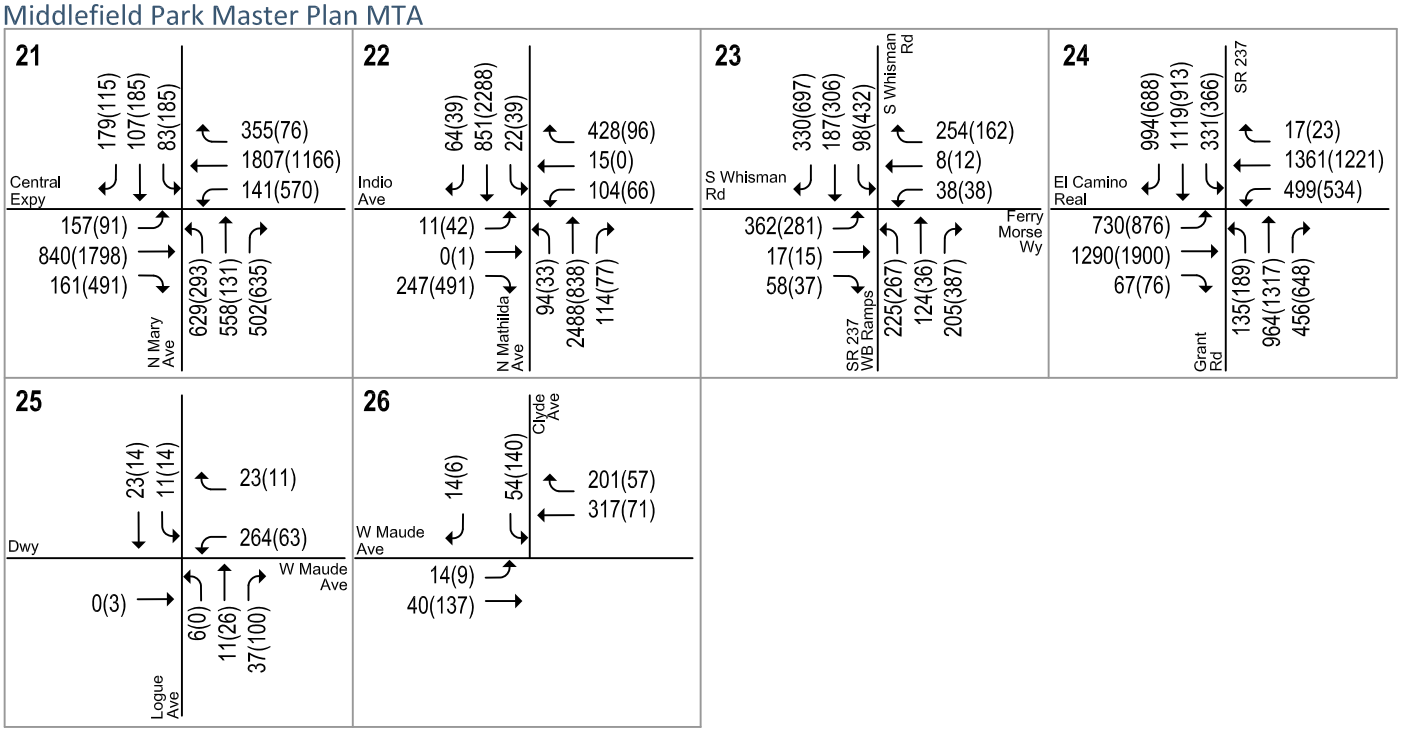


Figure 8
Existing Traffic Volumes

NORTH
Not to Scale

Table 4
Existing Intersection Levels of Service

ID	Intersection	Jurisdiction	LOS Standard	Peak Hour	Count Date	Existing Avg. Delay[1]	Existing LOS
1	Ellis Street and Manila Drive *(all-way stop)*	MV	D	AM	02/04/20	30.9	D
				PM	02/04/20	17.8	C
2	Ellis Street and US 101 NB Ramps	MV	D	AM	02/04/20	14.3	B
				PM	02/04/20	17.5	B
3	Ellis Street and US 101 SB Ramps	MV	D	AM	02/04/20	16.6	B
				PM	02/04/20	16.0	B
4	Ellis Street and Fairchild Drive	MV	D	AM	02/04/20	16.2	B
				PM	02/04/20	16.0	B
5	SR 237 Ramps and Maude Avenue	MV	D	AM	05/30/19	29.2	C
				PM	05/30/19	34.3	C-
6	Mary Avenue and Maude Avenue	SV	D	AM	02/05/20	37.2	D+
				PM	02/05/20	35.5	D+
7	Mathilda Avenue and Maude Avenue*	SV/CMP	E	AM	02/05/20	42.4	D
				PM	09/28/21	50.8	D
8	Moffett Boulevard and Middlefield Road	MV	D	AM	05/30/19	37.1	D+
				PM	05/30/19	39.1	D
9	Easy St and Middlefield Road	MV	D	AM	05/30/19	19.2	B-
				PM	05/30/19	11.9	B+
10	Whisman Road and Middlefield Road	MV	D	AM	05/30/19	29.5	C
				PM	05/30/19	31.4	C
11	Ellis Street and Middlefield Road	MV	D	AM	05/30/19	15.1	B
				PM	05/30/19	15.5	B
12	Logue Avenue and Middlefield Road	MV	D	AM	05/30/19	14.0	B
				PM	05/30/19	16.9	B
13	Ferguson Drive and Middlefield Road	MV	D	AM	05/30/19	10.3	B+
				PM	05/30/19	8.8	A
14	SR 237 WB Ramps and Middlefield Road	MV	D	AM	05/30/19	18.9	B-
				PM	05/30/19	14.9	B
15	SR 237 EB Ramps and Middlefield Road	MV	D	AM	05/30/19	24.4	C
				PM	05/30/19	18.8	B-

Table 4
Existing Intersections Level of Service (continued)

ID	Intersection	Jurisdiction	LOS Standard	Peak Hour	Count Date	Existing Avg. Delay[1]	Existing LOS
16	Bernardo Avenue and Middlefield Road	MV	D	AM	05/30/19	11.0	B+
				PM	05/30/19	15.4	B
17	Moffett Boulevard and Central Expy*	SCC/CMP	E	AM	05/22/19	41.6	D
				PM	11/01/18	58.2	E+
18	SR 85 SB Off Ramp/Central Expy	SCC	D	AM	09/28/21	10.8	B+
				PM	09/28/21	13.8	B
19	Whisman Station Drive and Central Expy*	SCC/CMP	E	AM	09/28/21	25.4	C
				PM	09/28/21	10.7	B+
20	Ferguson Drive and Central Expy*	SCC	D	AM	09/28/21	5.7	A
				PM	09/28/21	3.1	A
21	Mary Avenue and Central Expy*	SCC/CMP	E	AM	02/06/20	51.1	D-
				PM	09/28/21	62.1	E
22	Mathilda Avenue and Indio Avenue	SV	E	AM	02/05/20	36.7	D+
				PM	02/05/20	38.3	D+
23	Whisman Road and SR 237 WB Ramps	MV	D	AM	05/30/19	33.8	C-
				PM	05/30/19	35.3	D+
24	Grant Road/SR 237 and El Camino Real*	Caltrans/CMP	E	AM	09/28/21	**102.0**	**F**
				PM	09/28/21	**94.0**	**F**
25	Logue Avenue and Maude Avenue *(unsignalized)*[2]	MV	D	AM	09/28/21	10.7	B
				PM	09/28/21	10.0	B
26	Clyde Avenue and Maude Avenue *(all-way stop)*	MV	D	AM	09/28/21	11.1	B
				PM	09/28/21	8.3	A

Notes:
* Denotes VTA CMP intersection. SCC = Santa Clara County, MV = Mountain View, SV = Sunnyvale
1. Weighted average control delay measured in seconds per vehicle.
2. Worst movement delay (seconds per vehicle) and LOS are reported for stop-controlled intersections.
Bold indicates a substandard level of service.

4. Motor Vehicle Operations Analysis

This chapter presents the intersection operations analysis including the method by which project traffic is estimated, the results of intersection level of service analysis for existing plus project, background, and background plus project, any adverse effects to intersection level of service caused by the project, intersection vehicle queuing, freeway ramp traffic operations, midblock pedestrian crossings, and effects on surrounding neighborhood streets. A potential adverse effect on a study intersection is not considered a CEQA impact.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed project was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Trip generation estimates (see Table 1) for the mixed-use development are based on standard trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition and the trip caps for new office developments in the EWPP area.[4] For a consistent comparison with the EWPP EIR, the ITE 10th Edition Manual was used. Internal and transit trip reductions were applied to the project according to the VTA *Transportation Impact Analysis (TIA) Guidelines*. A pass-by trip reduction was also applied to the project's retail uses. Net project trip generation on the surrounding roadway network was estimated by further crediting trips generated by the existing land uses on site.

[4] The EWPP identifies an area-wide average trip cap of 0.95 a.m. and 0.88 p.m. peak-hour trips per 1,000 square feet of office and R&D sites to minimize vehicle trips into and out of East Whisman gateways. The 465 Fairchild Dr/600 Ellis Street Office Project transportation analysis, prepared by Fehr Peers dated September 2020, analyzed the combination of existing (legacy) office development not subject to TDM requirements and future new office development that will be subject to TDM requirements in order to refine the trip generation rate necessary for future new office development to be compliant with the gateway trip cap volumes. The resulting trip cap for new office development is 0.83 a.m. and 0.72 p.m., which includes the incorporation of TDM measures required by the EWPP.

Table 5
Project Trip Generation Estimates

Land Use[1]	ITE Code	ITE Land Use	Reduction %	Size		Daily Rate	Daily Trip	AM Peak Hour Rate	AM Peak Hour Trip In	AM Peak Hour Trip Out	AM Peak Hour Trip Total	PM Peak Hour Rate	PM Peak Hour Trip In	PM Peak Hour Trip Out	PM Peak Hour Trip Total
Proposed Land Uses															
Google Office Buildings	Based on Trip Cap Requirement			1,317	ksf	5.25	6,914	0.833	943	154	1,097	0.723	152	800	952
Multifamily Housing	221	Multifamily Housing (Mid-Rise)		1,900	du	5.44	10,336	0.36	178	506	684	0.44	510	326	836
Housing & Retail (15%)[2]			*15%*				*-232*		*-2*	*-4*	*-6*		*-12*	*-11*	*-23*
Housing & Employment (3%)[2]			*3%*				*-310*		*-5*	*-15*	*-20*		*-15*	*-10*	*-25*
Transit Reduction (9%)[2]			*9%*				*-881*		*-15*	*-44*	*-59*		*-43*	*-28*	*-71*
Multifamily Housing Trips							***8,913***		***156***	***443***	***599***		***440***	***277***	***717***
Retail[3]	820	Shopping Center		41	ksf	37.75	1,548	0.94	24	15	39	3.81	75	81	156
Housing & Retail (15%)[2]			*15%*				*-232*		*-4*	*-2*	*-6*		*-11*	*-12*	*-23*
Retail Passby (Daily=30%, AM PH=0%, PM PH=30%)[4]			*30%*				*-395*		*0*	*0*	*0*		*-19*	*-21*	*-40*
Retail Trips							***921***		***20***	***13***	***33***		***45***	***48***	***93***
Community/Civic Space[3]	495	Recreational Community Center		9	ksf	28.82	259	1.76	11	5	16	2.31	10	11	21
Maude Park	411	Public Park		5	acres	15.38	77	0.02	0	0	0	3.83	10	9	19
Project Trips After Reductions							**17,084**		**1,130**	**615**	**1,745**		**657**	**1,145**	**1,802**
Existing Land Uses															
Existing Office Buildings	710	General Office Building		685	ksf	9.74	6,672	1.16	684	111	795	1.15	126	662	788
Transit Reduction (6%)[2]			*6%*				*-400*		*-41*	*-7*	*-48*		*-8*	*-39*	*-47*
Total Existing Trips							**6,272**		**643**	**104**	**747**		**118**	**623**	**741**
Net Project Trips							**10,812**		**487**	**511**	**998**		**539**	**522**	**1,061**

Source: ITE Trip Generation Manual, 10th Edition 2017
Notes:
[1] Daily, AM, and PM peak hour average rates published in ITE Trip Generation Manual, 10th Edition, were used for Multifamily Housing, Retail, and Community/Civic Space uses. Maude Park trips were estimated using the fitted-curve equations for daily and PM peak-hour trips and the average trip rate for AM peak-hour trips. Daily trip rate and AM and PM peak-hour trip cap rates developed for the 465 Fairchild Drive office project were used for the Google office uses.
[2] Trip reductions based on Table 1: Standard Auto Trip Reduction Rates from the *VTA Transportation Impact Analysis Guidelines, October 2014.*
[3] The Master Plan proposes 30,000 s.f. of retail and 20,000 s.f. of community/civic uses. However, land uses proposed under the community civic uses category would result in traffic patterns more similar to retail uses. Therefore, this analysis conservatively assumes 41,000 s.f. of retail and 9,000 s.f. community/civic uses.
[4] Pass-by trip reduction is based on the maximum allowable pass-by trip reduction rate in the Santa Clara Valley Transportation Authority Transportation Impact Analysis Guidelines, October 2014 for the daily and PM peak hour. Hexagon assumes no pass-by trip reduction during the AM peak hour for retail uses.

Gross Project Trip Generation

Through empirical research, data has been collected that show trip generation rates for many types of land uses. The data research is compiled in the publication *Trip Generation Manual, 10th Edition,* by the Institute of Transportation Engineers (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development.

Trips that would be generated by the proposed uses were estimated using the ITE trip rates for, "Multifamily Housing Mid-Rise" (Land Use 221), "Shopping Center" (Land Use 820), "Recreational Community Center" (Land Use 495), and "Public Park" (Land Use 411). For the proposed office uses, on the other hand, trip rates were determined based on the trip caps for new office development in the EWPP. Trips generated by the existing offices on the site were estimated using ITE trip rates for "General Office" (Land Use 710).

A description of the source of trip generation rates for each land-use is provided below:

- ***~~Google~~ Office*.** The trip estimate is based on the daily trip rate and peak-hour trip cap rates for new office developments in the EWPP area. The trip cap rates were determined through the transportation analysis for the 465 Fairchild Drive/600 Ellis Street office project at 0.83 trips per ksf during the AM peak hour and 0.72 trips per ksf during the PM peak hour, which is inclusive of TDM measures required by the EWPP.
- ***Residential.*** The trip estimate is based on the ITE Land Use code 221: Multifamily Housing (Mid-Rise), which includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three to ten levels.
- ***Retail.*** The trip estimate is based on ITE Land Use code 820: Shopping Center. This category includes the trip data for a wide scale of retail/commercial uses, from neighborhood centers to regional centers. It includes several types of retail/commercial uses like retail stores, restaurants, banks, grocery store, and health clubs, etc. that are typically present in shopping centers. Since specific uses of the proposed retail/commercial spaces are unknown, it is reasonable to use the trip rates for shopping centers for the retail/commercial space as it includes a variety of uses that can serve a visitor in one vehicle trip.
- ***Community/Civic Space.*** The trip estimate is based on ITE Land Use code 495: Recreational Community Center. This category includes the trip data for a stand-alone public facility similar to and including YMCAs. These facilities also typically include meeting rooms, classes, daycare, and clubs for adults and children, etc.
- ***Maude Park.*** The trip estimate is based on the ITE Land Use code 411: Public Park. This category includes data for public parks that include swimming facilities, trails, ball fields, soccer fields, and picnic facilities. Because Maude Park is large (over 5 acres) and could include active recreational use (i.e., a sports field, a community pool, picnic/event areas), it is not considered as passive open space. Therefore, trips associated with the park were estimated using the ITE trip rates.

Trip Adjustments and Reductions

Because the project would provide office, residential, and retail mixed-use on site, some residents would patronize the retail and office businesses, which would result in the internalization of some project trips. Per the VTA TIA Guidelines, internal trip reductions of 15% between retail and residential uses and 3% between residential and office uses were applied to the project. The trip reduction factors were first applied to the smaller trip generator; then the same trips were subtracted from the larger trip generators to account for both trip ends.

The project is located within 2,000 feet of the VTA Light Rail Middlefield Station. Therefore, per the VTA TIA Guidelines, a 9% transit reduction was applied to the residential uses. This reduction is supported by a combination of the project's access to public transit and proposed TDM program, which includes access to local transportation information.

The internalization and transit reduction factors for the office uses were not applied because the trip cap rates for new office developments in the EWPP area, which are 28 and 37 percent lower than the ITE trip rates for the AM and PM peak hours, respectively, account for internalization and TDM measures. Therefore, additional VTA internalization and transit reduction were not applied to the office uses. According to the City's Greenhouse Gas (GHG) Reduction Program, the project would be required to achieve a minimum 9 percent reduction for nonresidential land uses with 50 employees or more. Because the project would be required to achieve the trip caps through the TDM plan, it would meet the reduction goal required by the GHG Reduction Program.

In addition, trip generation for retail uses is typically adjusted to account for pass-by trips. Pass-by trips are trips that would already be on the adjacent roadways (and are therefore already counted in the existing traffic) but would turn into the site while passing by. Pass-by trips are therefore excluded from the traffic projections (although pass-by traffic is accounted for at the site entrances). An average pass-by trip reduction of 30% was applied to the daily trips and the PM peak-hour trips of the retail component of the project based on the maximum allowable pass-by reduction per the VTA TIA Guidelines.

Existing Trip Credits

The project would demolish approximately 685,000 square feet of existing office buildings as part of the proposed project. The trips generated by the existing office buildings on the site were estimated using ITE average trip rates for General Office Building. A transit reduction factor was applied to the office uses per the VTA TIA Guidelines. Due to Covid-19, most employees are working remotely. Therefore, trip generation counts were not conducted for the existing buildings, and the ITE trip rates were used to estimate the existing trips. Existing trip credits account for the trips that were generated by the existing office buildings, all of which are occupied or were occupied recently.

Net Project Trips

After applying the applicable trip reductions and existing trip credits, the net new project trips generated by the proposed land uses on the roadway network would be 10,812 daily trips, including 998 AM peak hour trips (487 inbound trips and 511 outbound trips), and 1,061 PM peak hour trips (539 inbound trips and 522 outbound trips) (see Table 5).

Trip Distribution and Assignment

The trip distribution patterns for the office and residential uses were estimated based on the trip distributions for the 465 Fairchild Drive/600 Ellis Street office project and the 355 E. Middlefield Road residential project, respectively. Both projects are located in the EWPP area, and the trip distributions were informed by the overall EWPP distribution. The trip distribution for the retail and community uses of the project was estimated based on the locations of complementary land uses. It is expected that the project retail and community uses would serve mostly the area in the vicinity of the project area. The trip distribution patterns are shown on Figure 9.

The peak-hour trips generated by the existing and proposed uses were assigned to the roadway system based on the directions of approach and departure, the roadway network connections, and the locations of project driveways. Figure 10 show the assignment of the net project traffic at the study intersections. A tabular summary of project traffic at each study intersection is contained in Appendix B.

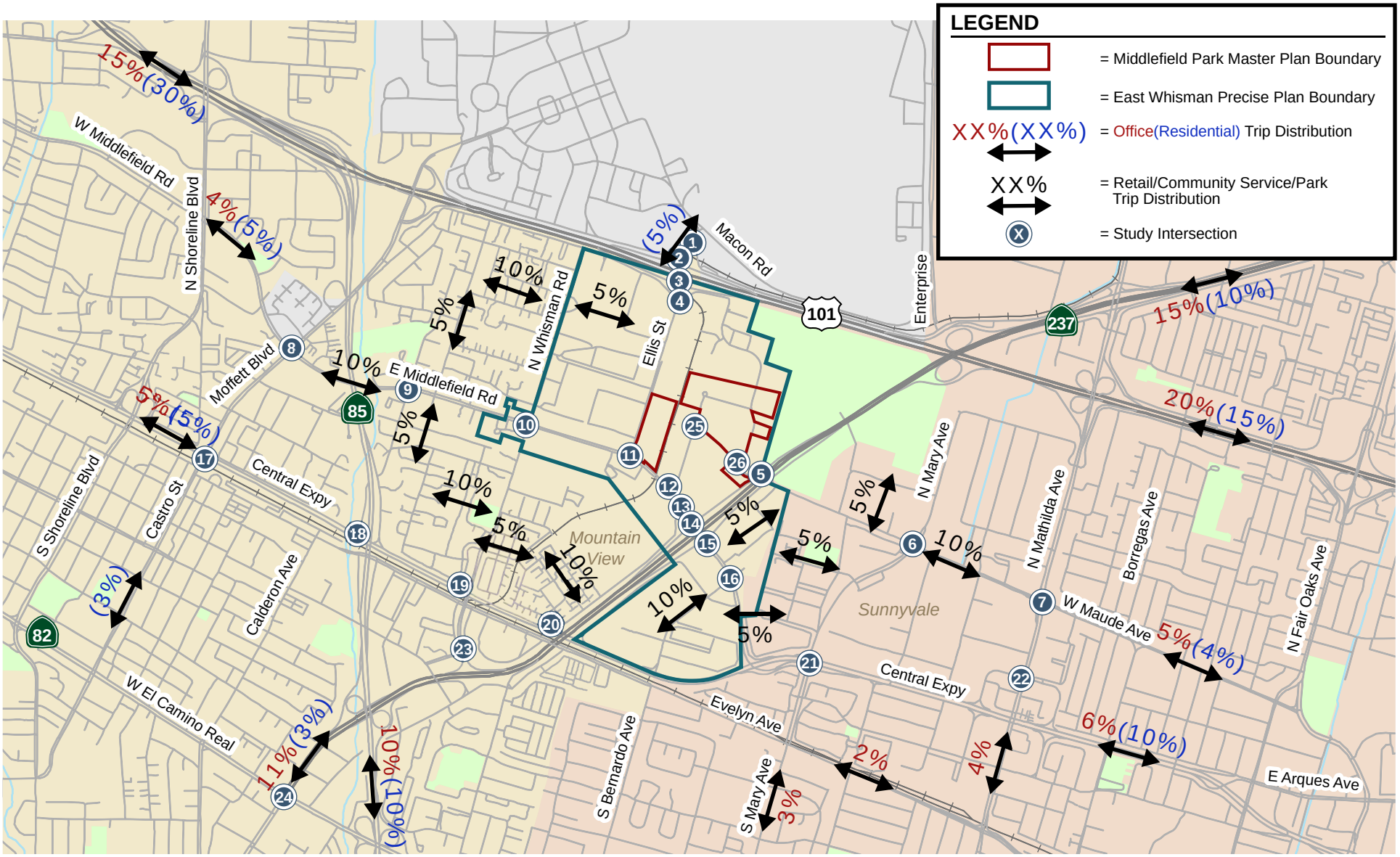


Figure 9
Project Trip Distribution

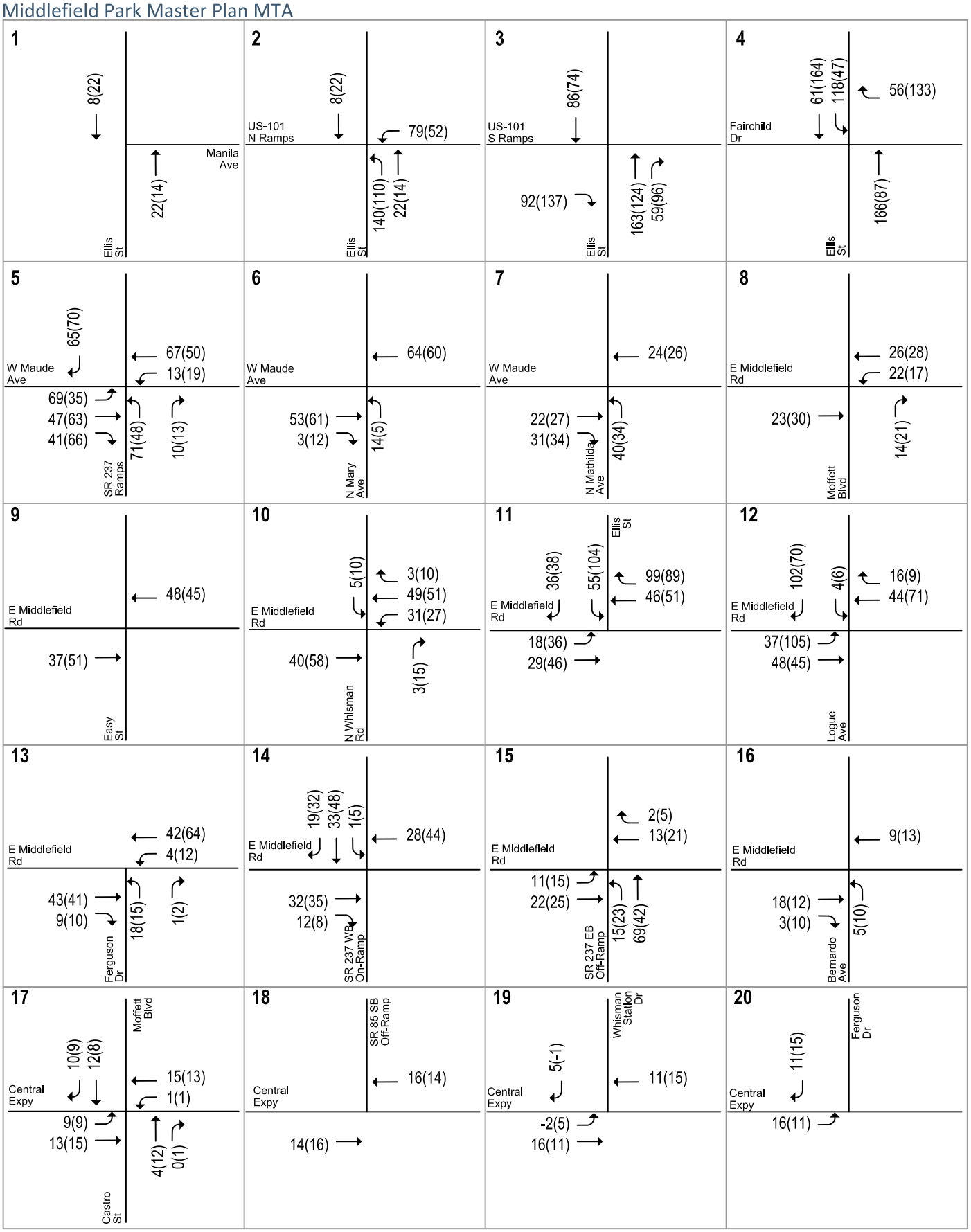


Figure 10
Project Trip Assignment

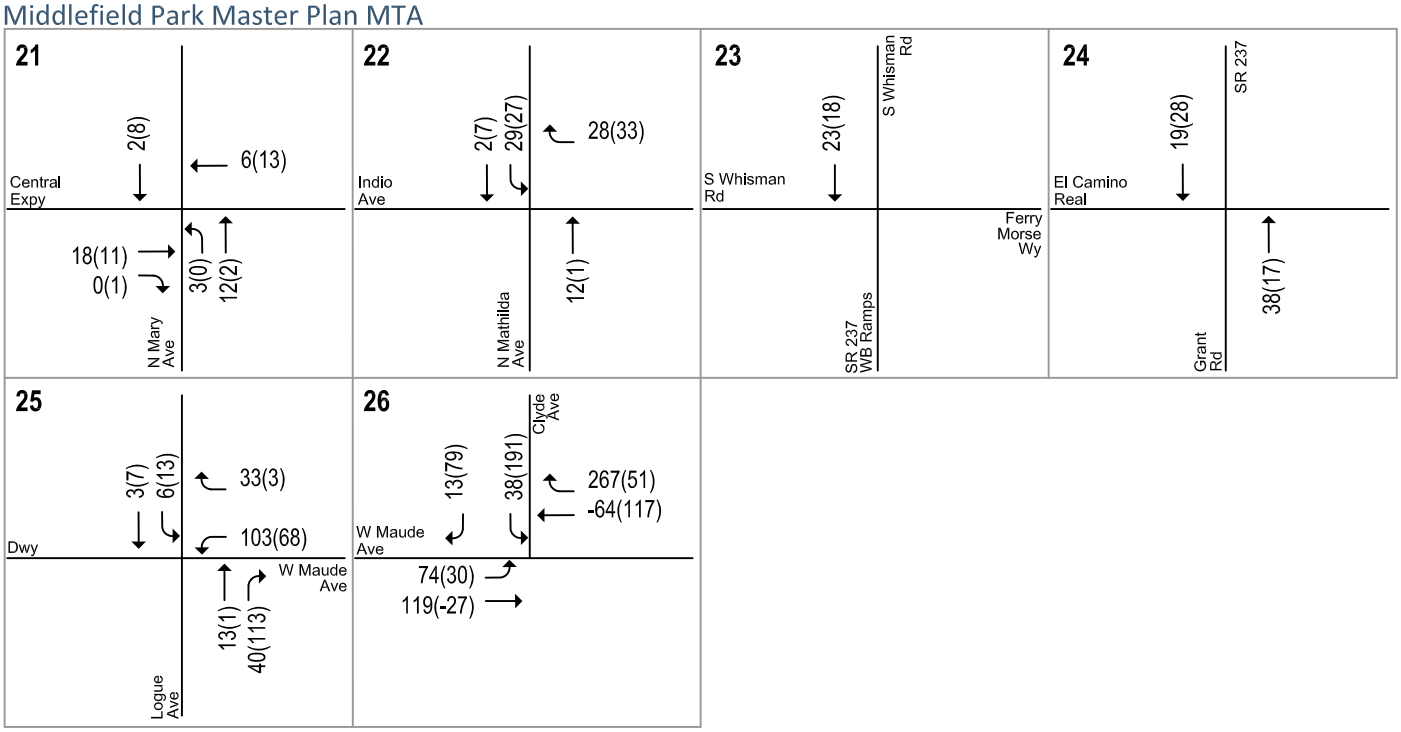


Figure 10
Project Trip Assignment

Intersection Traffic Operations Analysis

The intersection operations analysis is intended to quantify the operations of the study intersections and to identify potential adverse effects due to the addition of project traffic. The study intersections are located in the Cities of Mountain View and Sunnyvale and are evaluated based on the respective cities' and CMP's intersection analysis methodologies and standards in determining potential adverse operational effects due to the project, as described in Chapter 1.

Roadway Network

The roadway network under background and project conditions is assumed to be the same as under existing conditions because there are no planned and funded transportation improvements at the study intersections that would alter the existing intersection lane configurations, and the project would not alter the existing intersection lane configurations.

Traffic Volumes

Existing Plus Project Traffic Volumes

Project trips were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 11).

Background Traffic Volumes

Background traffic volumes for the study intersections (see Figure 12) were estimated by adding to the existing traffic volumes the trips generated by nearby approved projects that have not been constructed or occupied.

Lists of approved projects were obtained from the Cities of Mountain View and Sunnyvale. Hexagon considered both the location and size of the approved projects in order to eliminate those that were too far away or too small to affect traffic conditions of the study intersections. The approved projects considered for the study are listed in Appendix D. Vehicle trips from the approved projects were obtained from the project's TIA or environmental document (Initial Study or EIR), if available. For projects without a traffic study, trip estimates were developed using rates published in the *Trip Generation Manual*. The estimated trips were assigned to the study intersections according to distributions identified in the development traffic studies, if available, or knowledge of the study area.

Background Plus Project Traffic Volumes

Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 13).

The approved trips and traffic volumes for all components of traffic are tabulated in Appendix B.

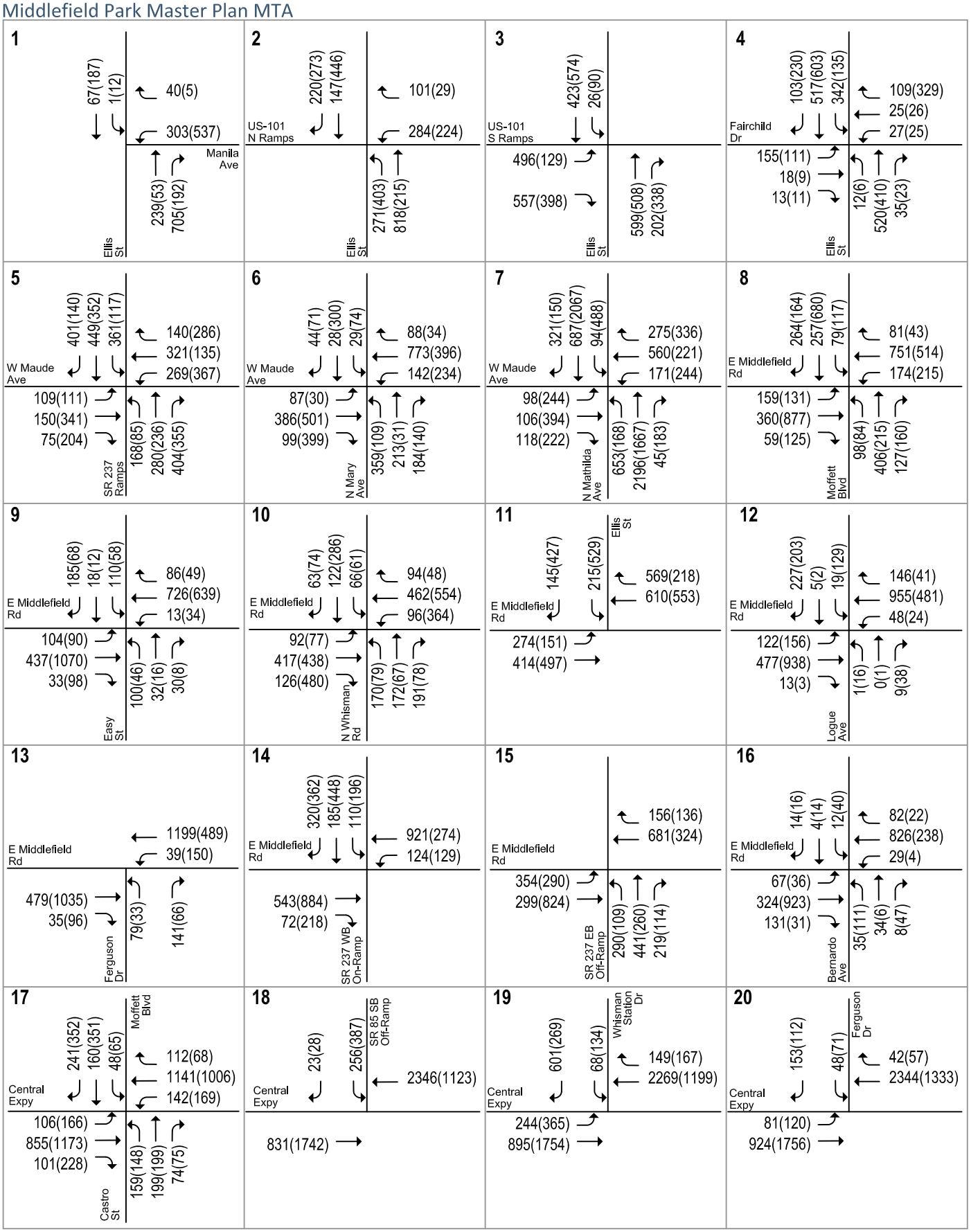


Figure 11
Existing Plus Project Traffic Volumes

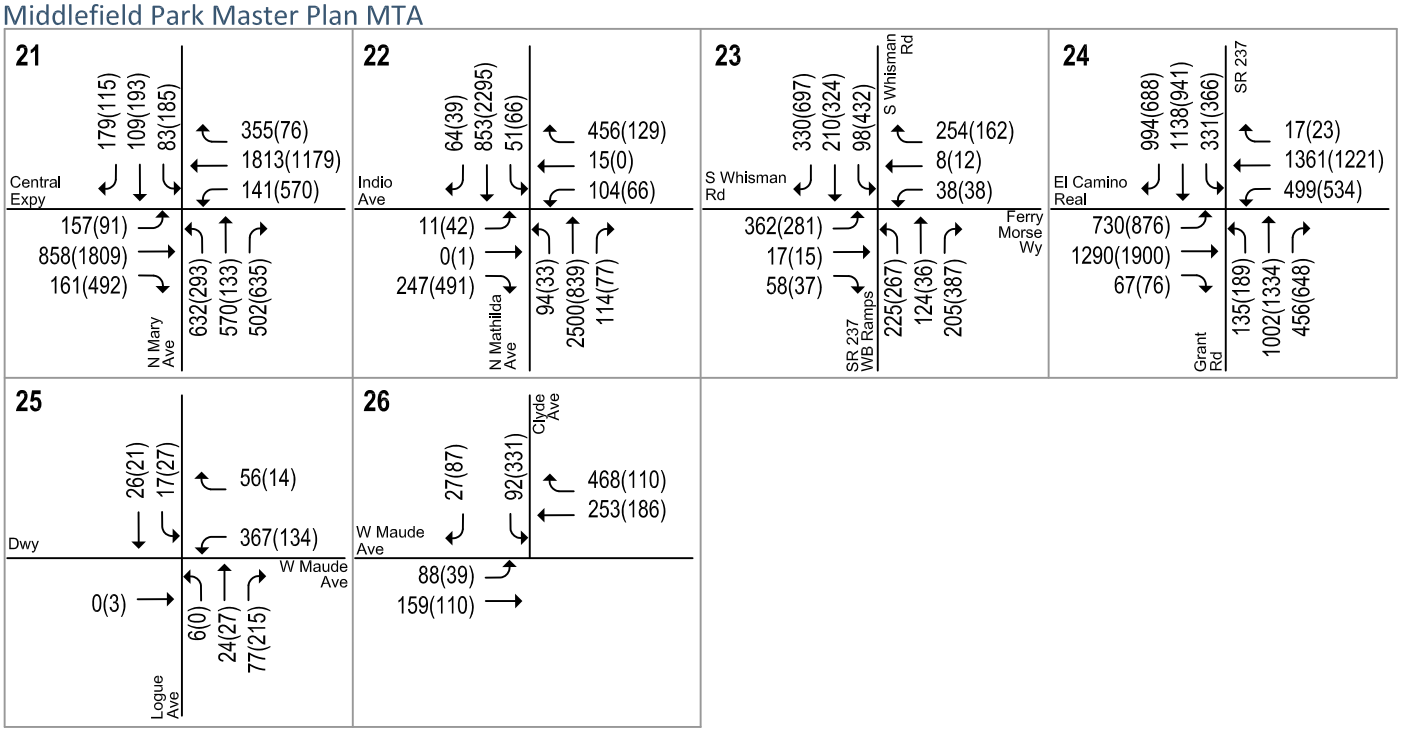


Figure 11
Existing Plus Project Traffic Volumes

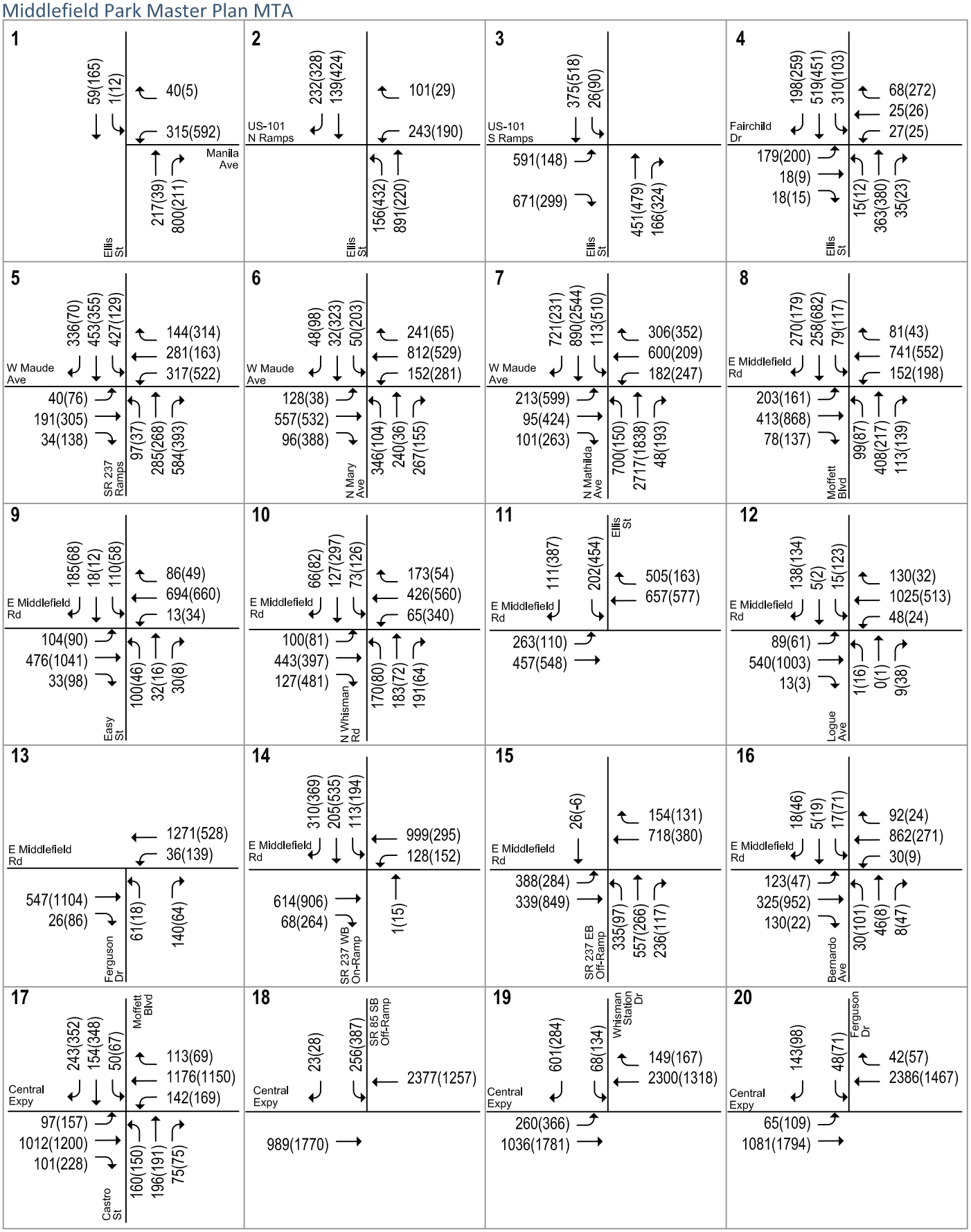


Figure 12
Background Traffic Volumes

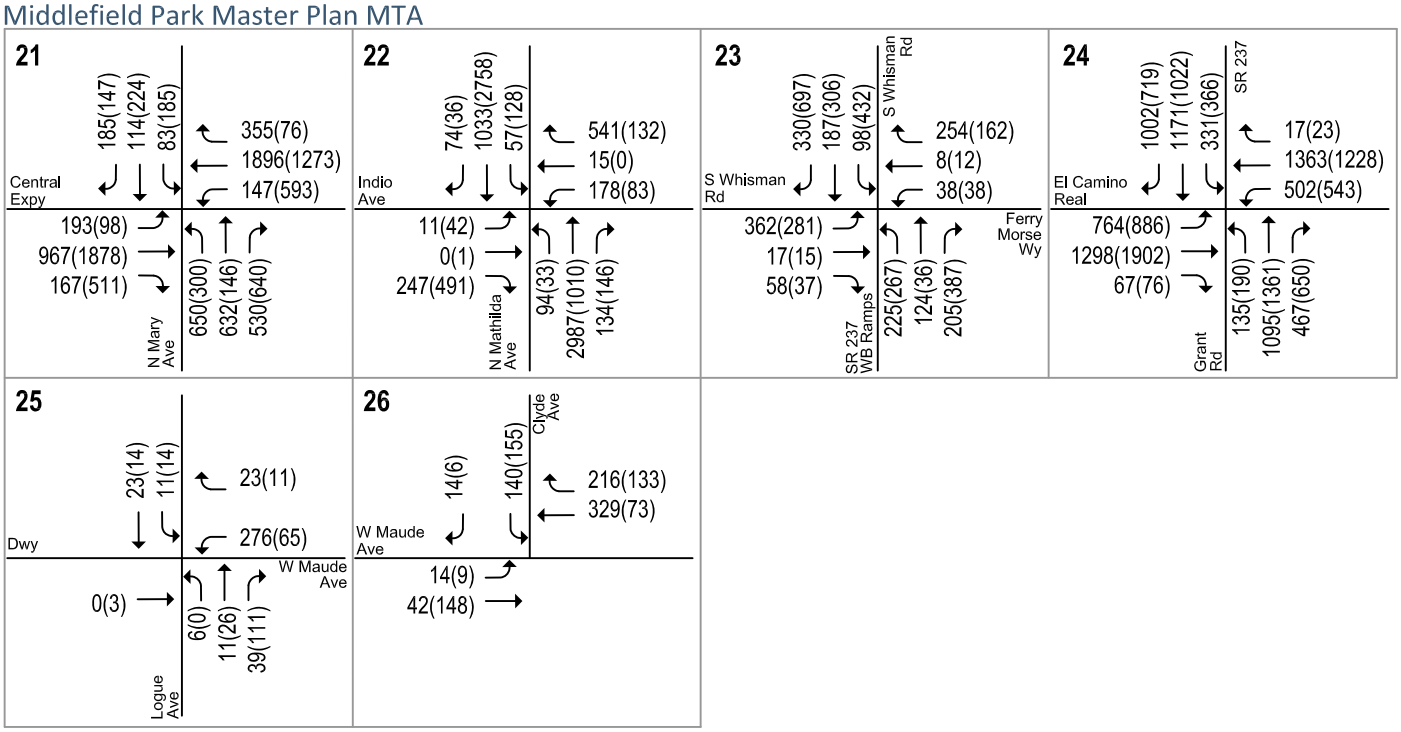


Figure 12
Background Traffic Volumes

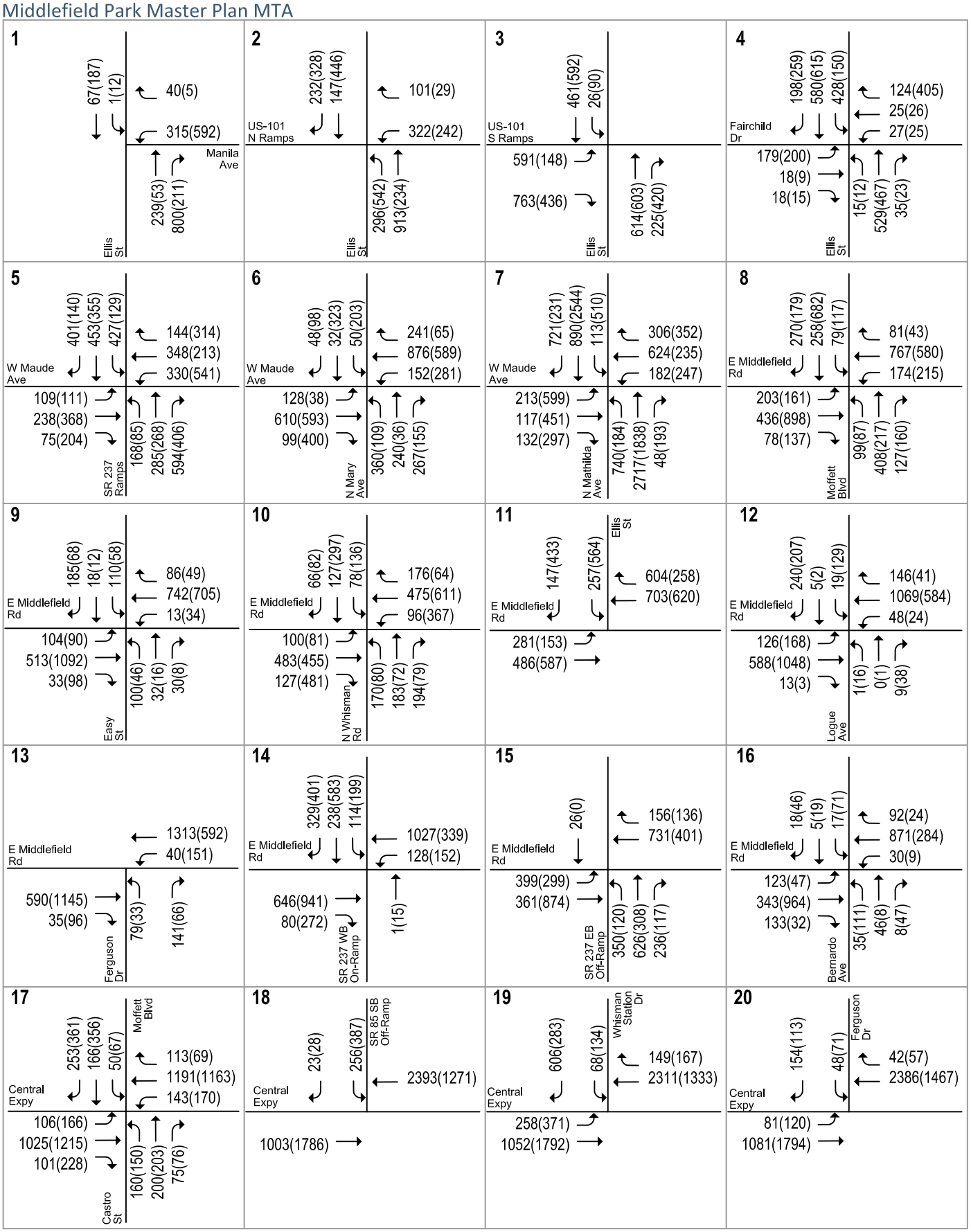


Figure 13
Background Plus Project Traffic Volumes

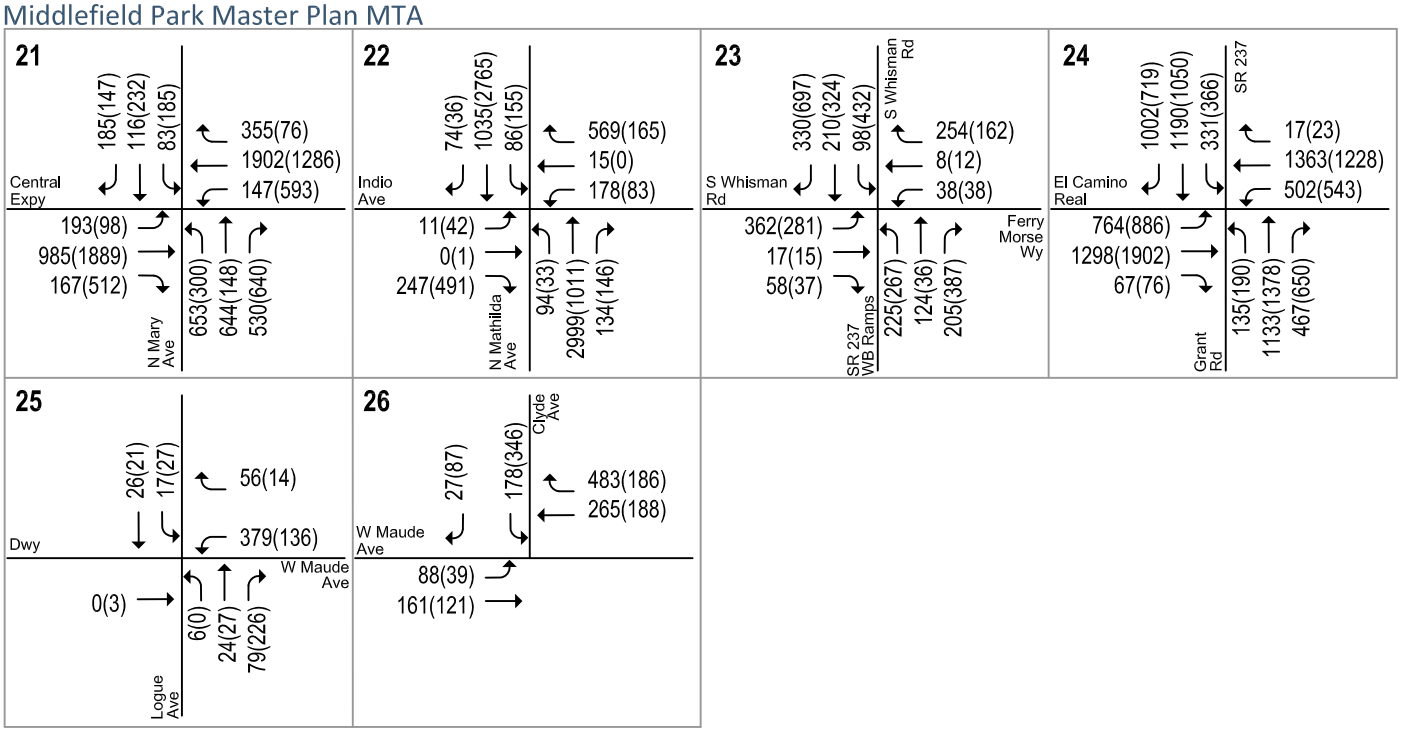


Figure 13
Background Plus Project Traffic Volumes

Intersection Levels of Service

The results of the existing plus project intersection level of service analysis are shown in Table 6. The results of the background and background plus project intersection levels of service analysis are shown in Table 7. The detailed intersection level of service calculation sheets for all study scenarios are included in Appendix C.

Background Conditions

Intersection levels of service were evaluated against the standards of the CMP and the Cities of Mountain View and Sunnyvale. The results of the intersection level of service analysis show that most study intersections would operate at acceptable levels during both the AM and PM peak hours of traffic. The Ellis Street/Manila Drive intersection would operate at LOS F during the AM peak hour, and the Grant Road/SR 237 and El Camino Real intersection would operate at LOS F during the AM and PM peak hours.

The EWPP EIR shows the Grant Road/SR 237 and El Camino Real intersection would operate at LOS E under background conditions and LOS F under cumulative conditions. However, no improvements were identified for this intersection.

Table 6
Existing Plus Project Intersection Levels of Service

					Existing		Existing+Project			
ID	Intersection (Jurisdiction)	Jurisdiction	LOS Standard	Peak Hour	Avg. Delay[1]	LOS	Avg. Delay[1]	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Ellis Street and Manila Drive	MV	D	AM	30.9	D	30.9	D	--	--
	(all-way stop)			PM	17.8	C	18.3	C	--	--
2	Ellis Street and US 101 NB Ramps	MV	D	AM	14.3	B	17.1	B	2.8	0.120
				PM	17.5	B	20.0	C+	2.4	0.112
3	Ellis Street and US 101 SB Ramps	MV	D	AM	16.6	B	18.5	B-	1.9	0.089
				PM	16.0	B	17.9	B	2.9	0.135
4	Ellis Street and Fairchild Drive	MV	D	AM	16.2	B	17.8	B	-0.3	0.037
				PM	16.0	B	18.9	B-	4.5	0.186
5	SR 237 Ramps and Maude Avenue	MV	D	AM	29.2	C	32.3	C-	3.7	0.087
				PM	34.3	C-	35.0	C-	-1.2	0.114
6	Mary Avenue and Maude Avenue	SV	D	AM	37.2	D+	36.6	D+	-0.4	0.024
				PM	35.5	D+	34.6	C-	-0.5	0.023
7	Mathilda Avenue and Maude Avenue*	SV/CMP	E	AM	42.4	D	43.0	D	0.6	0.007
				PM	50.8	D	52.6	D-	2.2	0.015
8	Moffett Boulevard and Middlefield Road	MV	D	AM	37.1	D+	37.3	D+	-0.1	0.008
				PM	39.1	D	39.7	D	1.0	0.020
9	Easy St and Middlefield Road	MV	D	AM	19.2	B-	19.1	B-	-0.1	0.015
				PM	11.9	B+	11.7	B+	0.0	0.016
10	Whisman Road and Middlefield Road	MV	D	AM	29.5	C	29.3	C	-0.2	0.021
				PM	31.4	C	31.8	C	0.7	0.018
11	Ellis Street and Middlefield Road	MV	D	AM	15.1	B	16.3	B	1.0	0.077
				PM	15.5	B	17.0	B	2.1	0.102
12	Logue Avenue and Middlefield Road	MV	D	AM	14.0	B	18.2	B-	5.3	0.107
				PM	16.9	B	20.6	C+	4.1	0.064
13	Ferguson Drive and Middlefield Road	MV	D	AM	10.3	B+	10.4	B+	0.0	0.024
				PM	8.8	A	9.0	A	0.4	0.030
14	SR 237 WB Ramps and Middlefield Road	MV	D	AM	18.9	B-	19.3	B-	0.4	0.020
				PM	14.9	B	15.1	B	0.2	0.033
15	SR 237 EB Ramps and Middlefield Road	MV	D	AM	24.4	C	24.4	C	0.0	0.026
				PM	18.8	B-	19.5	B-	0.7	0.020

Table 6
Existing Plus Project Intersection Levels of Service (continued)

ID	Intersection	Jurisdiction	LOS Standard	PM AM	Existing Avg. Delay[1]	Existing LOS	Existing+Project Avg. Delay[1]	Existing+Project LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
16	Bernardo Avenue and Middlefield Road	MV	D	AM	11.0	B+	11.1	B+	0.1	0.006
				PM	15.4	B	15.8	B	0.4	0.013
17	Moffett Boulevard and Central Expy*	SCC/CMP	E	AM	41.6	D	42.0	D	0.4	0.011
				PM	58.2	E+	59.9	E+	1.4	0.009
18	SR 85 SB Off Ramp/Central Expy	SCC	D	AM	10.8	B+	10.9	B+	0.1	0.005
				PM	13.8	B	13.8	B	0.0	0.005
19	Whisman Station Drive and Central Expy*	SCC/CMP	E	AM	25.4	C	25.9	C	0.7	0.005
				PM	10.7	B+	10.8	B+	0.3	0.006
20	Ferguson Drive and Central Expy*	SCC	D	AM	5.7	A	5.9	A	0.0	0.000
				PM	3.1	A	3.4	A	0.0	0.000
21	Mary Avenue and Central Expy*	SCC/CMP	E	AM	51.1	D-	51.1	D-	0.1	0.003
				PM	62.1	E	62.5	E	0.7	0.004
22	Mathilda Avenue and Indio Avenue	SV	E	AM	36.7	D+	38.5	D+	2.7	0.037
				PM	38.3	D+	38.7	D+	0.0	0.001
23	Whisman Road and SR 237 WB Ramps	MV	D	AM	33.8	C-	33.9	C-	0.5	0.014
				PM	35.3	D+	35.4	D+	0.0	0.000
24	Grant Road/SR 237 and El Camino Real*	Caltrans/CMP	E	AM	**102.0**	**F**	**101.6**	**F**	0.0	0.000
				PM	**94.0**	**F**	**93.8**	**F**	0.0	0.000
25	Logue Avenue and Maude Avenue *(unsignalized)*[2]	MV	D	AM	10.7	B	13.0	B	--	--
				PM	10.0	B	11.1	B	--	--
26	Clyde Avenue and Maude Avenue *(all-way stop)*	MV	D	AM	11.1	B	19.5	C	--	--
				PM	8.3	A	12.7	B	--	--

Notes:
* Denotes VTA CMP intersection. SCC = Santa Clara County, MV = Mountain View, SV = Sunnyvale
1. Weighted average control delay measured in seconds per vehicle.
2. Worst movement delay (seconds per vehicle) and LOS are reported for stop-controlled intersections.
Bold indicates a substandard level of service.

Table 7
Background Plus Project Intersection Levels of Service

ID	Intersection	Jurisdiction	LOS Standard	Peak Hour	Background Avg. Delay[1]	Background LOS	Background+Project Avg. Delay[1]	Background+Project LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Ellis Street and Manila Drive	MV	D	AM	**54.4**	**F**	**54.2**	**F**	--	--
	(all-way stop)			PM	23.4	C	24.3	C	--	--
2	Ellis Street and US 101 NB Ramps	MV	D	AM	15.1	B	18.5	B-	3.7	0.125
				PM	19.6	B-	23.4	C	4.0	0.122
3	Ellis Street and US 101 SB Ramps	MV	D	AM	18.2	B-	22.5	C+	4.2	0.110
				PM	15.6	B	17.8	B	2.1	0.153
4	Ellis Street and Fairchild Drive	MV	D	AM	16.7	B	19.3	B-	7.5	0.149
				PM	17.6	B	20.7	C+	5.6	0.185
5	SR 237 Ramps and Maude Avenue	MV	D	AM	34.4	C-	39.2	D	6.6	0.061
				PM	34.5	C-	36.6	D+	1.6	0.079
6	Mary Avenue and Maude Avenue	SV	D	AM	37.3	D+	36.9	D+	-0.5	0.018
				PM	36.0	D+	35.4	D+	-0.3	0.025
7	Mathilda Avenue and Maude Avenue*	SV/CMP	E	AM	54.1	D-	56.1	E+	4.7	0.021
				PM	62.7	E	63.6	E	-1.0	-0.004
8	Moffett Boulevard and Middlefield Road	MV	D	AM	37.9	D+	38.1	D+	0.0	0.008
				PM	39.7	D	40.1	D	0.8	0.013
9	Easy St and Middlefield Road	MV	D	AM	18.9	B-	18.7	B-	0.0	0.011
				PM	11.7	B+	11.5	B+	-0.1	0.008
10	Whisman Road and Middlefield Road	MV	D	AM	29.1	C	29.0	C	-0.2	0.021
				PM	31.9	C	32.5	C-	0.6	0.017
11	Ellis Street and Middlefield Road	MV	D	AM	15.3	B	16.9	B	1.5	0.078
				PM	15.6	B	17.3	B	2.4	0.102
12	Logue Avenue and Middlefield Road	MV	D	AM	13.9	B	18.1	B-	5.4	0.107
				PM	16.3	B	20.3	C+	3.7	0.051
13	Ferguson Drive and Middlefield Road	MV	D	AM	10.1	B+	10.0	A	0.1	0.024
				PM	8.7	A	8.8	A	0.4	0.022
14	SR 237 WB Ramps and Middlefield Road	MV	D	AM	19.1	B-	19.5	B-	0.5	0.020
				PM	16.2	B	16.6	B	0.4	0.035
15	SR 237 EB Ramps and Middlefield Road	MV	D	AM	25.5	C	25.5	C	0.0	0.026
				PM	19.5	B-	20.2	C+	0.6	0.019

Table 7
Background Plus Project Intersection Levels of Service (continued)

ID	Intersection	Jurisdiction	LOS Standard	AM PM	Background Avg. Delay[1]	Background LOS	Background+Project Avg. Delay[1]	Background+Project LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
16	Bernardo Avenue and Middlefield Road	MV	D	AM	12.9	B	12.9	B	0.0	0.006
				PM	16.4	B	16.7	B	0.4	0.005
17	Moffett Boulevard and Central Expy*	SCC/CMP	E	AM	42.4	D	42.8	D	0.4	0.011
				PM	63.4	E	65.6	E	1.9	0.009
18	SR 85 SB Off Ramp/Central Expy	SCC	D	AM	10.8	B+	10.9	B+	0.1	0.005
				PM	13.8	B	13.8	B	0.0	0.005
19	Whisman Station Drive and Central Expy*	SCC/CMP	E	AM	25.3	C	25.8	C	0.7	0.005
				PM	10.9	B+	11.0	B+	0.3	0.006
20	Ferguson Drive and Central Expy*	SCC	D	AM	4.8	A	5.0	A	0.0	0.000
				PM	3.1	A	3.4	A	0.0	0.000
21	Mary Avenue and Central Expy*	SCC/CMP	E	AM	52.4	D-	52.4	D-	0.1	0.003
				PM	65.9	E	66.4	E	0.9	0.004
22	Mathilda Avenue and Indio Avenue	SV	E	AM	52.1	D-	58.6	E+	10.3	0.037
				PM	41.9	D	43.7	D	1.5	0.010
23	Whisman Road and SR 237 WB Ramps	MV	D	AM	33.8	C-	33.9	C-	0.5	0.014
				PM	35.3	D+	35.3	D+	-0.1	-0.001
24	Grant Road/SR 237 and El Camino Real*	Caltrans/CMP	E	AM	**102.9**	**F**	**102.5**	**F**	0.0	0.000
				PM	**95.8**	**F**	**94.4**	**F**	-1.9	-0.005
25	Logue Avenue and Maude Avenue *(unsignalized)*[2]	MV	D	AM	10.8	B	13.2	B	--	--
				PM	10.1	A	11.2	B	--	--
26	Clyde Avenue and Maude Avenue *(all-way stop)*	MV	D	AM	12.6	B	28.4	D	--	--
				PM	8.7	A	14.3	B	--	--

Notes:
* Denotes VTA CMP intersection. SCC = Santa Clara County, MV = Mountain View, SV = Sunnyvale
1. Weighted average control delay measured in seconds per vehicle.
2. Worst movement delay (seconds per vehicle) and LOS are reported for stop-controlled intersections.
Bold indicates a substandard level of service.

Project Conditions

The results of the analysis show that the added project trips would not cause an adverse operational effect at any of the signalized study intersections under existing and background conditions.

The Ellis Street/Manila Drive intersection is a T-intersection and is stop controlled on all approaches. Under background conditions, the intersection is estimated to operate at an unacceptable level of service (LOS F) during the AM peak hour. The added project trips would slightly increase the average delay for the intersection but is not expected to cause a noticeable effect on traffic operations at this intersection. The peak-hour volume signal warrant analysis described below indicates that both the AM and PM peak-hour volumes at the intersection would meet the peak-hour signal warrant under both existing and background conditions. To address the deficiency, the EWPP EIR recommends signalizing the intersection with a protected left turn lane and shared through/right lane for each approach. Thus, the project should contribute to the improvement identified by the EWPP, which can be ~~. The project may be able to contribute to the improvement identified~~achieved by the applicant paying the EWPP Development Impact Fee~~, if adopted~~.

There are several signalized intersections for which the average delay under project conditions is shown to be less than under no project conditions during at least one peak hour. The decrease in average delay can be less under project conditions because the intersection delay is a weighted average of all intersection movements. The addition of project traffic to movements with delays lower than the average intersection delay can reduce the average delay for the entire intersection. There are also several

signalized intersections at which there would be no increase in critical delay and/or critical v/c compared to existing and background conditions. This is because the project trips are assigned to the non-critical movements of these intersections.

Signal Warrant Analysis At Unsignalized Intersections

Traffic operations at the unsignalized intersections were also analyzed on the basis of the Peak-Hour Volume Signal Warrant, (Warrant #3) described in *the California Manual on Uniform Traffic Control Devices (MUTCD)*, 2014 Edition. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. The results of peak-hour volume signal warrant analysis (see Table 8) indicate that the Ellis Street/Manila Drive intersection would meet the thresholds that warrant signalization under both existing and background conditions during both AM and PM peak hours. The Logue Avenue/Maude Avenue intersection would not meet the warrant analysis under any condition. The Clyde Avenue/Maude Avenue intersection would meet the warrant analysis under the background plus project conditions for both the AM and PM peak hours. However, because the intersection would operate at an acceptable LOS D under background plus project conditions, installation of a traffic signal is not recommended for the intersection. The peak-hour signal warrant sheet is contained in Appendix E.

Table 8
Signal Warrant Analysis Summary

Intersection	Signal Warrant Met[1]			
	Existing	Existing Plus Project	Background	Background Plus Project
Ellis Street & Manila Street	Yes	Yes	Yes	Yes
Logue Avenue & Maude Avenue	No	No	No	No
Clyde Avenue & Maude Avenue	No	No	No	Yes

Notes:

1. Based on the California Manual on Uniform Traffic Control Devices for Streets and Highways, Warrant 3 - Peak Hour

Intersection Control at Clyde Avenue and Maude Avenue

The Clyde Avenue/Maude Avenue intersection is all-way stop controlled. The peak-hour volume under the background plus project scenario would warrant a traffic signal. However, the intersection would operate adequately without a signal.

To further evaluate the need for a traffic signal at the Clyde Avenue/Maude Avenue intersection, the Eight-Hour Vehicular Volume Warrant (Warrant #1) and the Pedestrian Volume Warrant (Warrant #4) were checked. The warrant sheet is contained in Appendix E. The 8-hour vehicular volume warrant would not be met because the traffic volume for four of the highest 8 hours is less than the minimum thresholds for a traffic signal. Based on the peak period pedestrian volume estimated by the applicant for the MPMP, there would be up to 100 pedestrians during the 3-4 hour peak period, which is much lower than the minimum threshold (100 pedestrians per hour) of the pedestrian volume warrant. Therefore, based on the 8-hour volume and pedestrian volume warrants, the intersection would not warrant a traffic signal.

As an alternative, a roundabout was also evaluated for the Maude Avenue/Clyde Avenue intersection. A standard single lane roundabout typically requires 110 feet in diameter and a mini roundabout requires 80 feet in diameter. The intersection is approximately 70 feet wide in the east-west direction. However, in the north-south direction, the intersection is approximately 50 feet wide. Because the intersection

comprises an arterial and collector street, a standard roundabout would be appropriate. To accommodate the roundabout would require taking approximately 20 to 30 feet from the adjacent properties at Building R6, Building R5, as well as the property at the northeast corner of Clyde Avenue/Maude Avenue, for right-of-way use. With the roundabout, the intersection would operate similarly or better than the existing all-way stop. With the all-way stop, the maximum westbound vehicle queue on Maude Avenue is estimated to extend to the signal at SR 237 during the AM peak hour under background plus project conditions. With the roundabout, the westbound vehicle queue is expected to be shorter and would not extend to the signal at SR 237. It should be noted that the roundabout may be challenging to accommodate since the project does not include redevelopment of the property at the northeast corner of Clyde Avenue/Maude Avenue and it would alter the project significantly, resulting in fewer residential units (Buildings R5 and R6) – particularly affordable units - and a reduction in the size of public parks (Maude and Gateway Parks). Due to right-of-way constraints and loss of residential units and park space, the roundabout is not recommended.

Stop Warrant Analysis At Logue Avenue and Maude Avenue

A potential all-way stop at the Logue Avenue and Maude Avenue intersection was evaluated under existing, background, and background plus project conditions, based on the criteria described in the City's stop warrant analysis worksheet. The criteria includes:

I. **Volume Warrant:** The vehicular volume entering the intersection from all approaches is at least 300 vehicles per hour for the highest 8 hours of an average day, AND the combined vehicular volume entering the intersection from the minor street approaches is at least 100 vehicles per hour for the same 8 hours.

   OR

   The vehicular volume entering the intersection from all approaches is at least 300 vehicles per hour for the highest 8 hours of an average day, AND the total pedestrian volume entering the intersection is at least 100 pedestrians per hour for the same 8 hours.

   If the intersection is located in a residential area, the above volume thresholds are decreased by 40%.

II. **Crash Warrant:** 3 or more reported crashes/collisions in a 12-month period.

III. **Line of Sight Warrant:** 150 feet or less line of sight distance on one or more approaches of the major street.

An intersection qualifies as a residential area if ALL of the following conditions exist:

- Both streets have residential frontage and have a 25 mph speed limit.
- Neither street is an adopted through street as defined in the CVC (California Vehicle Code).
- Neither street has more than one travel lane in each direction.
- No stop sign or traffic signal exists within 500 feet along the major street.
- The installation of a 4-way stop sign is compatible with overall traffic circulation.

The Logue Avenue/Maude Avenue intersection does not qualify as a residential area because both streets do not have a residential frontage, even though some residential uses are~~is~~ anticipated along both streets (400 Logue Avenue and the project Building R3).

Based on the City's stop warrant criteria, the intersection would not meet any of the three warrants under any scenario. The stop warrant analysis worksheets are included in Appendix E.

Intersection Vehicle Queuing

The analysis of intersection operations was supplemented with a vehicle queuing analysis for intersections where the project would add a substantial number of trips to the left-turn movements. This analysis provides a basis for estimating future storage requirements at the intersections under existing, background, and background plus project conditions. Vehicle queues were estimated using the Poisson method, described in Chapter 1. The following left-turn movements were evaluated, and the results of the queueing analysis are summarized in Table 9:

- Ellis Street and Fairchild Drive: southbound left turn
- SR 237 Ramps and Maude Avenue: northbound and eastbound left turns
- Mary Avenue and Maude Avenue: northbound left turn
- Mathilda Avenue and Maude Avenue: northbound left turn
- Whisman Road and Middlefield Road: southbound and westbound left turns
- Ellis Street and Middlefield Road: southbound and eastbound left turns
- Logue Avenue and Middlefield Road: eastbound left turn
- Ferguson Drive and Middlefield Road: northbound and westbound left turns
- SR 237 Eastbound Ramps and Middlefield Road: northbound left turn
- Ferguson Drive and Central Expressway: eastbound left turn
- Moffett Boulevard and Middlefield Road: westbound left turn
- Mathilda Avenue and Indio Avenue: southbound left turn
- Logue Avenue and Maude Avenue: westbound movement
- Clyde Avenue and Maude Avenue: southbound and eastbound movements

The queuing analysis indicates that under background plus project conditions, the 95th percentile left-turn vehicle queue at the following movements and peak hours would exceed the storage capacity due to the project. The vehicle queuing calculations are included in Appendix F.

- Ellis Street and Fairchild Drive: southbound left turn (AM peak hour)
- Mathilda Avenue and Maude Avenue: northbound left turn (AM peak hour)
- Whisman Road and Middlefield Road: westbound left turn (PM peak hour)
- Ellis Street and Middlefield Road: eastbound left turn (AM and PM peak hours)
- Logue Avenue and Middlefield Road: eastbound left turn (PM peak hour)
- Clyde Avenue and Maude Avenue: southbound movement (PM peak hour)

The queuing analyses for these movements are discussed below. The project trips would not cause the estimated maximum vehicle queue to exceed the storage capacity at other movements or peak hours.

Southbound Left Turn at Ellis Street and Fairchild Drive

The southbound left-turn lane on Ellis Street at Fairchild Drive provides approximately 175 feet of vehicle storage, which can accommodate about seven vehicles. The 95th percentile queue currently extends past the storage lane by one vehicle during the AM peak hour. Under background conditions, the queue would exceed the storage length by three vehicles. The project would increase the 95th percentile queue by three vehicles under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by six vehicles in the AM peak hour.

The EWPP EIR analyzed the Ellis Street corridor at the US 101 interchange. The EIR identified that during the AM peak hour, the southbound queue at Fairchild Drive would extend to the US 101 southbound ramp intersection and cause extensive queuing and vehicle delays on the southbound off ramp. However, the EIR indicates that due to right-of-way and funding constraints, there are no feasible

Table 9
Queuing Analysis Summary

Analysis Scenario	Ellis Street & Fairchild		SR 237 Ramps & Maude Avenue				Mary Avenue & Maude Avenue		Mathilda Avenue & Maude Avenue		SR 237 EB Ramps & Middlefield Road	
	SBL		NBL		EBL		NBL		NBL		NBL	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing												
Cycle/Delay[1] (sec)	70	70	100	110	100	110	150	130	160	160	95	100
Volume (vph)	224	88	97	37	40	76	345	104	613	134	275	86
Number of lanes	1	1	1	1	1	1	2	2	2	2	2	2
Volume (vphpl)	224	88	97	37	40	76	173	52	307	67	138	43
95th %. Queue (veh/ln)	8	4	6	3	3	5	12	4	20	6	7	3
95th %. Queue[2] (ft/ln)	200	100	150	75	75	125	300	100	500	150	175	75
Storage (ft/ln)	175	175	225	225	175	175	250	250	450	450	250	250
Adequate (Y/N)	**N**	Y	Y	Y	Y	Y	**N**	Y	**N**	Y	Y	Y
Background												
Cycle/Delay[1] (sec)	70	70	100	110	100	110	150	130	160	160	95	100
Volume (vph)	310	103	97	37	40	76	346	104	700	150	335	97
Number of lanes	1	1	1	1	1	1	2	2	2	2	2	2
Volume (vphpl)	310	103	97	37	40	76	173	52	350	75	168	49
95th %. Queue (veh/ln)	10	5	6	3	3	5	12	4	22	7	8	3
95th %. Queue[2] (ft/ln)	250	125	150	75	75	125	300	100	550	175	200	75
Storage (ft/ln)	175	175	225	225	175	175	250	250	450	450	250	250
Adequate (Y/N)	**N**	Y	Y	Y	Y	Y	**N**	Y	**N**	Y	Y	Y
Background Plus Project												
Cycle/Delay[1] (sec)	70	70	100	110	100	110	150	130	160	160	95	100
Volume (vph)	428	150	168	85	109	111	360	109	740	184	350	120
Number of lanes	1	1	1	1	1	1	2	2	2	2	2	2
Volume (vphpl)	428	150	168	85	109	111	180	55	370	92	175	60
95th %. Queue (veh/ln)	13	6	8	5	6	7	12	4	23	8	8	4
95th %. Queue[2] (ft/ln)	325	150	200	125	150	175	300	100	575	200	200	100
Storage (ft/ln)	175	175	225	225	175	175	250	250	450	450	250	250
Adequate (Y/N)	**N**	Y	Y	Y	Y	Y	**N**	Y	**N**	Y	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L = left-turn; T = through; R = right turn
[1] Cycle length used for signalized intersections, delay of movement used for unsignalized intersections
[2] Assumes 25 feet per vehicle queued.
[3] Storage length measured from intersection to nearest driveway.

Table 9
Queuing Analysis Summary (continued)

Analysis Scenario	Whisman Road & Middlefield Road				Ellis Street & Middlefield Road				Logue Avenue & Middlefield		Ferguson Drive & Middlefield Road			
	SBL		WBL		SBL[3]		EBL		EBL		NBL		WBL	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing														
Cycle/Delay[1] (sec)	100	100	100	100	70	65	70	65	85	105	70	70	70	70
Volume (vph)	61	51	65	337	160	419	256	108	85	49	61	18	35	138
Number of lanes	1	1	1	1	2	2	1	1	1	1	1	1	2	2
Volume (vphpl)	61	51	65	337	80	210	256	108	85	49	61	18	18	69
95th %. Queue (veh/ln)	4	4	4	15	4	7	9	4	5	4	3	1	1	3
95th %. Queue[2] (ft/ln)	100	100	100	375	100	175	225	100	125	100	75	25	25	75
Storage (ft/ln)	125	125	275	275	250	250	125	125	200	200	125	125	175	175
Adequate (Y/N)	Y	Y	Y	**N**	Y	Y	**N**	Y	Y	Y	Y	Y	Y	Y
Background														
Cycle/Delay[1] (sec)	100	100	100	100	70	65	70	65	85	105	70	70	70	70
Volume (vph)	73	126	65	340	202	454	263	110	89	61	61	18	36	139
Number of lanes	1	1	1	1	2	2	1	1	1	1	1	1	2	2
Volume (vphpl)	73	126	65	340	101	227	263	110	89	61	61	18	18	70
95th %. Queue (veh/ln)	5	7	4	15	4	7	9	5	5	4	3	1	1	3
95th %. Queue[2] (ft/ln)	125	175	100	375	100	175	225	125	125	100	75	25	25	75
Storage (ft/ln)	125	125	275	275	250	250	125	125	200	200	125	125	175	175
Adequate (Y/N)	Y	**N**	Y	**N**	Y	Y	**N**	Y	Y	Y	Y	Y	Y	Y
Background Plus Project														
Cycle/Delay[1] (sec)	100	100	100	100	70	65	70	65	85	105	70	70	70	70
Volume (vph)	78	136	96	367	257	564	281	153	126	168	79	33	40	151
Number of lanes	1	1	1	1	2	2	1	1	1	1	1	1	2	2
Volume (vphpl)	78	136	96	367	129	282	281	153	126	168	79	33	20	76
95th %. Queue (veh/ln)	5	7	6	16	4	7	10	6	6	9	4	2	2	4
95th %. Queue[2] (ft/ln)	125	175	150	400	100	175	250	150	150	225	100	50	50	100
Storage (ft/ln)	125	125	275	275	250	250	125	125	200	200	125	125	175	175
Adequate (Y/N)	Y	**N**	Y	**N**	Y	Y	**N**	**N**	Y	**N**	Y	Y	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L = left-turn; T = through; R = right turn
[1] Cycle length used for signalized intersections, delay of movement used for unsignalized intersections
[2] Assumes 25 feet per vehicle queued.
[3] Storage length measured from intersection to nearest driveway.

Table 9
Queuing Analysis Summary (continued)

Analysis Scenario	Ferguson Drive & Central Expy		Moffett Boulevard & Middlefield Road		Mathilda Avenue & Indio Avenue		Logue Avenue & Maude Avenue		Clyde Avenue & Maude Avenue			
	EBL		WBL		SBL		WBL/T/R[3]		SBL/R[3]		EBL/T[3]	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing												
Cycle/Delay[1] (sec)	89	90	120	120	160	160	10.7	9.5	8.6	8.7	7.9	8.3
Volume (vph)	65	109	141	168	22	39	287	74	68	146	54	146
Number of lanes	1	1	1	1	1	1	1	1	1	1	1	1
Volume (vphpl)	65	109	141	168	22	39	287	74	68	146	54	146
95th %. Queue (veh/ln)	4	6	9	10	3	4	3	1	1	1	1	1
95th %. Queue[2] (ft/ln)	100	150	225	250	75	100	75	25	25	25	25	25
Storage (ft/ln)	175	175	300	300	325	325	100	100	75	75	75	75
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Background												
Cycle/Delay[1] (sec)	89	90	120	120	160	160	10.8	9.6	9.8	9.1	8.3	8.6
Volume (vph)	65	109	142	169	57	128	299	76	154	161	56	157
Number of lanes	1	1	1	1	1	1	1	1	1	1	1	1
Volume (vphpl)	65	109	142	169	57	128	299	76	154	161	56	157
95th %. Queue (veh/ln)	4	6	9	10	5	10	3	1	2	2	1	2
95th %. Queue[2] (ft/ln)	100	150	225	250	125	250	75	25	50	50	25	50
Storage (ft/ln)	175	175	300	300	325	325	100	100	75	75	75	75
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Background Plus Project												
Cycle/Delay[1] (sec)	89	90	120	120	160	160	13.2	11.1	12.1	16.6	11.6	10.5
Volume (vph)	81	120	143	170	86	155	435	150	205	433	249	160
Number of lanes	1	1	1	1	1	1	1	1	1	1	1	1
Volume (vphpl)	81	120	143	170	86	155	435	150	205	433	249	160
95th %. Queue (veh/ln)	5	6	9	10	7	11	4	2	2	5	2	2
95th %. Queue[2] (ft/ln)	125	150	225	250	175	275	100	50	50	125	50	50
Storage (ft/ln)	175	175	300	300	325	325	100	100	75	75	75	75
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	**N**	Y	Y

Notes:
NB = northbound; SB = southbound; WB = westbound; EB = eastbound; L = left-turn; T = through; R = right turn
[1] Cycle length used for signalized intersections, delay of movement used for unsignalized intersections
[2] Assumes 25 feet per vehicle queued.
[3] Storage length measured from intersection to nearest driveway.

improvements to improve operations and vehicle queuing along Ellis Street at the interchange. However, since adoption of the EWPP EIR, the City has identified lane restriping and median modifications that can minimally improve this intersection, for which the improvement costs were included in the EWPP Development Impact Fee. So, payment of the fee by the applicant would contribute to these improvements.

Northbound Left Turn at Mathilda Avenue and Maude Avenue

The northbound left-turn lanes on Mathilda Avenue at Maude Avenue provide approximately 450 feet of vehicle storage per lane within two lanes, which can accommodate about 18 vehicles per lane. The 95th percentile vehicle queue would exceed the storage capacity by two vehicles in the AM peak hour under existing conditions and four vehicles under background conditions. The project would increase the 95th percentile queue by one vehicle under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by five vehicles per lane in the AM peak hour. The northbound left turn pockets could be extended by modifying the landscaped median to accommodate the extra 10 vehicles. However, the northbound traffic has three through lanes to travel through the intersection. Thus, the spillback is not expected to affect the northbound through traffic at the intersection.

Westbound Left Turn at Whisman Road and Middlefield Road

The westbound left-turn lane on Middlefield Road at Whisman Road provides approximately 275 feet of vehicle storage, which can accommodate about 11 vehicles. The 95th percentile queue currently extends past the storage lane by four vehicles during the PM peak hour. Under background conditions, the queue would not increase. The project would increase the 95th percentile queue by one vehicle under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by five vehicles in the PM peak hour. The westbound left turn pocket could be extended to 200 feet by modifying the landscaped median. However, the westbound through movement has two lanes to travel through the intersection. Thus, the 95th percentile queue briefly extending to the inside through lane is not expected to adversely affect the westbound traffic flow.

Eastbound Left Turn at Ellis Street and Middlefield Road

The eastbound left-turn lane on Middlefield Road at Ellis Street provides approximately 125 feet of vehicle storage, which can accommodate about five vehicles. The 95th percentile queue currently extends past the storage lane by four vehicles during the AM peak hour. During the PM peak hour, the queue is accommodated within the storage lane with four vehicles. Under background conditions, the queue would not increase during the AM peak hour and would increase by one vehicle during the PM peak hour. The project would increase the 95th percentile queue by one vehicle under background plus project conditions, causing the 95th percentile vehicle queue to exceed the storage capacity by five vehicles in the AM peak hour and one vehicle in the PM peak hour. In the AM peak hour, the 95th percentile vehicle queue would extend to the median opening for the westbound midblock left turn into the driveway at 487 E. Middlefield Road.

The EWPP EIR identifies the need for an improvement at this intersection, specifically along the eastbound direction to improve queuing. The EIR recommends adding an eastbound left-turn lane with overlap signal phasing. The existing right-of-way of 80 feet could fit two 8-foot bike lanes, two 10-foot left turn lanes, and four 11-foot through lanes. The project ~~may be able to~~can contribute to the improvement identified by paying ~~an~~ the EWPP Development Impact Fee~~, if adopted~~.

Eastbound Left Turn at Logue Avenue and Middlefield Road

The eastbound left-turn lane on Middlefield Road at Logue Avenue provides approximately 200 feet of vehicle storage, which can accommodate about eight vehicles. The 95th percentile queue is accommodated during the AM and PM peak hours under existing and background conditions. The project

would increase the 95th percentile queue to 225 feet during the PM peak hour, which would extend past the storage lane by one vehicle. The small increase in queue length is not expected to cause a noticeable effect on the eastbound traffic operations because the left-turn spillback would last for a short period of time during the PM peak hour. The extended queue is not expected to create any conflicts with the VTA rail safety operations as there are gate arms at the rail to prevent vehicles from approaching the crossing. However, to minimize the possibility of the eastbound vehicle queue extending to the LRT tracks, a signal should be installed for the midblock crossing B at the LRT tracks with preemptive signals that are interconnected and coordinated with the signal at Logue Avenue and Middlefield Road. A separate queuing analysis should be conducted to confirm traffic signal coordination/operations.

Southbound Movement at Clyde Avenue and Maude Avenue

The southbound lane on Clyde Avenue at Maude Avenue provides approximately 75 feet of vehicle storage to the nearest driveway, which can accommodate about three vehicles. The 95th percentile queue is accommodated during the AM and PM peak hours under existing and background conditions. The project would increase the 95th percentile queue to 125 feet during the PM peak hour, which would extend past the nearest driveway by two vehicles. The small increase in queue length is not expected to substantially increase the delay for vehicles accessing the driveway because the left-turn spillback would last for a short period of time during the PM peak hour.

Freeway Ramp Traffic Operations

A freeway ramp operations analysis was performed to identify the effects of project traffic on the vehicle queues at the metered on-ramp and the signal-controlled off-ramp during the AM and PM peak hours of traffic. Ramp operations at the study ramps were based on the operational assessment prepared for EWPP EIR. It should be noted that the evaluation of freeway ramps is not required based on the VTA's TIA Guidelines, nor are there adopted methodologies or adverse effect criteria for the analysis of freeway ramps.

The US 101/Ellis Street interchange provides direct access to US 101 from the plan area. The SR 237/Maude Avenue interchange provides direct access to SR 237 East, and the SR 237/Middlefield Road interchange provides direct access to SR 237 West. The US 101 southbound on-ramp from Ellis Street is metered in the PM commute hours. The SR 237 on-ramps are not metered at either location. Therefore, the SR 237 ramp operations were only evaluated for the off-ramps.

US 101/Ellis Street Ramps

The EWPP EIR evaluated the operation of the US 101/Ellis Street interchange using a VISSIM micro simulation model evaluating the Ellis Street corridor between Manila Drive and Fairchild Drive. The model was calibrated using the vehicular/pedestrian/bicycle traffic volumes, intersection signal timings, and light rail service levels to replicate the operations observed in the field. The model results showed that during the AM peak hour, due to the southbound queue at Fairchild Drive and the northbound queue at the US 101 Northbound Ramp extending to the US 101 Southbound Ramp intersection under project conditions, the northbound and southbound off ramp queues are expected to frequently extend to the end of the ramps, which could negatively affect freeway operations. During the PM peak hour, the US 101 southbound on-ramp is expected to be fully queued and spilling back onto Ellis Street, blocking the Fairchild Drive intersection. The US 101 northbound off-ramp queue is expected to extend to the end of the ramp, due to the limited operational capacity of the westbound left-turn at the end of the ramp.

The project would add 92 and 137 trips to the US 101 southbound off-ramp during the AM and PM peak hours, respectively, and 79 and 52 trips to the US 101 northbound off-ramp during the AM and PM peak hours, respectively. The project would add 96 new PM peak-hour trips to the metered US 101 southbound on-ramp. The project trips would contribute to the ramp operational/queueing issues identified in the

EWPP EIR. However, due to right-of-way and funding constraints, the EIR indicates that there are no feasible improvements to address operational and queuing issues at the interchange.

SR 237/Middlefield Road Eastbound Off-Ramps

The project would add 84 and 65 trips during the AM and PM peak hours, respectively, to the eastbound off-ramp at Middlefield Road. During the AM peak hour, 15 vehicles are expected to make a left turn onto Middlefield Road, and 69 vehicles are expected to continue through to the Maude Avenue intersection. During the PM peak hour, 23 vehicles are expected to make a left turn onto Middlefield Road, and 42 vehicles are expected to continue through to the Maude Avenue intersection.

As shown in Table 9, the added 15 and 23 northbound left-turn trips during the AM and PM peak hours, respectively, would be within the storage lanes. The vehicle queues for the through traffic would also be contained within the off-ramps.

SR 237/Maude Avenue Off-Ramps

The project would add 65 and 70 trips to the SR 237 westbound off-ramp at Maude Avenue during the AM and PM peak hours, respectively. The added trips to the westbound off-ramp would make a right turn onto Maude Avenue. Right turn vehicles may make right turns on the red, green, and right turn green signal. Thus, the project is not expected to extend the off-ramp queue to the end of the ramp.

The added 69 and 42 northbound left-turn trips during the AM and PM peak hours, respectively, would not extend the queue past the storage lane, as shown in Table 9.

Therefore, the project trips would not cause operational or queueing issues at the SR 237/Middlefield Road and SR 237/Maude Avenue interchanges.

Midblock Pedestrian Crossings

The project proposes, or recommends, midblock crossings in the following locations, as shown on Figure 14, with Rectangular Rapid Flash Beacons (RRFB) or pedestrian signals:

A. Ellis Street north of Building O1
B. Middlefield Road west of the LRT tracks
C. Logue Avenue north of Building R3
D. Clyde Avenue south of Buildings O4 and O5/P1
E. Clyde Avenue north of Building R5

The midblock crosswalks A, C, D and E would be installed at the proposed Class I bicycle and pedestrian path/trail that would extend from Ellis Street north of Building O1, through Logue Avenue and Maude Park, to Clyde Avenue.

To determine the type of treatment necessary for each crossing, the *Guidelines for Pedestrian Crossing Treatments* included in the National Cooperative Highway Research Program (NCHRP) Report 562, *Improving Pedestrian Safety at Unsignalized Crossings*, was used for the assessment. The Guidelines include a worksheet to determine the type of treatment necessary. The worksheet first determines whether a traffic signal would be warranted at a crossing based on the major road vehicle volume and peak-hour pedestrian volume, based on the Pedestrian Volume Warrant (Warrant 4) in the MUTCD. The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street. The major street vehicle volume was used to determine the minimum peak-hour pedestrian volume that would warrant a traffic signal. If the peak-hour pedestrian volume is greater than the minimum volume, a traffic signal should be considered if not within 300 feet of another traffic signal. The traffic control signal for midblock

crossings should be installed at least 100 feet from side streets or driveways that are controlled by stop or yield signs. Note that this is just one tool used to evaluate whether installation of a traffic signal would be justified. Additional engineering analysis is recommended based on the actual pedestrian volumes and/or field observations of pedestrian delay gaps in roadway traffic flow to be conducted at the appropriate construction phase of the project.

If a traffic signal is not warranted, other types of treatments are determined based on pedestrian delay at the crossing. The pedestrian delay was determined using the pedestrian crossing distance, walking speed, and start up and end clearance time. Table 10 summarizes the recommended treatments and the assumptions for each proposed crossing. The midblock pedestrian crossing worksheets are contained in Appendix F. The recommended treatment and improvements for each proposed crossing are also shown in Figure 14.

Table 10
Pedestrian Midblock Crossing Treatment Summary

Location	Meets Signal Warrant (Y/N)[1]	Treatment Category[2]	Assumption
A. Ellis Street north of O1	Y	Traffic Signal	Pedestrian crossing volume per hour is equal to or greater than 105 pedestrians per hour
B. Middlefield Road west of LRT tracks	N	Traffic Signal[3]	Proximity of LRT tracks and safety
C. Logue Avenue north of R3	Y	Traffic Signal	Pedestrian crossing volume per hour is equal to or greater than 862 pedestrians per hour
D. Clyde Avenue south of O4 & O5/P1	Y	Traffic Signal	Pedestrian crossing volume per hour is equal to or greater than 387 pedestrians per hour
E. Clyde Avenue north of R5	N	Active or Enhanced	Fewer than 364 pedestrians per hour

Notes:
1. The signal warrant is determined based on the Pedestrian Volume Warrant (Warrant 4) in the MUTCD. The peak-hour pedestrian volume was estimated based on the pedestrian flow model, provided by Google for the MPMP. The warrant is based on the background plus project volumes.
2. The NCHRP describes treatment categories as Red, Active or Enhanced, and Crosswalk. Traffic signals are warranted by the pedestrian volume warrant.
3. A red signal or HAWK beacon be warranted for the pedestrian volume up to 460. However, due to the proximity of LRT tracks, for operational coordination and safety, a traffic signal is recommended..

In combination with providing adequate lighting in the public right-of-way for crossings, the treatment categories are as follows:

- **Crosswalk:** standard crosswalk markings and pedestrian crossing signs with new street lighting.
- **Enhanced and/or high visibility:** crosswalk with devices and design treatments that enhance both the ability of pedestrians to cross the street and the visibility of the crossing location and pedestrians waiting to cross. Warning signs, markings, or beacons are present or active at the crossing location at all times. Examples include in-street pedestrian crossing signs, high-visibility signs and markings, raised crosswalk, and median refuge islands.
- **Active when present:** crosswalk with devices designed to display a warning only when pedestrians are present or crossing the street. Examples include flashing amber beacons (RRFB), and pedestrian crossing flags.

Source: Middlefield Park Master Plan

Figure 14
Proposed Midblock Crossing Locations and Recommendations

- **Red signal or beacon (HAWK signal):** crosswalk with devices displaying a circular red indication (signal or beacon) to motorists at the pedestrian crossing location. A HAWK signal provides yellow and red indications for drivers when the pedestrian phase is activated and remains dark when there are no pedestrians.
- **Traffic Signal:** crosswalk with traffic control signal. A traffic signal is subject to requirements specified in the MUTCD. A midblock traffic signal typically dwells in steady green (or green arrow) for vehicles and turns red for vehicles when the pedestrian phase is activated.

The pedestrian volumes used to determine the treatments for the midblock crossings are based on the pedestrian flow model, prepared by ARUP and provided by the project applicant (see Appendix G). The pedestrian flow model estimated the pedestrian volumes during the 3 - 4 hour AM peak period based on pre-pandemic Google mode splits for office users in the project area and represent only pedestrian arrivals. The estimates do not include existing pedestrian activities and pedestrian trips generated by other uses proposed in the project area; the model also assumes the presence of a bridge over VTA light rail, which is not part of the project. A separate pedestrian flow model was provided that includes the AM peak hour estimates (see Appendix G). However, to present a conservative assessment, the 3-4 hour AM peak period pedestrian volumes were considered peak-hour volumes for this analysis. Additional volume analysis or refinement was not conducted due to the current pandemic conditions and the lack of diverse uses at the project site today. As the Master Plan is developed, additional pedestrian volume analysis can be conducted to refine midblock crossing treatments.

A. Ellis Street North of Building O1

A high visibility crosswalk with RRFB is present on Ellis Street north of the Quad Campus driveway (proposed Street B in EWPP). The project recommends a new crosswalk north of the Building O1 to the southside of the Quad Campus driveway. Based on the peak-hour traffic on Ellis Street under background plus project conditions, if the pedestrian volume per hour would be equal to or greater than 105, a traffic signal would be warranted. If the pedestrian volume would be between 20 and 105, an active or enhanced crosswalk would be needed.

The pedestrian flow model estimated 750 to 1,000 pedestrians per peak hour crossing Ellis Street at this location because the crosswalk would serve: Google employees walking to the office buildings and retail uses from the existing GBus stop within the Quad Campus to the project area, to/from adjacent office buildings on Ellis Street, or be used by transit commuters/residents of the project between the LRT station and nearby office buildings. Thus, a traffic signal would be warranted based on the projected pedestrian volume by the model. Additionally, the traffic signal will further support pedestrian and bicycle crossings associated with any future pedestrian-bike bridge near this intersection.

With the proposed crossing, the existing Ellis Street crossing north of the Quad Campus driveway should be eliminated. It is recommended to install the signal at the Quad Campus driveway and move the proposed crossing to the south leg of the intersection to be more closely aligned with the future location of a bridge (to be designed and constructed by the City).

B. Middlefield Road at the LRT Tracks

A multi-use path is present along the west side of the LRT tracks between the northwest corner of the proposed Building O2 and the South Whisman and Whisman Station neighborhoods. The path can be accessed via Middlefield Road. However, currently there is no marked crosswalk on Middlefield Road. Based on the peak-hour traffic on Middlefield Road under background plus project conditions, if there would be 20 to 460 pedestrians/bicycles per hour crossing Middlefield Road, a red signal or HAWK beacon crosswalk would be warranted. The MPMP pedestrian flow model estimated fewer than 100, but more than 20, pedestrians per hour crossing Middlefield Road at this location. Thus, a red signal or HAWK beacon would be warranted. However, due to the proximity of LRT tracks, for operational

coordination and safety, a traffic signal is recommended. The preemptive pedestrian signal should be interconnected and coordinated with the signal at Logue Avenue and Middlefield Road. The signal and crossing must comply with CA MUTCD Section 8 guidance and CPUC General Order 75 and 88 requirements. Additional queueing analysis should be conducted to further determine traffic signal coordination, along with~~,~~ a safety analysis, which may require the addition of new gates, channelization, warning devices for pedestrian and bicyclist safety, and gate arms/push gates to prevent "wrong way" entrance from sidewalk and bike lanes when crossing protections are activated.

Bus Stop Redesign Options

There is an existing bus duck out located just west of the LRT tracks along westbound Middlefield Road for VTA Route 21 and MVgo Route A. Both routes have headways of 30 to 60 minutes. To accommodate the project, the existing VTA bus duck out needs to be redesigned primarily to accommodate an emergency vehicle access (EVA) entrance for the project and, secondly, to accommodate the proposed midblock crossing and Class IV protected bike lanes on Middlefield Road consistent with the EWPP. The City, project applicant, VTA and the California Public Utilities Commission (CPUC), who own and oversee the safety of the light rail tracks, ~~is~~ are considering three bus stop redesign options: (a) bus turn-out with bus island (Figure 15), (b) in-line bus stop with bus island (Figure 16), and (c) bus stop without island (Figure 17).

(a) Bus Turn-Out with Bus Island

The turn-out would be approximately 36 feet west of the proposed midblock crosswalk. Although the bus turn-out would be located close to the proposed crosswalk, buses are not expected to block the crosswalk, because it is unlikely to have two or more buses stop at the same time, based on the current bus headways. This option would not cause delays to the westbound traffic, as the bus lane would be separated from the travel lane. With the addition of the bus island, the bus would not have to cross the bike lane to arrive at the bus stop, which provides added safety for bicyclists. However, pedestrians would have to cross the bike lane with caution to get to the bus island from the sidewalk. The design shows a raised pedestrian crossing between the sidewalk and bus island to alert bicyclists.

(b) In-line Bus Stop with Bus Island

The in-line bus stop would be approximately 100 feet east of the Ellis Street intersection and 190 feet west of the proposed crosswalk. The bus would need to stop in the travel lane for this option, which would cause delays to the westbound traffic. The in-line option would potentially result in a westbound vehicle queue that extends to the crosswalk and rail track. However, based on the current bus headways, the vehicle queue would only occur briefly, assuming the buses would load passengers efficiently and would not wait at the bus stop. Similar to the turn-out with island option, the bus would not have to cross the bike lane to arrive at the bus stop, but pedestrians would have to cross the bike lane with caution to get to the bus island from the sidewalk.

(c) Bus Stop without Island

The no island bus stop would be approximately 95 feet east of the Ellis Street intersection and 195 feet west of the proposed crosswalk. This option would be similar to the existing bus stop, but would move the stop closer to the Ellis Street intersection. This option would not cause delays to the westbound traffic, as the bus lane would be separated from the travel lane. However, because the stop is closer to the intersection, the bus departing the stop would need to wait for westbound queues to clear the signal and wait for a gap to merge into the westbound travel lane. Although this option would separate the bus stop and the travel lane, the bus would be required to cross over the bike lane to get to the stop. This would not improve safety for bicyclists compared to the existing configuration or the other two design options. However, pedestrians would wait for the bus on the sidewalk and would not have to cross the bike lane.

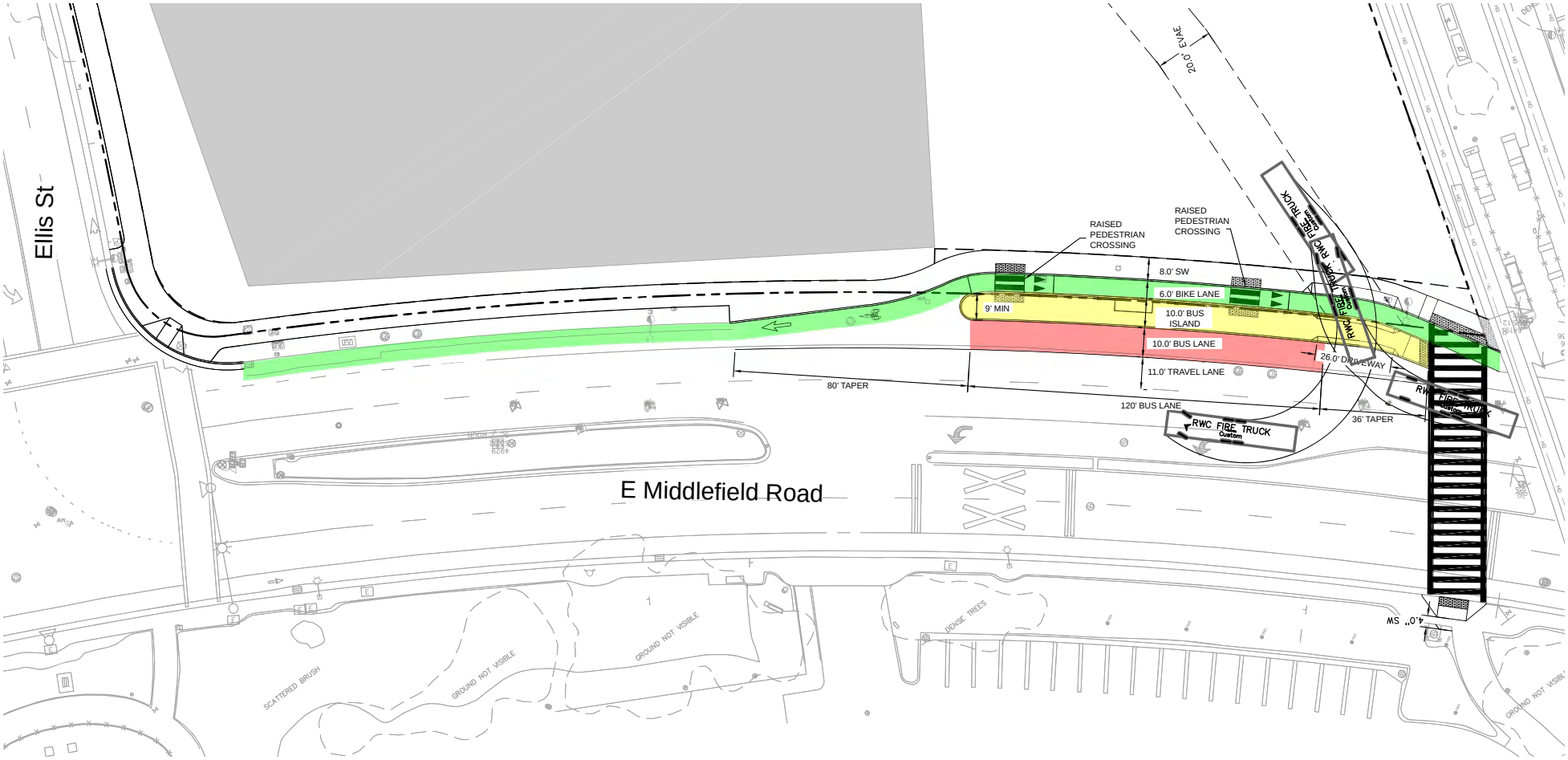


Figure 15
VTA Bus Duck Out Option - Bus Turn-Out with Bus Island

NORTH
Not to Scale

Figure 16
VTA Bus Duck Out Option - In-Line Bus Stop with Bus Island

NORTH
Not to Scale

Figure 17
VTA Bus Duck Out Option - Bus Stop without Island

NORTH
Not to Scale

Under any of the bus redesign options, the applicant will need to provide necessary safety measures determined in coordination with the City, VTA, and CPUC and through the CPUC General Order 88-B process.

C. Logue Avenue North of Building R3

Based on the peak-hour traffic on Logue Avenue under background plus project conditions, the crossing would require a traffic signal if greater than 862 pedestrians per hour were present. If the pedestrian volume per hour would be fewer than 862, a marked crosswalk would be warranted.

The MPMP pedestrian flow model estimated 750 to 1,000 pedestrian crossings per peak hour crossing Logue Avenue at this location because the crosswalk would be used by Google employees to walk to and from the office buildings to the P1 and P2 garages or by transit commuters to walk between the LRT station and the office and residential buildings via a future pedestrian-bicycle bridge over the LRT tracks (to be designed/constructed by the City). Thus, a traffic signal would be warranted based on the projected pedestrian volume by the model. However, the model assumed a pedestrian bridge crossing over the LRT tracks is present, so there would be a high pedestrian volume traveling between Ellis Street and Logue Avenue using the crosswalk on Ellis Street, north of Building O1 (Midblock A), and at this crossing.

Prior to the pedestrian bridge crossing over the LRT tracks, there would be fewer pedestrians using this midblock crossing. Therefore, an active crosswalk with RRFB is recommended prior to installation of the bridge. A signal at the midblock crosswalk should be reevaluated as part of the bridge design and review process. However, the project should install infrastructure (e.g., conduits, lighting, etc.) at the Logue Avenue midblock crossing to facilitate an easier installation of a future signal.

D. Clyde Avenue South of Buildings O4 & O5/P1

Based on the peak-hour traffic on Clyde Avenue under background plus project conditions, the crossing would require a traffic signal if greater than 387 pedestrians per hour were present. If the pedestrian volume would be between 20 and 387, an active or enhanced crosswalk would be needed.

The pedestrian flow model estimated 750 to 1,000 pedestrians per hour crossing at this location because the crosswalk would be next to the proposed parking garage and would be used by Google employees to walk to the office buildings from the parking garage. Thus, a traffic signal would be warranted based on the projected pedestrian volume by the model. It is unknown whether the driveway to P1 parking garage would be located on the north or south side of the building. It is recommended that the P1 driveway be on the north side of Building O5/P1 to align with the service street north of Buildings O3 and O4 to create an intersection. The midblock crossing D should be by itself, allowing it to be at least 100 feet from the driveway.

As an alternative to signal control, a roundabout was evaluated as a traffic control option for the midblock crossing. A roundabout was found to not be appropriate for the crossing because it would function like stop signs in that vehicles would need to frequently stop for pedestrians, which would create substantial delay for vehicle traffic on Clyde Avenue based on the projected pedestrian volume. Clyde Avenue has a curb-to-curb width of 50 feet. A mini roundabout typically requires 80 feet in diameter, which ~~. Thus, a mini roundabout for the crossing~~ would require taking approximately 15 feet of right-of-way from both sides of the street further reducing park open space. Thus, a roundabout is not recommended.

E. Clyde Avenue North of Building R5

Based on the peak-hour traffic on Clyde Avenue under background plus project conditions, the crossing would require an active or enhanced crosswalk if there would be 25 to 364 pedestrians per hour crossing Clyde Avenue.

The pedestrian flow model estimated fewer than 100, but more than 25, pedestrians per hour crossing at this location. Thus, an active crosswalk would be warranted based on the projected pedestrian volume by the model. The proposed crosswalk would be near the driveway to P2 parking garage, which would be located on the south side of the building and would be used by Google employees to walk to the office buildings from the parking garage, or, if a shared garage, with park users. It is recommended the crossing be installed at the P2 driveway, allowing pedestrians to be more visible to vehicles exiting the garage. This crossing should be at least 300 feet from the proposed midblock Crossing D to generally align with the south side of Maude Park and the EWPP block lengths.

Effects on Surrounding Neighborhood Streets

Direct access to the plan area is via two major arterials (Ellis Street and Maude Avenue) and one local street (Clyde Avenue). Surrounding arterials that also provide access to the plan area include Middlefield Road, Moffett Boulevard, Mary Avenue, and Mathilda Avenue. Because of the easy access to the plan area from major arterials, project traffic is not expected to use/cut-through neighborhood residential streets. In addition, there are no neighborhood residential streets that would provide direct access to Ellis Street or Maude Avenue near the plan area. It should be noted that Middlefield Road, Ellis Street, and Maude Avenue are already serving commercial uses in the project vicinity. Therefore, the project is not expected to cause an adverse effect or cut-through traffic issues on the surrounding neighborhood streets.

There would be potential cut-through traffic along Fairchild Drive/Leong Drive between Moffett Boulevard and Ellis Street to bypass congestion along US 101. Leong Drive/Fairchild Drive does not have any stop signs between Moffett Boulevard and Ellis Street, which could promote cut-through for drivers who are familiar with the area. However, the segment of US 101 between Moffett Boulevard and Ellis Street is generally not as congested as the rest of the freeway. Thus, it is not likely that vehicles would use Fairchild Drive to cut through. The City's Neighborhood Traffic Management Plan (NTMP) is available to address any concerns for the neighborhood, and the project should contribute to the traffic calming measures identified in the NTMP if the project results in cut-through traffic along Leong Drive/Fairchild Drive.

5.
Site Access, Circulation, and Parking

A review of the project plan area was performed to determine if adequate site access and circulation would be provided and to identify any access or circulation issues that should be improved. This review is based on the draft Middlefield Park Master Plan presented in Figure 2, and in accordance with generally accepted traffic engineering standards. A parking analysis was conducted to compare the City's parking requirements to the parking demand based on local surveyed utilization rates and ITE parking demand rates. The analysis also includes a shared parking analysis.

This report has analyzed the project with service streets serving all residential/mixed-use and office locations, excluding R1, R6 and P2 which are served by driveways. Should any modifications occur to the project to replace service streets with driveways or non-vehicular access (e.g., paseos, multi-use paths), additional transportation analysis may be required under a separate MTA.

Motor Vehicle Access and Circulation

Motor vehicle access to and from the proposed buildings would be provided via one service street and one driveway on Ellis Street, two service streets at the cul-de-sac on Logue Avenue to Clyde Avenue, two service streets and one driveway on Maude Avenue, and one service street and one driveway on Clyde Avenue (see Figure 18). The northern Ellis Street service street (#1) would provide full access to the building O1 garage and the buildings R1 and R2 shared garage. The southern entrance (#2) on Ellis Street would be a right-in, right-out only driveway and would provide access to the buildings R1 and R2 shared garage. The Logue Avenue service streets (#3) would provide access to the O2, O3, and O4 office buildings and garages. The western most Maude Avenue service street (#4) would provide access to each respective garage for buildings R3, R4, R4 affordable (R4 aff). The middle service street (#5) on Maude Avenue would provide access to the buildings R4, R4 aff, and R5 parking garages. The eastern most Maude Avenue driveway (#6) would provide access to the R6 residential building and parking garage. The northern Clyde Avenue service street (#7) would provide access to the O4 and O5 office buildings and garages as well as the P1 parking structure for office use. The southern Clyde Avenue driveway (#8) would provide access to the P2 parking garage.

The parking garages at buildings R1, R2, R3, R4, R4 aff, and R5 would provide parking spaces for the residential and ~~, retail, and community~~active uses within each respective building location. Building R4 aff and R6 would provide parking for residential use only. Parking garages P1 and P2 would be used by all office buildings as part of a parking district. An analysis was conducted to determine if office and park uses could share the use of these district garages during and outside of office hours, as discussed later in this section.

Source: Middlefield Park Master Plan

Figure 18
Proposed Driveway Access Points

Private Service Street/Driveway Design

The project would provide a service street north of Buildings O2, O3, and O4, which would be accessed via Logue Avenue and Clyde Avenue. Additional service streets would be provided for buildings O1, R3/R4/R4 aff, and R4/R4 aff/R5, and O5/P1 (see Figure 18). The EWPP identifies service streets as slower, narrower streets that serve as access to parking garages, addresses for residential units, commercial loading spaces, and delivery for offices or R&D uses, which are private but can be publicly accessible. Service streets include trees and sidewalks, where bicycles may share the travel lane with slow-moving vehicles. Service streets that are a fire lane must be at least 26 feet wide (curb to curb) with a 13-foot vehicle lane in each direction, for a total width of 46 feet with a separation of 55 to 65 feet between buildings. Service streets must include a 5-foot minimum width sidewalk, separated from the street by landscaping. The proposed service streets would need to meet these requirements.

According to Mountain View's Zoning Ordinance, Section 36.32.80(e), two-way driveways should be a minimum of 18 feet wide, unless fire access requires a minimum width of 26 feet. The driveways to parking garage P2, building R1/R2 shared garage, and building R6 should meet the City's requirement.

Sight Distance at Project Driveways

The project driveways and service street entrances should be free and clear of any obstructions to optimize sight distance per the City's Standard Details A-22, thereby ensuring the exiting vehicles can see pedestrians coming from either direction on the sidewalk and other vehicles or bicycles traveling on the street. The EWPP requires 200 feet between each driveway/service street, and driveways must be at least 50 feet from street corners. Because the Master Plan is conceptual, all measurements between driveways and intersections are estimates. The project will be required to follow the sight distance requirements at the time of permitting for each phase of development.

Ellis Street Driveways

The posted speed limit on Ellis Street is 40 mph. The stopping sight distance is 300 feet per the City's Standard Details A-22. Thus, a driver must be able to see 300 feet in both directions on Ellis Street to locate a sufficient gap to turn out of the service street or driveway.

The two vehicle entries/exits (#1 and #2) on Ellis Street would be located approximately 340 feet apart from each other. There are no roadway curves on Ellis Street, which gives adequate sight distance between the two vehicle access points. The southern driveway (#2) is estimated to be located 275 feet north of Middlefield Road. Vehicles turning from Middlefield Road are expected to travel at lower speeds while making turns. Given that vehicles turning onto northbound Ellis Street from Middlefield Road are more likely to travel at a speed of 15 mph, the recommended stopping sight distance would be 125 feet (based on a design speed of 20 mph), which means that sufficient sight distance would be provided for exiting vehicles at the southern driveway (#2) with restricted right-turn exiting only.

Maude Avenue Driveways

There is a slight roadway curve on Maude Street east of Clyde Avenue. However, based on the posted speed limit of 25 mph and the recommended stopping sight distance of 150 feet, a driver would be able to see both directions on Maude Street to locate a sufficient gap to turn out of the service streets and driveway. Thus, both service streets (#4 and #5) for buildings R3, R4/R4 aff, and R5 would have sufficient sight distance from the roadway curve. The two service streets (#4 and #5) on Maude Avenue to buildings R3, R4/R4 aff, and R5 are estimated to be approximately 300 feet apart, which is adequate sight distance given that vehicles are likely to travel slowly while exiting either service street. However, any on-street parking near the service streets/driveways could potentially block the exiting drivers' sight. Thus, it is recommended on-street parking be removed on the north side of Maude Avenue along the project frontage to avoid blocking visibility and to implement buffered bicycle lanes as envisioned by the Precise

Plan. Should the buildings be constructed prior to installation of the modifications to street parking and bike lanes on Maude Avenue, as an interim measure, the project should provide 15 feet of red curb next to the service streets and driveways to provide adequate sight distance.

The proposed driveway for building R6 would be located approximately 55 feet west of Clyde Avenue. Vehicles turning from Clyde Avenue would need to stop prior to entering the intersection. Vehicles stopped at the intersection would be able to see vehicles turning out of the driveway, so the sight distance would be adequate. However, street parking is permitted along both sides of the driveway, which could block the sight distance for outbound vehicles. The project should provide 15 feet of red curb next to the driveway and along the street frontage within the intersection so the outbound vehicles could clearly see the oncoming vehicles from Maude Avenue and Clyde Avenue.

Alternatively, Building R6 could be designed with a driveway in alignment with the intersection of Clyde Avenue and Maude Avenue. With the driveway opposite Clyde Avenue, exiting vehicles would easily be able to make left and right turns out of the driveway with no sight distance issues. The project should provide red curb on either side of the driveway for the portions of the project frontage within the intersection.

Clyde Avenue Driveways

There is a roadway curve on Clyde Avenue north of the northern service streets. Based on the posted speed limit of 25 mph and the recommended stopping sight distance of 150 feet, a driver would be able to see both directions on Clyde Avenue to locate a sufficient gap to turn out of the service streets (#7). Drivers exiting the northern service streets need to be able to see 150 feet and see southbound drivers approaching prior to the curve. The northern service streets (#7) at O4/O5/P1 and the southern driveway (#8) at P2 are estimated to be approximately 350 to 400 feet apart from each other. On-street parking is allowed near the service street entrance to O4, which could potentially block the exiting drivers' sight. Thus, the project should provide 15 feet of red curb next to the service street entrance.

Similar to Maude Avenue, the MPMP proposes to remove parking along one side of Clyde Avenue per the EWPP but does not specify which side. Because Maude Park is on the west side of Clyde Avenue, which would benefit from on-street parking, and there are fewer vehicle curb cuts, it is recommended that on-street parking be removed on the east side of Clyde Avenue along the project frontage to implement buffered bicycle lanes consistent with the EWPP. Should the project buildings be constructed prior to implementation of the removal of parking and bike lane reconfiguration, as an interim measure to prevent blocking the exiting drivers' sight, the project should provide 15 feet of red curb next to the driveways.

Driveway Operations

Traffic operations at the project service streets/driveways were evaluated to identify whether there would be vehicle queuing issues. The trips that are estimated to occur at each entrance and exit are shown in Figure 19. Table 11 summarizes the estimated maximum inbound vehicle queues on streets and outbound vehicle queues at the driveways. The results show that the driveways are not expected to experience any on-site or on-street queuing issues, as the driveways are expected to have a minimum queue storage of two vehicles for both the inbound and outbound directions.

A signal warrant analysis was also conducted for the new service streets/driveways along Ellis Street, Maude Avenue, and Clyde Avenue. The results of peak-hour signal warrant analysis indicate that all service streets/driveways, except the O1/R2 service street (#1), would not meet the thresholds that warrant signalization under background plus project conditions during either of the peak hours (see Table 12). The peak-hour signal warrant sheets are included in Appendix E.

Figure 19
Project Driveway Trips

Table 11
Driveway Queuing Analysis

Analysis Scenario	Ellis Street & O1 Driveway				Maude Avenue & R3/R4 Driveway				Maude Avenue & R4/R5 Driveway			
	SBL		WB		EBL		SB		EBL		SB	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Project Conditions												
Delay (sec)	11.0	7.7	26.4	16.7	12.3	7.6	12.5	11.0	7.7	7.8	11.3	11.0
Volume (vph)	160	149	119	273	15	45	105	72	23	62	126	87
Number of lanes	1	1	1	1	1	1	1	1	1	1	1	1
Volume (vphpl)	160	149	119	273	15	45	105	72	23	62	126	87
95th %. Queue (veh/ln)	2	2	3	3	1	1	2	1	1	1	2	1
95th %. Queue[1] (ft/ln)	50	50	75	75	25	25	50	25	25	25	50	25
Storage (ft/ln)[2]	250	250	--[3]	--[3]	240	240	--[3]	--[3]	300	300	--[3]	--[3]
Storage Type	TWLT		Driveway		EB lane		Driveway		EB lane		Driveway	

Notes:
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L = left turn movement; TWLT = two-way left-turn
[1] Assumes 25 feet per vehicle queued.
[2] Storage length measured from intersection to upstream intersection or driveway.
[3] Site plans are not available. During design, the 95th percentile queue should be the minimum storage length in feet.

Table 11
Driveway Queuing Analysis (continued)

Analysis Scenario	Maude Avenue & R6 Driveway				Clyde Avenue & O4 & O5/P1 Driveway								Clyde Avenue & P2 Driveway			
	WBL		NB		NBL		EB		SBL		WB		SBL		WB	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Project Conditions																
Delay (sec)	7.6	7.5	10	9	7.6	7.6	13.0	11.1	8.8	7.6	19.3	17.4	8.8	7.7	14.8	12.6
Volume (vphpl)	10	34	40	25	53	9	12	64	107	17	60	312	33	5	16	86
95th %. Queue (veh/ln)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95th %. Queue[1] (ft/ln)	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Storage (ft/ln)[2]	55	55	--[3]	--[3]	200	200	--[3]	--[3]	200	200	--[3]	--[3]	430	430	--[3]	--[3]
Storage Type	WB Lane		Driveway		NB lane		Driveway		SB lane		Driveway		SB lane		Driveway	

Notes:
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; L = left turn movement; TWLT = two-way left-turn
[1] Assumes 25 feet per vehicle queued.
[2] Storage length measured from intersection to upstream intersection or driveway.
[3] Site plans are not available. During design, the 95th percentile queue should be the minimum storage length in feet.

Table 12
Driveway Signal Warrant Analysis Summary

Service Street/Driveway	Signal Warrant Met[1]
Ellis Street & O1/R2 Service Street	Yes
Ellis Street & R1/R2 Driveway	No
Maude Avenue & R3/R4 Service Street	No
Maude Avenue & R4/R5 Service Street	No
Clyde Avenue & O4 & O5/P1 Service Street	No
Clyde Avenue & P2 Driveway	No

Note:
1. Based on the California Manual on Uniform Traffic Control Devices for Streets and Highways, Warrant 3 - Peak Hour.

The service streets/driveways along Logue Avenue were not considered for a signal warrant as the driveways would be at the end of the proposed cul-de-sac. The driveway to building R6 was also not considered for a signal warrant.

Building O1/R2 Service Street (#1)

The service street would provide full access to the Building O1 garage and the Building R1/R2 shared garage. The peak-hour volume at the service street intersection would warrant a signal.

Building R6 Driveway (#6)

The driveway to building R6 is shown only 55 feet from the nearby Clyde Avenue/Maude Avenue intersection, which could make it difficult for vehicles to make a left turn into the driveway if the eastbound queue at the intersection were to extend past the driveway. The queuing analysis shows that the estimated eastbound queue at the Clyde Avenue/Maude Avenue intersection would not extend past or block the driveway. Thus, vehicles would be able to make a left turn into the driveway. Regardless, to minimize the project's traffic effect on Maude Avenue and delay for vehicles accessing the building R6 site, the driveway should be restricted to right in and right out only. For the right-in, right-out control option, because all trips would make a right turn into and out of the driveway, operational issues related to vehicle queueing and vehicle delay for inbound and outbound traffic are not expected to occur at the driveway.

Alternatively, the driveway could be located east of the intersection, between Building R6 and Gateway Park, so vehicles could make a left turn into the driveway without affecting traffic on Maude Avenue. Because of the nearby signal at SR 237 and stop control at Clyde Avenue that provides gaps in traffic on Maude Avenue, the project traffic would be able to turn in and out of the driveway without difficulties. The driveway option would not change the findings of the intersection operations analysis described in Chapter 4 for the SR 237 Ramps/Maude Avenue and Clyde Avenue/Maude Avenue intersections.

The building R6 driveway could also be aligned with the Clyde Avenue/Maude Avenue intersection. With this alternative alignment, the intersection would still operate at an acceptable level (D or better) with the all-way stop. The alignment of the driveway to the intersection would not change the findings of the signal warrant analysis described in Chapter 4 for this intersection.

Building O5/P1 Driveway (#8)

It is unknown whether the driveway to Building O5/P1 would be located on the north or south side of the building. It is recommended that the O5/P1 driveway be on the north side of Building O5/P1 to align with the service street north of Buildings O3 and O4 and to create an intersection. The intersection also would not meet the thresholds that warrant signalization under background plus project.

Truck Access and Circulation

Emergency Vehicle Access (EVA)

Emergency response vehicles would access the project site from Ellis Street, Middlefield Road, Logue Avenue, Maude Avenue, Clyde Avenue, and all project driveways/service streets. Additional emergency access would be provided via an emergency vehicle access path, also doubling as a multi-use path, on the west side of the light rail tracks north of Middlefield Road. Another potential emergency vehicle access lane may be located on the south side of O5/P1. Emergency access would also be provided through the service street north of buildings O2, O3, O4, and O5/P1 and the service streets between R3/R4/R4 aff and R4/R4 aff/R5 (see Figure 20).

As required by the EWPP, if emergency access is required for residential paseos and multi-use paths, additional width is required to accommodate the 26-foot-wide emergency access. Additionally, dead-end emergency access lanes that exceed 150 feet in length must be provided with a turn-around, which some of the service streets may need to comply with. The emergency access road west of the LRT tracks is a multiuse path that meets the EWPP requirement for EVA access. Buildings greater than 30 feet in height require a minimum of two EVA roads. All buildings would be greater than 30 feet in height, and all buildings are shown to have at least two EVA roads as previously described through the driveways, service streets, multi-use paths, and public streets.

Garbage Collection

The project is required to provide trash, recycling, and composting services within at least one trash and recycle enclosure of each building. It is expected that trash bins would be towed from the trash enclosures to the loading area for each building in the project driveway or service street staging area, or, if accommodated inside of the parking garage, which would be used as trash staging on garbage collection days. Therefore, trash collection would occur on-site in each building.

Loading

EWPP Requirements

Residential Uses

For residential uses, the EWPP requires one loading space per 200 units for pick-up/drop off, short-term parking, and loading and deliveries, in addition to one designated moving truck location. Table 13 shows the number of required loading spaces for the residential uses of the project, excluding one required moving truck space at each residential building.

Source: Middlefield Park Master Plan

Figure 20
Emergency Vehicle Access Routes

Table 13
Required Loading Spaces for Residential Uses

Buliding	Size	Required Loading Spaces
R1	400 units	2
R2	450 units	3
R3	270 units	2
R4	90 units	1
R4 Aff	210 units	2
R5	310 units	2
R6	170 units	1
Total	**1900 units**	**13**

Nonresidential Uses

For nonresidential uses, the EWPP follows the City zoning code for loading space requirements. The code requires one loading space for nonresidential uses occupying 10,000 to 30,000 square feet of building area. For uses occupying greater than 30,000 square feet of building area, one additional space is required for every additional 20,000 square feet. The project would build 1,367,000 square feet of non-residential uses (1,317,000 square feet of office and 50,000 square feet of active uses). Thus, the project would require 69 loading spaces per the zoning code. The breakdown of spaces is shown in Table 14. R4 aff and R6 buildings are not listed in Table 14, as they do not include nonresidential uses.

Table 14
Required Loading Spaces for Non-Residential Uses

Proposed Uses	Size	Required Loading Spaces
Office Uses		
O1	441,939 s.f.	22
O2	190,000 s.f.	10
O3	310,000 s.f.	16
O4	292,212 s.f.	15
O5/P1	82,849 s.f.	4
Office Subtotal	**1,317,000 s.f.**	**67**
~~Retail/Community~~Active Uses		
R1	18,308 s.f.	1
R2	12,633 s.f.	1
R3	3,877 s.f.	0
R4	1,955 s.f.	0
R5	4,227 s.f.	0
P2/Active Uses	9,000 s.f.	0
~~Retail/Community~~Active Uses Subtotal	**50,000 s.f.**	**2**
Total	**1,367,000 s.f**	**69**

Recommended Loading Spaces

Per the zoning code, the project would be required to provide a total of 82 loading spaces (69 for office uses and ~~retail/community~~active uses, and 13 for residential uses). To determine the actual number of loading spaces that would be used, a study was prepared by ARUP (supplied by the applicant) to estimate the number of loading spaces needed for deliveries and loading per a demand-based approach using demand rates from local and global data surveys (see Appendix H). Based on the study, the number of loading spaces to meet peak loading demand would be 18 spaces for the office buildings and 15 spaces for the residential/mixed-use buildings (including active~~retail/community~~ uses), where it is assumed 15 percent of all deliveries arrive in the peak hour and each truck has a 30-minute turnaround time. Table 15 shows the recommended number of loading spaces for deliveries and loading based on the peak loading demand. Spaces required for the storage and collection of garbage or a moving truck are separately required per residential/mixed-use building and were excluded from the ARUP study.

The loading zones and loading docks would be accessed via the proposed service streets/driveways. The project would prioritize minimizing off-street and on-street loading activities during peak hours to reduce potential conflicts between passenger vehicle site access and loading services.

Table 15
Recommended Loading Spaces Based On Peak Demand

Buildings	Recommended Loading Spaces
Office	
O1	6
O2	3
O3	4
O4	4
O5/P1	1
Office Subtotal	**18**
Residential Mixed Use	
R1	4
R2	3
R3	2
R4	1
R4 Aff	1
R5	3
R6	1
Mixed Use Subtotal	**15**
Total	**33**

Proposed Flex/Loading Zone Locations

The EWPP encourages loading docks to be screened on private property and in locations least visible from public streets, parks, or open spaces. However, the EWPP provides an option for curbside "flex zones" on local streets (Logue, Maude, and Clyde Avenues). Flex zones uses may include parking, passenger pick-up/drop-off, delivery loading, shuttle/transit stops, and other uses as approved by the City. Per the EWPP, Logue Avenue, Maude Avenue, and Clyde Avenue are planned to provide on-street

parking along one-side of the street; and therefore, one off-street parking space/loading area on the designated street parking side could be designated as a flex zone.

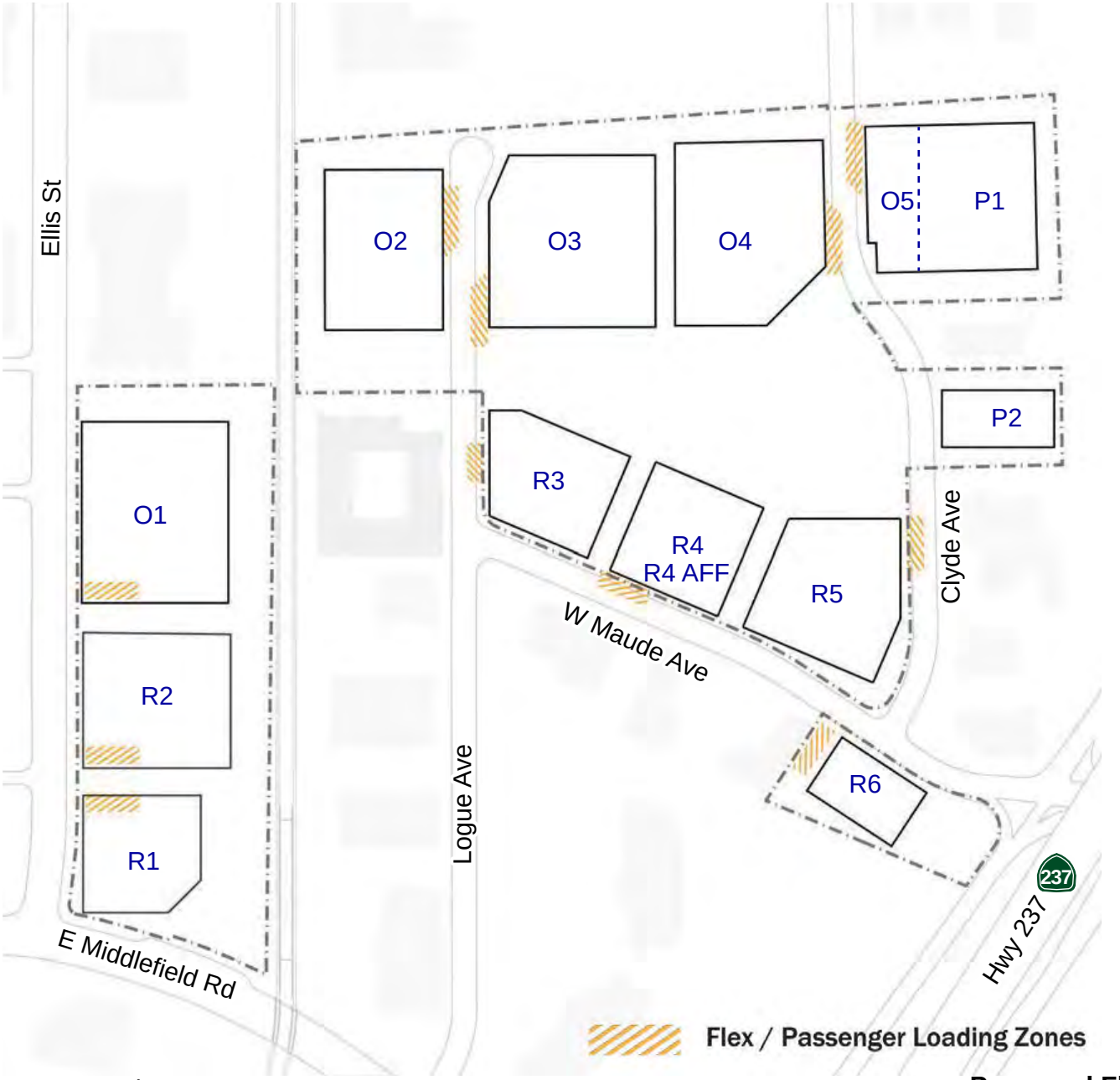
The project proposes on-street flex zones in various locations within the plan area (see Figure 21) for passenger pick-up/drop-off and delivery loading. At buildings O1, R1, R2, and R6, the loading zones are proposed within the parking garages or service streets/driveways on private property. All other flex zones are proposed on public streets. All flex zones should be free and clear of driveways and midblock crossings and should not interfere with planned bike lanes or bus stops. The building O2, O3, and R3 flex zones are proposed on Logue Avenue. The building R4/R4 aff flex zone is proposed on Maude Avenue. The building O4, O5, and R5 flex zones are proposed on Clyde Avenue. All flex zones would be provided on local public streets and private service streets, which would meet the EWPP requirement. Table 16 provides a summary of recommendations to retain the flex zone as proposed or to relocate to a service street, based on the draft Master Plan.

Table 16
Flex Zone Recommendations

Flex Zones	Retain as Proposed	Relocate to Service Street
R1	X (on site)	
R2	X (on site)	
R3		X
R4/R4 Aff		X
R5		X
R6	X (on site)	
O1	X (on site)	
O2	X (on street)	
O3		X
O4		X
O5		X

The building O1, R1, R2, and R6 flex zones within the service streets, driveway, or parking garages would be good locations as conflicts between passengers and vehicles are expected to be few. The service streets/garages would provide better flex zone spaces for Buildings O1, R1, and R2, as Ellis Street is considered an arterial with no on-street parking. For Building R6, providing a flex zone on the street would be close to the intersection, which could cause potential conflicts between vehicles. Within the private driveway, there could be potential conflicts between passengers and loading vehicles; however, as previously described, the project would prioritize minimizing loading activities during peak hours to reduce potential conflicts between passenger vehicle site access and loading services. Thus, the on-site location is appropriate for Building R6.

The Logue Avenue flex zones (O2, O3 and R3) would be ideal only for the O2 building. As part of the project, buffered bike lanes would be implemented by removing parking on one side of the roadway along the project frontage. Although, the MPMP does not specify, it is recommended on-street parking be removed on the east side of Logue Avenue along the project frontage because the project has the frontage for the entire segment north of Maude Avenue. Without on-street parking, it is not possible to accommodate the proposed on-street flex zones for Building R3 and O3 without blocking the bike lane. Therefore, the flex zones for the R3 and O3 buildings should be located within their respective private service streets or parking garages.



Source: Middlefield Park Master Plan

Figure 21
Proposed Flex/Loading Zones

The flex zone for the O2 building would be located in the parking lane near the cul de sac. It is assumed that the cul de sac would be large enough to accommodate truck maneuver within the cul de sac without interfering with the parking lane on Logue Avenue. It is recommended the flex zone be located directly adjacent to the cul de sac, so vehicles could access the flex zone easily.

As envisioned by the EWPP, the MPMP would also implement buffered bike lanes by removing parking along one side of the roadway along Maude and Clyde Avenues. However, the MPMP does not specify which side of the street. It is recommended that on-street parking be removed on the north side of Maude Avenue along the project frontages. Therefore, it is recommended the loading zones for building R4/R4 aff be provided within one of the service streets or within the respective parking garage. Because Maude Park is on the west side of Clyde Avenue, which would benefit from on-street parking, on-street parking should be removed on the east side of Clyde Avenue along the project frontages with the implementation of buffered bicycle lanes. Therefore, the on-street flex zone for building O5 should be relocated to the service street or parking garage.

The proposed flex zones on the west side of Clyde Avenue for Buildings O4 and R5 would be good location for southbound traffic along Clyde Avenue. Passengers would be able to exit the vehicle and be directly in front of the O4 and R5 buildings. However, the flex zone would be an issue for northbound vehicles, as drop off vehicles would need to make a U-turn in the middle of Clyde Avenue or enter and exit the O4, O5, or P2 building driveways to approach the flex zones. This could cause issues for inbound and outbound project traffic at the driveway, as well as any through traffic along Clyde Avenue. Thus, the building O4 and R5 flex zones should be provided within the service streets with adequate turnaround space for vehicles to exit onto the street or within the respective parking garages.

All flex zones recommended to be relocated to the service street, project driveway, or respective parking garage would need to be align with on-site loading requirements for the project.

Parking

Vehicle Parking

Vehicle parking for the project was reviewed per the City of Mountain View requirements, State of California Density Bonus Law, parking demand rates from local utilization survey data, the ITE *Parking Generation Manual,* the GreenTRIP Parking Database, the CAPCOA *Handbook for Analyzing Greenhouse Gas Emission Reductions*, and the Urban Land Institute (ULI) publication *Shared Parking*. A shared parking analysis was conducted for residential and ~~retail/community/civic~~active uses within the same building and for the district parking garages based on the ULI *Shared Parking* methodology.

Parking rates for office use, ~~retail/community/civic~~active use, and park use are evaluated based on local utilization survey data and the *ITE Parking Generation Manual*. Active uses are being conservatively assumed for parking as 41,000 sf of retail and 9,000 sf of community/civic uses.

For the residential mixed-use buildings, parking spaces were evaluated for the following three scenarios based on the options for unbundled residential parking and shared parking. The residential market-rate unit mix was provided by the applicant: 26% studio units, 38% 1-bedroom units, 32% 2-bedroom units and 4% 3-bedroom units.

- **Scenario 1: No Shared, No Unbundled Parking.** This scenario establishes a parking rate per market rate residential unit based on local utilization survey data and assumes parking is bundled (included) in monthly rent and assigned per unit. No shared parking is assumed with the ground-floor ~~retail/community/civic~~active uses in the same building.
- **Scenario 2: No Shared, With Unbundled Parking.** This scenario establishes a parking rate per market rate residential unit based on the GreenTRIP Parking Database and the CAPCOA

Handbook for parking reduction from unbundled parking. The parking is assumed to be unbundled with the residential units. Unbundled spaces mean a separate monthly rent is charged per parking space and is assigned to a unit only when rented. This scenario assumes separate parking for the ~~retail/community/civic~~active uses in the same building – no shared parking.

- **Scenario 3: Shared and Unbundled Parking.** This scenario assumes a parking rate per market rate residential unit as identified in Scenario 2, but with shared parking for the ~~retail/community/civic~~active uses within the same building.

For purposes of the parking analysis, in the three residential scenarios discussed, the ~~retail/community/civic~~active use parking rate is consistent.

The project proposes 4,276 total vehicle parking spaces, including 2,634 spaces for office use (at ~~a rate of~~ 2.0 spaces per 1,000 s.f.) and 1,642 spaces within the residential/mixed-use buildings for residential uses (at 0.8 spaces per unit), and ~~retail/community/civic~~active uses (at 2.4 spaces per 1,000 gross s.f., or 4 spaces per 1,000 for retail and no parking for community/civic spaces).

East Whisman Precise Plan Parking Requirements

To establish the baseline, the vehicle parking requirements were calculated for the project based on the parking maximums and minimums established in the EWPP. Table 17 compares this baseline with the proposed parking in the Draft Master Plan. The EWPP parking requirements are:

- **Office:** Maximum of 2.9 spaces per 1,000 s.f.
- **Residential – Market Rate Units**: Maximum of one space per studio/1-bedroom unit and two spaces per unit with more than one bedroom, which is inclusive of any visitor parking.
- **Residential – Affordable Units:** Maximum of 0.5 spaces per unit per the State of California Density Bonus Law for affordable housing (AB 1763).[5] The project is located in a transit proximity area and within a half mile of the Middlefield LRT Station so this parking ratio is assumed for Buildings R4 aff and R6.
- **Retail:** Minimum of 4 spaces per 1,000 s.f.
- **Other uses:** Minimum as defined in the Zoning Ordinance. The City code does not provide a parking rate for community/civic uses. The most similar use for community uses is a church use, which requires one space per 170 square feet of gross floor area (or 5.89 spaces per 1,000 s.f.). This is a similar rate to other public assembly/community center type of uses - such as a YMCA or daycare facilities.
- **Parks:** The City does not have an adopted parking rate for parks and the project is not required to provide parking, but a rate was established for purposes of the shared parking analysis.

Based on the City's maximum office parking requirements, the project could provide no more than a total of 3,819 spaces for the office buildings. The project proposes 2,634 spaces in the office buildings and district parking garages P1 and P2 at a rate of 2.0 spaces per 1,000 s.f. of office, which is within the maximum ratio of 2.9 spaces. Additionally, the project could provide no more than a maximum total of 2,477 spaces for the residential mixed-use buildings. The project proposes 1,642 total spaces, inclusive

[5] State Density Bonus Law under AB 1763 ~~does~~ identifies~~y~~ a parking allowance of 0.5 spaces per ~~bedroom~~ unit for developments that include the maximum number of affordable low-income and very low-income units within half of a mile of a major transit stop. ~~However, s~~Since the number of bedrooms is not known for the affordable buildings, this report assumes parking per unit under the Law.

Table 17
East Whisman Precise Parking Maximums and Minimums

Proposed Uses	Size		Parking Ratio	Required Parking Spaces	Proposed Parking Spaces
Office Use[1]					
Building O1	441,939	s.f.			450
Building O2	190,000	s.f.			250
Building O3	310,000	s.f.			150
Building O4	292,212	s.f.			150
Building O5/Garage P1	82,849	s.f.			1,334
Garage P2 [2]	--		--	--	300
Office Total	***1,317,000***	***s.f.***	***2.9 per ksf***	***3,819***	***2,634***
Building R1					
Residential[1]	104	Studio	1 per unit	104	
	152	1-bedroom	1 per unit	152	
	128	2-bedroom	2 per unit	256	
	16	3-bedroom	2 per unit	32	
Retail[3]	18,308	s.f.[6]	4 per ksf	73	
R1 Total	***400***	***units***		***617***	***354***
Building R2					
Residential[1]	117	Studio	1 per unit	117	
	171	1-bedroom	1 per unit	171	
	144	2-bedroom	2 per unit	288	
	18	3-bedroom	2 per unit	36	
Retail[3]	12,634	s.f.[6]	4 per ksf	51	
R2 Total	***450***	***units***		***663***	***337***
Building R3					
Residential[1]	70	Studio	1 per unit	70	
	103	1-bedroom	1 per unit	103	
	86	2-bedroom	2 per unit	172	
	11	3-bedroom	2 per unit	22	
Retail[3]	3,877	s.f.[6]	4 per ksf	16	
R3 Total	***270***	***units***		***383***	***244***
Building R4 Affordable					
Affordable Residential[4]	210	units	0.5 per unit	105	
R4 Affordable Total	***210***	***units***		***105***	***168***

Table 17 (continued)
East Whisman Precise Parking Maximums and Minimums

Proposed Uses	Size		Parking Ratio	Required Parking Spaces	Proposed Parking Spaces
Building R4					
Market Rate Residential[1]	23	Studio	1 per unit	23	
	34	1-bedroom	1 per unit	34	
	29	2-bedroom	2 per unit	58	
	4	3-bedroom	2 per unit	8	
Retail[3]	1,955	s.f.[6]	4 per ksf	8	
R4 Total	***90***	***units***		***131***	***92***
Building R5					
Residential[1]	81	Studio	1 per unit	81	
	118	1-bedroom	1 per unit	118	
	99	2-bedroom	2 per unit	198	
	12	3-bedroom	2 per unit	24	
Retail[3]	4,227	s.f.	4 per ksf	17	
R5 Total	***310***	***units***		***438***	***311***
Building R6					
Affordable Residential[4]	170	units	0.5 per unit	85	
R6 Total	***170***	***units***		***85***	***136***
Community/Civic Use					
Community[5]	9,000	s.f.[6]	5.9 per ksf	53	-
Office Subtotal[1]				**3,819**	**2,634**
Mixed-Use Subtotal[1, 3]				**2,475**	**1,642**
Google Middlefield Park MP Total				**6,294**	**4,276**

Notes:
1. Office and market rate residential parking ratios based on the maximum EWPP requirements.
2. P2 garage would be shared between office, retail, community/civic, and park uses during the off hours of the office.
3. Retail parking ratio based on the minimum EWPP requirements.
4. The State Density Bonus Law requires 0.5 spaces per unit in affordable housing buildings.
5. Parking ratio based on the City of Mountain View Zoning Code, Section 36.32.50, for church uses.
6. The Master Plan proposes 50,000 sf of active uses, comprised of retail, services, neighborhood commercial and community/civic uses. The proposed land uses would result in traffic patterns conservatively assumed to be 41,000 sf retail and 9,000 sf community/civic.~~The Master Plan proposes 30,000 s.f. of retail and 20,000 s.f. of community/civic uses. However, land uses proposed under the community civic uses category would result in traffic patterns more similar to retail uses. Therefore, this analysis assumes 41,000 s.f. of retail and 9,000 s.f. community/civic uses.~~

of 0.8 spaces per residential unit and 2.4 spaces per 1,000 s.f. of retail/community/civic use, which is within the maximum allowed. While Table 17 shows the stand-alone maximum parking required for the project, the EWPP encourages shared parking where complementary uses occur, such as commercial and residential within the same building and encourages unbundled residential parking. Shared parking, unbundled parking, and lower parking ratios are appropriate to consider for this project due to the transit proximity and proposed surrounding uses.

Office Parking

Counts were conducted at local office buildings near transit between 2016 and 2018 by Hexagon (see Appendix I). The office locations surveyed are in close proximity to Caltrain stations or offer shuttles to a nearby Caltrain station. For office buildings near transit, the average peak parking demand rate was found to be 2.03 spaces per 1,000 s.f. Based on this rate, the parking demand for the office buildings would be 2,674 spaces, which is 40 spaces more than the proposed number of parking spaces (see Table 18).

Table 18
Office Parking Demand Based on Local Survey

Proposed Office Use	Size		Parking Demand Rate	Parking Demand (spaces)	Proposed Spaces
Building O1	441.939	ksf			450
Building O2	190.000	ksf			250
Building O3	310.000	ksf			150
Building O4	292.212	ksf			150
Building O5/Garage P1	82.849	ksf			1,334
Garage P2	--		--	--	300
Office Total	**1,317**	**ksf**	**2.03 per ksf[1]**	**2,674**	**2,634**

Note:
1. Rate per local survey rates for similar uses near transit conducted by Hexagon between 2016~~2011~~ and 2018.

However, Google provides the GBus shuttle service for its employees in Mountain View and Sunnyvale. Based on the MPMP TDM Plan (see Appendix J), 31.3 percent of its employees take GBus to work, which greatly reduces the parking demand. All of the proposed office buildings would be required to implement the MPMP TDM plan to meet the trip caps. Therefore, it is expected that the proposed number of office parking spaces would be sufficient to meet the demand at a ratio of 2.0 spaces per 1,000 s.f. of office. Note, this is the same parking ratio for office as approved for Charleston East and Landings by the City, both owned by Google in North Bayshore.

~~Retail/Community/Civic~~Active Use Parking

The parking demand that would be generated by the proposed retail/community/civic uses were estimated using the 85th percentile parking rate contained in the ITE *Parking Generation Manual*, 5th Edition, for "Shopping Center" (Land Use 820) for 41,000 s.f. and "Recreational Community Center" (Land Use 495) for 9,000 s.f., based on the types of uses anticipated. For Shopping Center, the rate is 3.68 spaces per 1,000 s.f. and, for Community Center, the rate is 3.78 spaces per 1,000 s.f. Based on these rates, the parking demand for the total project would be 184 spaces. Table 19 summarizes the parking

demand per building based on the distribution of retail/community/civic (active) uses in the project. For the P2 structure, 15 additional parking spaces would be required for the ~~retail/community~~active use space, and for the Ellis Park Fairchild Barns, an additional 4 spaces would be required in the R1/R2 garage.

Table 19
~~Retail/Community/Civic~~Active Use Parking Demand Based on ITE Rates

Proposed ~~Active~~~~Retail/Community/Civic~~ Uses	Size		Parking Demand Rate	Parking Demand (spaces)
Market-Rate Residential Building				
R1 Retail	18.308	ksf	3.68 per ksf[1]	67
R2 Retail/Community/Civic Use	12.634	ksf	3.68 per ksf[1]	46
R3 Retail/Community/Civic Use	4.543	ksf	3.68 per ksf[1]	17
R4 Retail/Community/Civic Use	3.621	ksf	3.68 per ksf[1]	13
R5 Retail/Community/Civic Use	5.894	ksf	3.68 per ksf[1]	22
Other				
P2 Community/Civic Use	4	ksf	3.78 per ksf[2]	15
Ellis Park Community/Civic Use	1	ksf	3.78 per ksf[2]	4
~~Active~~~~Retail/Community/Civic~~ Uses Total	**50**	**ksf**		**184**

Notes:
1. 85th percentile weekday rates for Shopping Center (Non-December) (Land Use 820) used from ITE Parking Generation Manual, 5th Edition.
2. 85th percentile weekday rates for Recreational Community Center (Land Use 495) used from ITE Parking Generation Manual, 5th Edition.

Residential Parking – Affordable Units

Per State Density Bonus Law, if an affordable housing development includes rental units for low-income or very-low income households, is located within a Transit Priority Area, and has unobstructed access to a major transit stop from the development, then, upon request of the developer, a city shall not impose a vehicular parking ratio, inclusive of handicapped and guest parking, that exceeds 0.5 spaces per unit. Since the project is located in a transit proximity area and within a half mile of the Middlefield LRT Station, this parking ratio is assumed for the two affordable buildings - Buildings R4 aff and R6. This results in 105 spaces for Building R4 aff and 85 spaces for R6 (see Table 20). The parking proposed in Building R4 affordable (R4 aff) would be 63 spaces more and for Building R6 would be 51 spaces more than what would be required by State Density Bonus Law.

Table 20
Affordable Residential Unit Parking Demand by State Law

Proposed Affordable Housing	Size		Parking Demand Rate	Parking Demand (spaces)	Proposed Spaces
Building R4 Affordable	210	units	0.5 per unit[1]	105	168
Building R6	170	units	0.5 per unit[1]	85	136
Affordable Housing Total				**190**	**304**

Note:
1. The State Density Bonus Law ~~requires~~allows 0.5 spaces per affordable housing unit ~~in affordable housing buildings~~ near transit.

Residential Parking – Market Rate Units

Scenario 1: No Shared, No Unbundled Parking

A parking utilization survey was conducted on March 15, 2022, at higher-density residential complexes in Mountain View near transit services and major arterials (see Appendix I). The surveys were conducted at nighttime during the weekday when full occupancy is anticipated.[6] Some of the surveyed sites offer partial unbundled parking, with one space included with monthly rent and additional spaces offered at an additional monthly rent. Peak parking demand rates were determined based on the average number of occupied parking spaces per bedroom. On average, the parking ratio was found to be 0.72 spaces per bedroom, or 0.99 spaces per unit, inclusive of visitor parking spaces.

As a comparison, the parking ratios for approved residential developments in the EWPP area include:

- 400 Logue Avenue: 1 space per unit (or 0.85 spaces per bedroom)
- 355 E. Middlefield Road: 1.27 spaces per unit, collectively of apartments and condos
    - 1.09 spaces per apartment unit (or 0.83 spaces per bedroom)
    - 1.32 spaces per condo unit (or 0.54 spaces per bedroom)

The project proposes 0.8 spaces per unit for 1,900 residential units (market-rate and affordable units), which calculates to 0.57 spaces per bedroom. This parking ratio is lower than the majority of parking ratios for the approved residential developments and slightly lower than the unbundled parking scenario studied in Scenario 2.

Under Scenario 1, the project should provide 0.72 spaces per bedroom for market rate units, based on the local surveyed utilization rates and adjacency to transit, retail services, and open spaces. This parking rate is equivalent to 1.01 spaces per unit, but is recommended to be considered at 1 space per unit due to the minor fractional difference which can be easily absorbed by the projects residential TDM program. This rate is within the maximum parking allowed of one space per studio/1 bedroom unit and 2 spaces per 2 or more bedroom unit in the EWPP and includes guest parking.

[6] The Q1 2022 vacancy rate of higher-density residential apartment complexes (300+ units) in Mountain View is 5.4%. This rate was provided by the City from Costar accessed on March 24, 2022.

Based on the parking rate of one space per multi-family residential unit and the retail/community use rate noted above, assuming no shared parking, the project should provide the number of parking spaces to meet the total parking demand for each building shown in Table 21.

Table 21
Market Rate Residential Scenario 1: No Shared, No Unbundled Parking Demand

	Scenario 1: No Shared, No Unbundled Parking Required Per Building				
Proposed Market-Rate Residential Building	Residential Parking Demand (spaces)	Active~~Retail/Community/ Civic~~ Use Parking Demand (spaces)[1]	Total Parking Demand (spaces)	Proposed Parking Spaces	MPMP Parking Differential
Building R1	400	71	471	354	117
Building R2	450	46	496	337	159
Building R3	270	17	287	244	43
Building R4	90	13	103	92	11
Building R5	310	22	332	311	21
Market-Rate Residential Building Total	**1,520**	**169**	**1,689**	**1,338**	**351**

Note:
1. Parking demand for Building R1 include the demand for Ellis Park Community/Civic Use.

For Scenario 1, the parking demand generated by the residential and ~~retail/community/civic~~active uses would be 1,689 spaces, which is 351 spaces more than the number of proposed parking spaces (1,338 spaces) in the market-rate residential mixed-use buildings.

Scenario 2: No Shared, With Unbundled Parking

Based on local parking surveys for residential uses, some of the surveyed sites offer partial unbundled parking, with one space included with monthly rent and additional spaces offered at an additional monthly rent. To determine the residential parking demand with fully unbundled parking, the GreenTRIP Parking Database and CAPCOA *Handbook for Analyzing Greenhouse Gas Emission Reductions* (December 2021) were reviewed.

The GreenTRIP Parking Database, published by TransForm, includes parking data for 80 multi-family residential sites around the San Francisco Bay Area. The data ~~were~~ was collected in 2013 - 2014. The data shows whether unbundled parking was implemented, the cost of a parking space, and the number of unbundled parking spaces. Fourteen sites that are similar to the project were selected from the database. These sites are located in Berkeley, Union City, Mountain View, Sunnyvale, San Jose, Emeryville, and Dublin. These sites have a moderate number of units (greater than 100), provide parking spaces equal or greater than 0.57 space per bedroom, are not senior housing, had affordable units equal or less than 15%, and had vacancy rates equal or less than 5%. The parking data for the selected sites are included in Appendix I. The parking data shows that these developments have an average parking demand of 0.88 spaces per bedroom, while the developments that implement 100% unbundled parking have an average parking demand of 0.68 spaces per bedroom. Thus, the parking demand for developments with fully unbundled parking is about 15% lower than the average parking demand for all sites.

The CAPCOA Handbook provides methods to quantify GHG emission and VMT reductions from a specified list of measures. For unbundled parking, the reduction is calculated based on the reduction of vehicle ownership by comparing parking space cost to vehicle cost. Based on the parking space cost,

the handbook recommends up to 15.7% of VMT reduction resulting from unbundled parking with a monthly parking cost of $300 per space (see Appendix I). It is assumed that a VMT reduction is equivalent to a reduction in parking demand.

Based on the GreenTRIP Parking Database and CAPCOA Handbook, it is anticipated that fully unbundled parking could provide a parking reduction of 15% from the recommended parking rate (0.72 spaces per bedroom). With the fully unbundled parking, the parking demand could be reduced to 0.61 spaces per bedroom.

Under Scenario 2, the project should provide 0.61 spaces per bedroom for market rate units. This parking rate is equivalent to 0.85 spaces per unit, which is within the maximum parking allowed of 1 space per studio/1 bedroom unit and 2 spaces per 2 or more-bedroom units in the EWPP and inclusive of guest parking.

Based on the parking rate of 0.85 spaces per multi-family residential unit with unbundled parking and the ~~retail/community~~active use rate noted above, assuming no shared parking, the project should provide the number of parking spaces to meet the total parking demand for each building shown in Table 22.

Table 22
Market Rate Residential Scenario 2: No Shared, With Unbundled Parking Demand

Proposed Market-Rate Residential Building	Scenario 2: No Shared, With Unbundled Parking Required Per Building				
	Residential Parking Demand (spaces)	Active~~Retail/Community/ Civic~~ Use Parking Demand (spaces)[1]	Total Parking Demand (spaces)	Proposed Parking Spaces	MPMP Parking Differential
Building R1	340	71	411	354	57
Building R2	383	46	429	337	92
Building R3	230	17	247	244	3
Building R4	77	13	90	92	-2
Building R5	264	22	286	311	-25
Market-Rate Residential Building Total	**1,294**	**169**	**1,463**	**1,338**	**125**

Note:
1. Parking demand for Building R1 include the demand for Ellis Park Community/Civic Use.

Per Scenario 2, the parking demand generated by the residential~~, retail,~~ and ~~community~~ active uses would be 1,463 spaces, which is 125 spaces more than the number of proposed parking spaces (1,338 spaces) in the market-rate residential mixed-use buildings.

Scenario 3: Shared and Unbundled Parking

Shared parking is the use of a parking space to serve two or more individual land uses due to variations in parking demand by hour among differing land uses. Summing the parking demand generated by each use at every hour generally results in an overall peak parking demand for a mixed-use site that is less than the sum of the peak parking demands for each individual use. Thus, the application of ~~the principal of~~ shared parking may reduce the total parking demand for mixed-use developments. ~~Therefore, a~~A shared parking analysis was conducted for the residential buildings R1, R2, R3, R4, and R5 to estimate the parking demand with fully unbundled parking for ~~the~~ residential ~~use~~ and ~~the retail/community/civic~~active uses with spaces being shared by the residential use at night.

The shared parking analysis is based on time-of-day factors obtained from the Urban Land Institute (ULI) *Shared Parking*, 3rd Edition, recommended parking rate for multi-family residential buildings with unbundled parking, and the retail/community use rate noted above. Appendix I shows the hourly parking demand and total parking demand for each building with shared parking.

With shared parking, the project should provide total parking spaces within each building to meet a parking demand of 0.61 spaces per bedroom for market rate units with unbundled parking. This parking rate is equivalent to 0.85 spaces per unit, which is within the maximum parking allowed of 1 space per studio/1 bedroom unit and 2 spaces per 2 or more-bedroom units in the EWPP. The remainder of the residential parking demand would be accommodated by the retail spaces at night. The shared parking spaces would likely be used as a combination of residential guest parking, property management staff parking, and/or residential parking with restricted hours.

Based on the parking rate of 0.85 spaces per multi-family residential unit with unbundled parking and the retail/community use rate noted above, with shared parking, the project should provide the number of parking spaces to meet the total parking demand for each building shown in Table 23.

Table 23
Market Rate Residential Scenario 3: Shared and Unbundled Parking Demand

	Scenario 3: Shared and Unbundled Parking Required Per Building				
Proposed Market-Rate Residential Building	Residential Parking Spaces[2]	Active~~Retail/Community/ Civic~~ Use Parking Demand (spaces)[3]	Total Parking Demand (spaces)[1]	Proposed Parking Spaces	MPMP Parking Differential
Building R1	269	71	340	354	-14
Building R2	337	46	383	337	46
Building R3	213	17	230	244	-14
Building R4	64	13	77	92	-15
Building R5	242	22	264	311	-47
Market-Rate Residential Building Total	**1,125**	**169**	**1,294**	**1,338**	**-44**

Notes:
1. Based on the shared parking analysis, total parking demand is the parking demand for the residential use with fully unbundled parking based on 0.85 spaces per unit.
2. Residential spaces = Total spaces - the number of spaces for ~~the retail/community/civic~~active uses
3. Parking demand for Building R1 include the demand for Ellis Park Community/Civic Use.

Per Scenario 3, the parking demand generated by the residential~~, retail,~~ and ~~community~~ active uses would be 1,294 spaces, which is 44 spaces fewer than the number of proposed parking spaces (1,338 spaces) in the residential mixed-use buildings.

Parking for Maude Park

The parking demand that would be generated by the proposed Maude park use was estimated using the 85th percentile parking rate contained in the ITE *Parking Generation Manual*, 5th Edition, for "Soccer Field" (Land Use 488). This was selected based on the anticipated active recreational use of a large 5-acre park. Based on the presence of one soccer field, the weekday rate is 69.65 spaces. This generates an assumed parking demand of at least 70 spaces.

The project does not show any parking for public parks/open space as the park land would be dedicated to and developed by the City. Therefore, a shared parking analysis was conducted for the P1 and P2 district garages to evaluate if parking spaces could be shared between the office and parks outside of the office peak hours. The shared analysis (see Table 24) shows the office parking demand would peak from 10:00 to 11:00 AM on weekdays, and there would be no parking spaces to share at that time. During the rest of the weekday and weekend when the office parking demand is lower, it is expected the available parking spaces in the parking garage would be sufficient to accommodate the parking demand for office and park users. Note, any arrangements for use of parking for park users would require agreement between the applicant and City.

Table 24
Maude Park Shared Parking Analysis

Hour of Day	Park	Office	Total Demand	Available Spaces to Share
Parking Demand by Hour:				
6 a.m.	1	39	40	1,595
7 a.m.	4	199	203	1,435
8 a.m.	9	719	728	915
9 a.m.	21	1,373	1,394	261
10 a.m.	39	1,634	**1,673**	0
11 a.m.	50	1,454	1,504	180
Noon	62	1,160	1,222	474
1 p.m.	67	1,258	1,325	376
2 p.m.	70	1,552	1,622	82
3 p.m.	67	1,389	1,456	245
4 p.m.	64	1,160	1,224	474
5 p.m.	50	817	867	817
6 p.m.	64	343	407	1,291
7 p.m.	70	203	273	1,431
8 p.m.	70	69	139	1,565
9 p.m.	70	39	109	1,595
10 p.m.	59	13	72	1,621
11 p.m.	36	0	36	1,634
Midnight	8	0	8	1,634
	Parking Requirement[1]		**Max. Demand**	
	70	**1,634**	**1,673**	
P1/P2 Proposed Spaces		**1,634**		

Time of Day Source: Urban Land Institute (ULI) *Shared Parking, 3rd Edition, 2005*.
Bold indicate parking demand greater than proposed parking
Notes:
1. Parking requirements for the community and park uses are based on the ITE Parking Generation Manual, 5th Edition. It is assumed the office use would occupy~~occupied~~ all parking spaces during ~~the~~ peak demand.

Recommended Vehicle Parking Rates

Table 25 provides a summary of the recommended vehicle parking rates for the project. The project should provide 2.0 spaces per 1,000 s.f. for office use, based on the surveyed rates plus the availability of TDM measures, including the GBus employee shuttles. Although the surveyed rate was found to be 2.03 spaces per 1,000 s.f. of office use, the high rate of GBus use is expected to reduce the parking demand, in addition to the close proximity of Middlefield LRT station.

Based on the *ITE Parking Generation Manual*, the project should provide 3.68 spaces per 1,000 s.f. for retail/community/civic uses. For residential uses, based on the State Density Bonus Law, the project qualifies to provide 0.5 spaces per affordable housing unit due to proximity to the Middlefield LRT station. Parking for the market-rate residential units would depend on the parking program:

- Scenario 1 (No Shared, No Unbundled): provide 1 space per unit (equivalent to 0.72 spaces per bedroom), based on the local surveyed rates.
- Scenario 2 (No Shared, With Unbundled): provide 0.85 spaces per unit (equivalent to 0.61 spaces per bedroom), based on the GreenTRIP Parking Database and CAPCOA Handbook.
- Scenario 3 (Shared and Unbundled): provide 0.85 spaces per unit (equivalent to 0.61 spaces per bedroom), based on the ULI *Shared Parking* and Scenario 2 unbundled parking.

Table 25
Recommended Vehicle Parking Rates

Proposed Uses	Size	Recommended Parking Rate	Parking Demand (spaces)	Proposed Spaces
Office	1,317 ksf	2 per ksf[1]	2,634	2,634
Market Rate Residential	1,520 units			1,216
Scenario 1: No Shared, No Unbundled Parking		1.00 per unit[2]	1,520	
Scenario 2: No Shared, With Unbundled Parking		0.85 per unit[3]	1,294	
Scenario 3: Shared and Unbundled Parking		0.85 per unit[3]	1,294	
Affordable Residential	380 units	0.5 per unit[4]	190	304
Active~~Retail/Community/Civic~~ Use	50 ksf	3.68 per ksf[5]	184	122

Notes:
1. The parking demand rate for office is based on the MPMP proposed parking rate. Based on the MPMP TDM plan, 31.3 percent of Google employees are expected to use the provided Google GBus service, which is expected to lower the parking demand.
2. Rate per local survey rates conducted by Hexagon in March 2022.
3. Rate per local survey rates conducted by Hexagon in March 2022, and with a 15% reduction for unbundled parking.
4. The State Density Bonus Law allows~~requires~~ 0.5 spaces per affordable housing unit ~~in affordable housing buildings~~ near transit.
5. 85th percentile weekday rates for Shopping Center (Non-December) (Land Use 820) used from ITE Parking Generation Manual, 5th Edition.

Compared to the draft Master Plan, the project provides an adequate number of total parking spaces for office use. Per State Density Bonus Law, p~~P~~arking proposed for the affordable housing units in R4 aff would be 63 spaces more than ~~what would be~~ required and Building R6 would provide 51 spaces more

than ~~what would be required by State Density Bonus Law~~. Depending on the scenario selected, the project may need to provide additional parking within the mixed-use buildings to accommodate the recommended market-rate residential and ~~retail/community~~active use parking rates identified.

Bicycle Parking

The bicycle parking for the project was evaluated based on the EWPP requirements. The bicycle parking requirements are as follows:

- Residential: one long-term space per unit and one short-term space per 10 units
- Office: one-long term space per 2,000 square feet and one short-term space per 20,000 square feet.
- Neighborhood Commercial Uses (Retail/Community/Civic Uses): one long-term space and 4 short-term spaces per 5,000 square feet

The bike parking requirements for neighborhood commercial uses were universally applied to the ~~retail and community/civic~~active uses.

The project will be required to provide the required number of long-term spaces within each building and short-term parking within the plan area near building entrances, shuttle stops, major pathways, and gathering spaces (see Table 26). The project is not required to provide bicycle parking spaces for the park use, as that will be considered as part of the City's park design process.

Table 26
Bicycle Parking Requirements

Proposed Uses	Size		Rate[1] Long-Term	Rate[1] Short-Term	Required Parking Spaces Long-Term	Required Parking Spaces Short-Term
Office Uses						
O1	441.939	ksf	1 per 2 ksf	1 per 10 ksf	221	45
O2	190.000	ksf	1 per 2 ksf	1 per 10 ksf	95	19
O3	310.000	ksf	1 per 2 ksf	1 per 10 ksf	155	31
O4	292.212	ksf	1 per 2 ksf	1 per 10 ksf	146	29
O5/P1	82.849	ksf	1 per 2 ksf	1 per 10 ksf	41	8
Office Total	1,317.000		1 per 2 ksf	1 per 10 ksf	**659**	**132**
Building R1						
Residential	400	units	1 per unit	1 per 10 units	400	40
Retail	18.308	ksf	1 per 5 ksf	4 per 5 ksf	4	15
R1 Total					**404**	**55**
Building R2						
R2	450	units	1 per unit	1 per 10 units	450	45
Retail/Community	12.634	ksf	1 per 5 ksf	4 per 5 ksf	3	10
R2 Total					**453**	**55**
Building R3						
R3	270	units	1 per unit	1 per 10 units	270	27
Retail/Community	4.543	ksf	1 per 5 ksf	4 per 5 ksf	2	4
R3 Total					**272**	**31**
Building R4 Affordable						
R4	210	units	1 per unit	1 per 10 units	210	21
R4 Affordable Total					**210**	**21**
Building R4						
R4	90	units	1 per unit	1 per 10 units	90	9
Retail/Community	3.621	ksf	1 per 5 ksf	4 per 5 ksf	2	3
R4 Total					**92**	**12**
Building R5						
R5	310	units	1 per unit	1 per 10 units	310	31
Retail/Community	5.894	ksf	1 per 5 ksf	4 per 5 ksf	2	5
R5 Total					**312**	**36**
Building R6						
R6	170	units	1 per unit	1 per 10 units	170	17
R6 Total					**170**	**17**
Other						
Community at P2 & Ellis Park	5	ksf	1 per 5 ksf	4 per 5 ksf	2	4
Park	5	acres	--	--	--	--
Other Total					**2**	**4**

Notes:
1. Rates per the City of Mountain View East Whisman Precise Plan.

6. Pedestrian, Bicycle, and Transit Facility Assessment

This Chapter evaluates the effects of the project on the operations of pedestrian and bicycle facilities and transit services in the project vicinity.

The analysis includes an evaluation of the pedestrian access and circulation within the site, access/network between the project site and key nearby destinations, ADA compliance of pedestrian facilities in the project proximity, pedestrian quality of service (PQOS), and the project's consistency with the applicable policies related to pedestrian-oriented designs and elements. The City's PQOS Map was used to identify whether the project trips or design would affect the existing PQOS and whether there are existing pedestrian connection gaps in the project proximity.

A qualitative analysis of the project's effect on bicycle access, circulation, and operations in the area was conducted. The analysis includes an evaluation of bicycle circulation, bicycle facilities, and access to bicycle parking within the site, bicycle access/network between the project site and key nearby destinations, and bicycle level of traffic stress (BLTS). The City's BLTS Map was used to identify whether the project trips or design would affect the existing BLTS.

A qualitative analysis of the project's effect on transit services/facilities in the area and consistency with the applicable policies related to transit-oriented designs and elements was conducted.

Pedestrian Operations

Pedestrian Access and Circulation

Pedestrian access to the project site is provided via sidewalks on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, Middlefield Road, and surrounding streets. Figure 22 shows the proposed pedestrian and multi-use paths within the plan area that would provide pedestrian connections between the buildings, parks/open spaces, surrounding sidewalks and nearby transit/shuttle stops. An east-west pedestrian and multi-use path would be provided along the north side of building O1 and through Ellis Park to connect pedestrians between Ellis Street, the north-south multi-use path along the LRT tracks, Logue Avenue, and Clyde Avenue. East-west pedestrian routes would also be provided between Ellis Street, the LRT station, and Logue Avenue that would provide access to the LRT Station and north-south multi-use path along the LRT racks. Between Logue Avenue and Clyde Avenue, north-south pedestrian and multi-use paths would connect pedestrians between Maude Avenue, Maude Park, and the service street along the northern boundary of the plan area.

Source: Middlefield Park Master Plan

Figure 22
Proposed Pedestrian and Bicycle Network, Shuttle Stops, and Micromobility Corrals

As previously discussed (see Chapter 4), midblock pedestrian crossings are proposed in various locations: one on Ellis Street at the multi-use path and between buildings R1 and R2, one on Logue Avenue at the multi-use path, two on Clyde Avenue at the multi-use path south of building O4, and one on Middlefield Road at the multi-use path along the LRT racks. These midblock crossings would provide safe crossing for pedestrians traveling through the plan area.

Figure 22 also shows that continuous pedestrian connections would be provided between the project buildings and the proposed bus stops via sidewalks, proposed midblock crossings, and proposed pedestrian and multi-use paths. As discussed in Chapter 3, Google operates an existing Gbus shuttle with an existing stop within the Quad Campus. A ~~second~~ new Gbus stop would be added in the plan area within the proposed service street adjacent to Buildings O3 and O4. Access between these hubs and the project buildings would be provided via the proposed midblock crossing, proposed pedestrian/multi-use paths within the plan area, new upgraded bike lanes, and existing sidewalks.

The project would provide 8-foot sidewalks with an additional 6 feet of landscaping between the sidewalk and street along the project frontage on Middlefield Road and along the project frontage on Ellis Street, and 7-foot sidewalks plus 5 feet of landscaping along the project frontage on Logue, Maude, and Clyde Avenues. The updated sidewalks would meet the EWPP street design standards. The new service streets require a minimum 5 feet of sidewalk and a minimum 5 feet of landscaping on either side of the service street, per the EWPP standards.

ADA Compliance

ADA curb ramps are present at all corners of the study intersections where there are crosswalks. Most corners meet current ADA curb ramp designs, such as truncated domes and adequate curb ramp slopes. Truncated domes are the standard design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

The following intersections in~~le~~clude at least one corner that does not include truncated domes, and the ramp slope of these ramps do not appear to meet the current ADA standard.

- North leg of the Clyde Avenue/Maude Avenue intersection
- North leg of the Logue Avenue/Maude Avenue intersection
- South leg corners at the Ferguson Drive/Middlefield Road intersection
- Southwest corner at the SR 237 Westbound Ramp/Middlefield Road intersection
- South leg of the SR 237 Eastbound Ramp/Middlefield Road intersection

The project would improve the Clyde Avenue/Maude Avenue and Logue Avenue/Maude intersections to inlcude ADA-compliant ramps as part of the street improvements within the plan area.

Pedestrian Infrastructure, Safety, and User Experience

According to the 2012 General Plan, a neighborhood is walkable when people can travel comfortably and safely on foot to many destinations. Convenient walking distance is considered to be a half mile to a mile, a walk that would take 10 to 20 minutes. There are a few restaurants and retail stores on Middlefield Road within a mile of the project site, and the Middlefield LRT Station and bus stops are located within 0.5 miles of all project buildings.

Although located within one mile, access to some of the surrounding land uses and bus stops would require crossing busy arterial streets (Whisman Road and Middlefield Road). The wide streets might be uncomfortable for some pedestrians to cross and would not be considered a quality pedestrian environment. For this reason, the EWPP plans to create a mixed-use area with more commercial uses to be utilized by residents and employees.

The project would implement the EWPP in the project area by providing wider sidewalks along the project frontages on Middlefield Road, Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. It would also provide enhanced midblock crosswalks on Ellis Street, Logue Avenue, and Clyde Avenue at the multi-use trail. And, the project introduces a mix of uses internally that do not require the crossing of major streets to access between buildings, public open space, retail services, and public transit.

Pedestrian Quality of Service

Pedestrian quality of service (PQOS) identifies the level of comfort for pedestrians on any given roadway. Mountain View's Comprehensive Modal Plan (AccessMV), published in May 2021, includes a PQOS map (see Figure 23) that shows continuity or gaps in the pedestrian facilities as indicated with a PQOS score ranging from 1 to 5. A higher PQOS score indicates a low quality of service. The PQOS metric in the AcessMV document covers the following factors:

- Proximity to a variety of destinations and amenities
- Street connectivity and directness of routes to destinations
- Presence of a continuous network of pedestrian facilities
- Motor vehicle traffic speed; and
- Street width and intersection conditions

Based on the PQOS map, the following streets in the project vicinity have a PQOS greater than 2, which is not desirable:

- Ellis Street (PQOS 5)
- Maude Avenue between Logue Avenue and Clyde Avenue (PQOS 4)
- Maude Avenue between Clyde Avenue and the City limit (PQOS 5)
- Logue Avenue (PQOS 4)
- Clyde Avenue (PQOS 5)
- Fairchild Drive (PQOS 5)

The project would have an adverse effect on pedestrian operations because the project is expected to add vehicle trips to these street segments that have a PQOS score of 3 or more.

Because the project is a mixed-use development, it would provide a variety of uses within closer proximity. The project would provide new pedestrian and multi-use paths to provide pedestrians with direct routes to transit/shuttle stops and street segments. The project also would provide enhanced midblock pedestrian crossings to ensure a continuous network of pedestrian facilities across streets. The project would also provide wider sidewalks with landscaping for streets along the project frontages to enhance the pedestrian environment. Taking these factors into account, the project is expected to improve the PQOS along Ellis Street, Clyde Avenue, Maude Avenue, and Logue Avenue within the plan area.

Bicycle Operations

Bicycle Access and Circulation

Bicycle access to the project site is via bike lanes on Middlefield Road, Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue. The EWPP proposes to improve these bike lanes to buffered bike lanes. The project would implement Class IV protected bike lanes on Middlefield Road and Class II buffered bike lanes on Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue along the project frontages. Class IV bike lanes are separated bike lanes using grade separation, flexible posts, inflexible physical barriers, on street parking, or raised islands.

Source: Access MV, City of Mountain View, 2021

Figure 23
Existing Pedestrian Quality of Service

An east-west multi-use path would be provided through the project between Ellis Street and Clyde Avenue that would connect to the existing multi-use pathway that currently runs through the Quad Office Campus between Whisman Road and Ellis Street, which would provide direct access to the Hetch Hetchy Trail. Multiple north-south multi-use paths are proposed ~~from~~ between Maude Avenue and the service street along the northern boundary of the plan area into Maude Park, which provide a midblock north-south pedestrian connection between Logue Avenue and Maude Avenue, so pedestrians/cyclists would not need to travel to Logue Avenue or Maude Avenue.

The project proposes bike and scooter share hubs (micromobility hubs shown in Figure 22), once permitted by the City of Mountain View, in three locations: near the Quad Campus driveway entrance on Ellis Street (proposed Street B in EWPP), east of building R1 across from the Middlefield LRT stop, and within the service street just north of building O4 at Clyde Avenue. Micromobility hubs would provide dedicated on-site spaces for bike and scooter storage, which would allow the implementation of bike and scooter share programs via the TDM plan. Access between these hubs and the project buildings would be provided via the proposed midblock crossings, proposed pedestrian/multi-use paths within the plan area, and existing sidewalks. These hubs should be well-lit and positioned near (generally within 50 feet) of the main building entrances or at key destinations within the plan area.

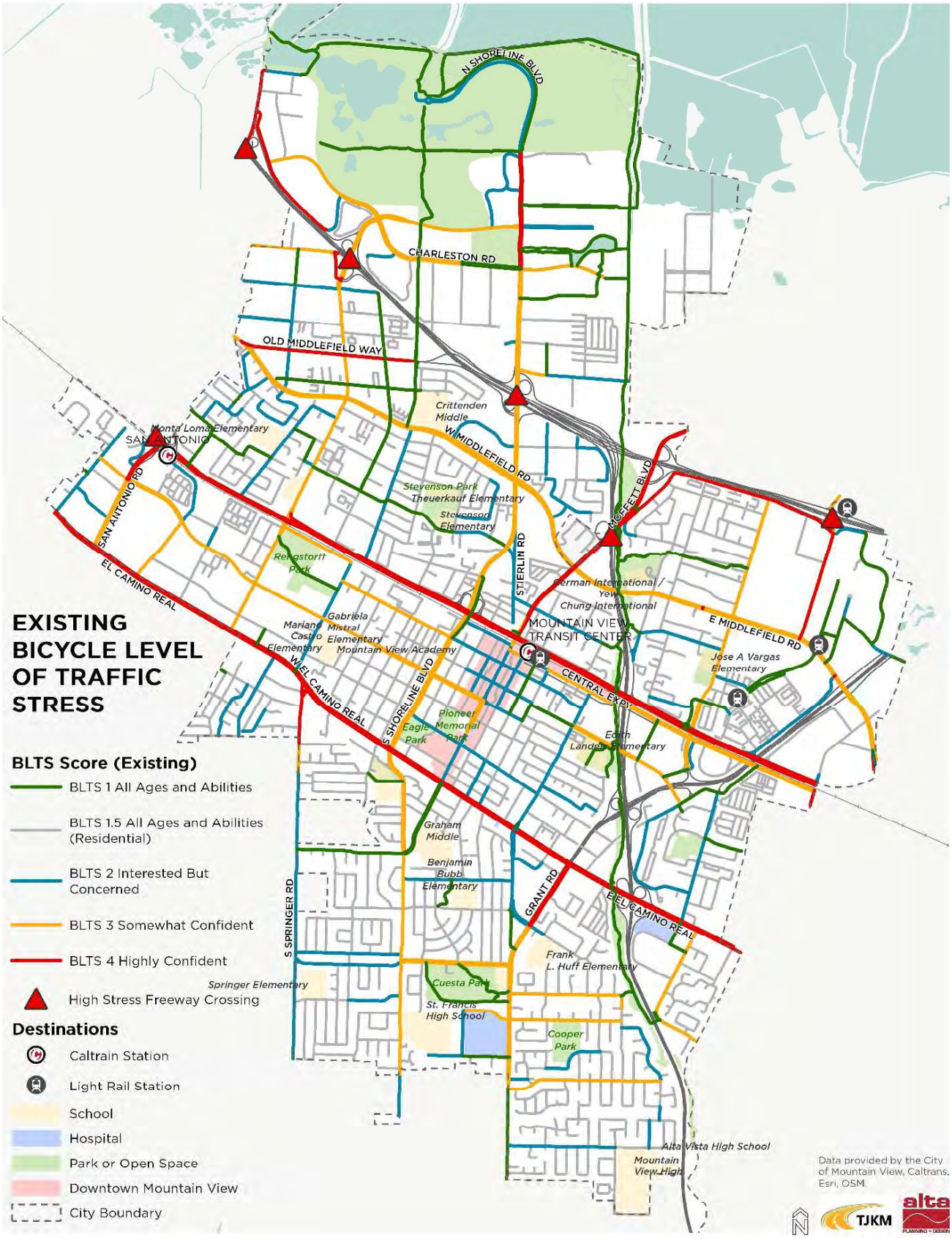
Bicycle Infrastructure, Safety, and User Experience

The 2015 Bicycle Transportation Plan Update evaluates the quality of the bicycle network in the City in terms of connectivity gaps and low stress gaps. The plan identifies spot gaps, connection gaps, and quality gaps along Middlefield Road, Logue Avenue, Ellis Street, and Maude Avenue. Spot gaps refer to point-specific locations lacking dedicated bicycle facilities or other treatments to accommodate safe and comfortable bicycle travel. Connection gaps are missing segments on a clearly defined bikeway, while quality gaps are links of an existing bikeway that are deficient or have operational shortcomings. The plan also identifies the low stress bicycle network. Low stress segments include Class I separated paths and streets with low traffic volumes, low traffic speeds, and bike facilities such as a protected bike lane or a bike boulevard. These are facilities where people feel most comfortable biking because they typically have the least interaction with motor-vehicles. Fairchild Drive, Manila Drive, the Hetchy Hetch Trail, and the Stevens Creek Trail are considered low stress segments. Although there are bike lanes on Ellis Street, Logue Avenue, Clyde Avenue, Maude Avenue, and Middlefield Road in the project area, none of these streets are classified as low stress bicycle facilities. However, the project would construct multi-use paths (Class I Bikeway) within the area to provide safer and direct connections for bicycles between Ellis Street and Clyde Avenue and between Middlefield Road, Maude Avenue, and the office buildings O3, O4 and O5 without riding on the streets. The project would also improve the existing bike lanes by providing buffered/protected bike lanes along the project frontage.

Bicycle Level of Traffic Stress

The City's AcessMV report includes a bicycle level of traffic stress (BLTS) map (see Figure 24) to identify the perceived comfort and safety of existing roads and bikeway facilities from the perspective of cyclists, as indicated with a BLTS score ranging from 1 to 4. A higher BLTS score indicates that the bikeway is comfortable for a more confident adult. A BLTS score of 1 is comfortable for all ages and abilities, a BLTS score of 2 is comfortable for an average adult, while a BLTS score of 4 indicates that the streets are comfortable only for highly confident riders. The metric (ranging from 1 to 4) in the AccessMV document covers the following factors:

- Number of through lanes or street width
- Posted speed limit or prevailing vehicle speed
- Presence and type of bicycle facilities
- Presence of traffic signals
- Presence of crossing islands



Source: Access MV, City of Mountain View, 2021

Figure 24
Existing Bicycle Level of Traffic Stress

Based on the BLTS map, the following streets in the project vicinity have a BLTS greater than 2, which is undesirable:

- Ellis Street (BLTS 4)
- Middlefield Road (BLTS 3)

The project would create an adverse effect on bicycle operations, as the project is expected to add vehicle trips to these streets.

The AccessMV report also includes a BLTS map considering the planned bicycle facilities listed in the Caltrans District 4 Bike Plan (2018), the VTA Countywide Bicycle Plan (2018), the City of Mountain View Bicycle Transportation Plan (2014), the Caltrain Bicycle Access and Parking Plan (2008), and several area precise plans, including the EWPP. With the planned improvements identified in these documents, Ellis Street is expected to continue to have a BLTS score of 4 and Middlefield Road would have a BLTS score of 3. All other streets in the EWPP area would continue to have a BLTS score of 2 or lower.

The project would improve the bike lanes along the project frontage on Ellis Street, Logue Avenue, Clyde Avenue, and Maude Avenue to buffered bike lanes and protected bike lanes on Middlefield Road. Implementing the buffered/protected bike lanes on Ellis Street and Middlefield Road is expected to lower the BLTS score, as protected bike lanes would provide more space between vehicular traffic and bicyclists.

Pedestrian and Bicycle Access to Schools

The project is located within the boundary of Jose Antonio Vargas ~~Theuerkauf~~ Elementary School and Edith Landels Elementary School, Graham ~~Crittenden~~ Middle School, and Mountain View High School, which are about 0.7 mile southwest, 1.7 miles ~~northwest~~southwest, 3.0~~2.0~~ miles ~~northwest~~southwest, and 4.9 miles south of the plan area, respectively. According to the City of Mountain View's Suggested Routes to Schools Program, Jose Antonio Vargas Elementary School students that wish to bike to school could use the LRT trail and Pacifica Drive to get to the school. ~~m~~Middle school students that wish to bike to school could use ~~Walker Drive,~~ Hetch Hetchy Trail, Stevens Creek Trail, ~~Central Avenue, Montecito Avenue,~~ and ~~Farley Street~~ local streets to get to the school. High school students could use the Stevens Creek Trail and local streets from the project area to school.

Transit Operations

Transit Facilities, Service, and Access

The project area is served by VTA Route 21 and MVgo Route A with the closest bus stops located on Middlefield Road and Maude Avenue. The project also is served by the Middlefield LRT Station, which is considered a major transit stop. The project would enhance and provide shorter access to the transit stops by providing pedestrian and multi-use paths within the plan area. The project would also enhance existing bus stops on site frontages by providing shelters and benches, as required by VTA.

Google operates an existing GBus shuttle system with an existing stop within the Quad Campus. A ~~second~~ new GBus stop would be added in the plan area within the proposed service street adjacent to Buildings O3 and O4. Access between these hubs and the project buildings would be provided via the proposed midblock crossing, proposed pedestrian/multi-use paths within the plan area, and existing sidewalks.

Transit Ridership

According to the VTA TIA Guidelines, nine percent of residents in housing within 2,000 feet of an LRT station are expected to utilize transit, which calculates to 59 new riders during the AM peak hour and 71 new riders during the PM peak hour. Because Google operates its GBus shuttles for employees as a long-haul commute option, the number of office workers that would take VTA transit to commute is expected to be minor. Office employees who are VTA transit riders will likely be traveling a short distance between the Mountain View Transit Center (in Downtown) to the Middlefield LTR station.

During the AM and PM peak hours, there are three light rail trains that run in each direction, two Route 21 buses that run in each direction, and two MVgo shuttles that run northbound in the morning and southbound in the afternoon/evening. The increase in ridership could be accommodated by the existing transit routes.

Transit Vehicle Delay

To assess the project's effect on transit vehicle delay, the delay experienced by each route running through the study intersections was estimated based on the average vehicle delay that is calculated as part of the intersection level of service analysis. Table 27 summarizes the bus travel times through the study area and the increase in transit vehicle delay with the addition of the project traffic. VTA has not established policies or significance criteria related to transit vehicle delay. Therefore, this analysis is presented for information purposes only. The results show that the project would result in a minimal increase (less than 60 seconds per vehicle) in transit travel time for the bus routes in the study area.

Table 27
Transit Vehicle Delay in Study Area

Bus Route	Study Area Street(s)	Direction	Projected Change in Transit Vehicle Delay (sec/veh)	
			AM	PM
21	Moffett Blvd, Middlefield Rd, Logue Ave, Maude Ave, Mathilda Ave	Eastbound	1.2	36.1
		Westbound	-3.8	25.9
MVgo Route A	Whisman Rd, Fairchild Dr, Clyde Ave, Maude Ave, Logue Ave, Middlefield Rd	--	4.7	4.4

Note:
Projected increase in transit delay based on a comparison of background vs. background plus project intersection movement delays calculated by TRAFFIX.

7. Other Transportation Issues

This chapter presents other transportation issues associated with the project, including:

- EWPP Street C Removal
- Recommended Changes to the MPMP
- Construction Phasing
- Project Contribution to the EWPP

EWPP Street C Removal

The EWPP proposes a Street C that extends midblock between Logue Avenue and Clyde Avenue from Maude Avenue northward to the Hetch Hetchy right of way and ends in a cul-de-sac (see Figure 25). Street C was conceptualized in EWPP to serve as an additional access to new buildings to break-up the long Maude Avenue block and provide a point of pedestrian connectivity near a new neighborhood park. The EWPP describes that, with a Master Plan application, the City can review a proposed circulation network that does not include Street C if findings can be made that the street is not necessary for vehicle circulation or utilities.

Because Street C would end in a cul-de-sac, it would not serve through traffic and would only serve properties on the new street. The project would provide direct access to the proposed buildings in the area bounded by Logue, Maude, and Clyde Avenues through Maude Avenue (buildings R3, R4/R4 aff, R5, and R6), Clyde Avenue (buildings O5/P1 and P2), and the service street running along the northern boundary (buildings O2, O3, and O4). Therefore, Street C is not necessary for vehicular access to these buildings. Although Street C would provide pedestrian/bicycle midblock access between Maude Avenue and the Hetch Hetchy easement, the project would also provide north-south public multi-use paths from Maude Avenue to the service street along the north project boundary into a new neighborhood park (Maude Park). Thus, Street C is not necessary for vehicular and pedestrian circulation. Replacing Street C with public multi-use paths is consistent with the EWPP as it maintains approximately 300-to-400-foot block lengths and would provide more connections for pedestrians and bicyclists with the service streets than a single Street C would provide.

Source: Middlefield Park Master Plan

Figure 25
Street C Proposed by EWPP

Recommended Changes to the MPMP

Table 28 summarized the recommended changes to the MPMP based on the analysis and evaluation discussed in Chapters 4 and 5.

Table 28
Recommended Changes to Draft MPMP

Element	Recommended Changes from MPMP
Midblock Crossing	Ellis Street Crossing north of Building O1: Provide a traffic signal on Ellis Street at the Quad Campus driveway and move the crossing to the south leg of the intersection. Eliminate the existing Ellis Street crossing north of the Quad Campus driveway. Middlefield Road Crossing at the LRT tracks: Signalize the crossing. Interconnect and coordinate the preemptive pedestrian signal with the signal at Logue Avenue and Middlefield Road. Logue Avenue Crossing north of Building R3: Provide an active crosswalk with RRFB and install infrastructure (e.g. conduits, lighting, etc.) to facilitate the installation of a future signal. Clyde Avenue Crossing south of Building O5/P1: Install a signalized crosswalk at least 100 feet from the driveway to Building O5/P1. Clyde Avenue Crossing north of Building R5: Install an active crosswalk with RRFB at the P2 driveway, at least 300 feet from the Clyde Avenue Crossing south of Building O5/P1.
Service Street/ Driveway	Provide 15 feet of red curbs next to the service streets/driveways if parking is permitted on the roadways. Align the O5/P1 driveway with the service street north of Buildings O3 and O4 to create an intersection.
Flex Zones	Move the on-street flex zones for O3, O4, O5, R3, R4, and R5 to the service street/private driveway for the respective buildings.
Removal of On-Street Parking	East side of Logue Avenue, north side of Maude Avenue, and east side of Clyde Avenue. Removal of parking at R6 street frontage.
Vehicle Parking Ratios	Determine residential parking requirement based on unbundled and shared parking management. Retail/community/civic uses based on 3.68 spaces per 1,000 sf.

Construction Phasing

The project would be constructed in four phases (see Table 29). Phase 1 would construct buildings R1, R2, and R6. Phase 2 would include constructing buildings O1 and O2. Phase 3 would construct buildings R3, R4/R4 aff, and R5. Under Phase 3, Maude Park is intended to be dedicated or delivered. Phase 4 would construct buildings O3, O4, O5/P1, and P2. Roadway improvements along Middlefield Road should occur during Phase 1, depending on the timing of other improvements planned in later phases. Logue Avenue would be extended to serve building O2 and the roadway and intersection improvements along Ellis Street are planned under Phase 2. Roadway improvements along Logue and Maude Avenues would occur in Phase 3, with Maude Avenue improvements potentially moved to Phase 4 depending on

timing of Phase 4. Finally, Phase 4 would include Clyde Avenue roadway and midblock crossing improvements. Based on the buildings and roadway improvements planned for each phase, Table 29 summarizes the midblock crossings and new traffic signals that should be built in each phase.

Construction parking and staging would be located near each building during each phase, with some off-site locations for parking. Trucks would access the construction areas using arterial streets, such as Ellis Street, Middlefield Road, Logue Avenue, and Maude Avenue (see Figure 26) with nearby freeway access for SR 237 and US 101. Two additional sites (in the northeast corner of Clyde Avenue and Maude Avenue and north of Building O4 on Clyde Avenue) are proposed to be used during construction, which are not part of the Master Plan area. On-site vehicle parking is expected to be sufficient for existing uses and construction crews during each phase of construction. The project would be conditioned to prepare and submit a construction management plan during each building permit stage that addresses the construction schedule, street closures and/or detours, construction staging areas, parking, and the planned truck routes. Use of any city-owned land (future parks) for construction staging or parking would require a license agreement with the City.

Table 29
Construction Phase Improvments

Phase	Construction
Phase 1	Buildings R1, R2, and R6 Middlefield Road roadway improvements[1] Middlefield Road Midblock Crossing at the LRT tracks (signal) VTA bus duck-out modifications
Phase 2	Buildings O1 and O2 Logue Avenue extension Ellis Street roadway and intersection improvements Ellis Street Midblock Crossing north of Building O1 (signal) Signal at the O1/R2 service street on Ellis Street
Phase 3	Buildings R3, R4/R4 affordable, and R5 Logue Avenue roadway improvements Logue Avenue Midblock Crossing north of Building R3 (active crosswalk with RRFB) Maude Avenue roadway improvements[2]
Phase 4	Buildings O3, O4, O5/P1, and P2 Clyde Avenue roadway improvements Clyde Avenue Midblock Crossing south of Building O5/P1 (signal) Clyde Avenue Midblock Crossing north of Building R5 (active crosswalk with RRFB)

Notes
1. Improvements along Middlefield Road could potentially occur during Phase 1, depending on the timing of other improvements planned in later phases.
2. Maude Avenue improvements could be combined with Phase 4, depending on timing of Phase 4 development.

Source: Middlefield Park Master Plan

Figure 26
Construction Phasing

Project Contribution to the EWPP

The EWPP envisions a variety of housing, retail, open space, and office uses, including the land uses proposed by the Middlefield Park project. Implementation of the EWPP would result in adverse operational effects at several study intersections and would require intersection improvements to address the adverse effects. Because the project would contribute trips to the EWPP, the project should contribute its fair share to the improvements recommended by the EWPP EIR. The intersection improvements recommended by the EWPP EIR and percentage of the MPMP's contributions are shown in Table 30.

The project's contribution to the EWPP recommended improvements were calculated based on the proportion of trips generated by the project to the total EWPP trips. The AM and PM peak-hour proportions were averaged to determine the overall project contribution per intersection. The number of trips generated by the EWPP are the same under existing, background, and cumulative conditions. The project should contribute to the listed improvements, which could be met by payment of the ~~Should the city adopt an East Whisman~~EWPP Development Impact Fee ~~(currently under review) that includes the listed improvements, the project may be able to pay their fair share in fee~~.

Table 30
EWPP Intersection Improvements and Project Contributions

ID	Intersection	Improvement[1]	Peak Hour	Project Trips	EWPP Deficiency Scenario	Project Contribution
1	Ellis Street and Manila Drive	Signalize intersection with a protected left turn lane and shared through/right lane for each approach	AM PM	30 36	Background, Cumulative	14%
2	Ellis Street and US 101 NB Ramps	Add westbound left and southbound right lanes with overlap signal phasing[2]	AM PM	249 198	Background, Cumulative	--
4	Ellis Street and Fairchild Drive	Convert southbound approach to 2 through lanes[2]	AM PM	401 431	Cumulative	--
5	SR 237 Ramps and Maude Avenue	Redesign the interchange to a tight diamond configuration[3]	AM PM	383 364	Cumulative	--
6	Mary Avenue and Maude Avenue	Add dedicated eastbound right lane with overlap signal phasing[4]	AM PM	134 138	Cumulative	22%
7	Mathilda Avenue and Maude Avenue*	No feasible improvement identified	AM PM	117 121	Cumulative	--
8	Moffett Boulevard and Middlefield Road	Add dedicated northbound right, southbound right, and eastbound right lanes with overlap signal phasing	AM PM	85 96	Cumulative	16%
10	Whisman Road and Middlefield Road	Add dedicated eastbound right lane with overlap signal phasing	AM PM	131 171	Cumulative	18%
11	Ellis Street and Middlefield Road	Add second eastbound left lane	AM PM	283 364	Cumulative	45%
17	Moffett Boulevard and Central Expressway*	Close Castro Street leg at Evelyn Avenue, as identified in the *Mountain View Transit Center Master Plan (2016)*[4]	AM PM	64 68	Cumulative	10%
18	SR 85 SB Off Ramp/Central Expressway	Convert southbound right lane to shared southbound left/right lane[5]	AM PM	30 30	Cumulative	38%
21	Mary Avenue and Central Expressway*	Add second westbound left, third westbound through, and third eastbound thorugh lanes[4]	AM PM	41 35	Existing, Background, Cumulative	10%
22	Mathilda Avenue and Indio Avenue	Add dedicated westbound right lane with overlap signal phasing[4]	AM PM	71 68	Cumulative	20%
23	Whisman Road and SR 237 WB Ramps	Add dedicated southbound left and westbound right lanes with overlap signal phasing[5]	AM PM	23 18	Cumulative	5%

Notes:
* Indicates CMP intersection
1. Improvements as listed in the EWPP EIR under existing plus project, background plus project, and cumulative plus project conditions.
2. This improvement is considered infeasible due to several considerations, including right-of-way, funding constraints, the limited space under the existing bridge structure to accommodate vehicle, bicycle, and pedestrian use, and a need to accommodate light rail and freight rail traffic.
3. The interchange is part of the State highway system, which is under the jurisdiction of Caltrans. There are no feasible improvements completely under the City's control.
4. The implementation of this improvement is uncertain because this intersection is not under the City of Mountain View's jurisdiction.
5. This improvement would require coordination with Caltrans and Santa Clara County.

Appendix A: Draft SEIR Comment Letters

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102

June 13, 2022

Lindsay Hagan
City of Mountain View
500 Castro Street
Mountain View, CA 94039

Re: SIR - Supplemental Environmental Impact Report for the Middlefield Park Master Plan, Mountain View, Santa Clara County.
SCH# 2021100026.

Dear Ms. Hagan:

Comment A.1

The California Public Utilities Commission's (Commission) Rail Crossing Engineering Branch (RCEB) is taking this opportunity to address the City of Mountain View (City) Supplemental Environmental Impact Report (SIR) for the Middlefield Park Master Plan. RCEB staff offers the following comments:

Commission Requirements and Policy

The Commission has jurisdiction over the safety of highway-rail crossings (crossings) in California. The Commission has exclusive power over the design, alteration, and closure of crossings, pursuant to Public Utilities Code Section 1201 et al. Based on Commission Rules of Practice and Procedure, Rule 3.9, an application to the Commission is required to construct a railroad across a public road. The Diridon Station Area Plan is subject to several other rules and regulations involving the Commission. The proposed project's design criteria must comply with the California Manual on Uniform Traffic Control Devices (MUTCD) and Commission General Orders (GO's). The following GO's, among others, may be applicable:

- GO 26-D (regulations governing clearances on railroads and street railroads with reference to side and overhead structures, parallel tracks, and the crossing of public roads, highways, and streets)
- GO 72-B (rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads, and highways)
- GO 75-D (regulations governing standards for warning devices for at-grade highway-rail crossings)
- GO 88-B (rules for altering public highway-rail crossings)
- GO 95 (rules for overhead electric line construction)
- GO 118 (regulations governing the construction, reconstruction, and maintenance of walkways adjacent to railroad trackage and the control of vegetation adjacent thereto).

Specific Project Comments

Comment A.2

RCEB recommends that the City add language to the Addendum so that any future development adjacent to or near the light rail right-of-way (ROW) is planned with the safety of the rail corridor in mind. New developments may increase traffic volumes on streets and intersections and at at-grade crossings. This includes considering pedestrian circulation patterns or destinations with respect to railroad ROW and compliance with the Americans with Disabilities Act.

Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares with no at-grade rail crossings as that configuration provides the most extensive safety considerations to the public, improvements to existing at-grade crossings due to increase in traffic volumes, and continuous vandal-resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad ROW.

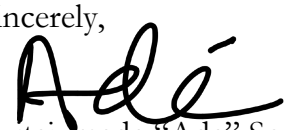
Field Diagnostic meetings are required at all impacted or potentially new crossings. The Field Diagnostic Team consists of staff and representatives from the City, the CPUC, VTA, or Caltrans, and other stakeholders. This review includes a detailed analysis of the crossing. During the field diagnostic review, the Field Diagnostic Team evaluates appropriate hazard elimination recommendations and determines whether the project's development is feasible.

Comment A.3

The Commission is the responsible agency under CEQA section 15381 regarding this project. As such, we appreciate and thank you for the opportunity to work with the City to improve public safety regarding crossings in Mountain View. We request that RCEB be informed of all developments associated with the Middlefield Park Master Plan. Meetings should be arranged with the Commission's RCEB staff to discuss relevant safety issues and conduct diagnostic reviews of any proposed and impacted crossing locations within the proposed Park Master Plan.

If you have any questions, please contact Eyitejumade "Ade" Sogbesan via email at es3@cpuc.ca.gov.

Sincerely,



Eyitejumade "Ade" Sogbesan
Utilities Engineer
California Public Utilities Commission
Rail Safety Division
Rail Crossings and Engineering Branch

Valley Water

Clean Water • Healthy Environment • Flood Protection

File: 34560
Stevens Creek

June 7, 2022

Ms. Lindsay Hagan
City of Mountain View
Community Development Department
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540

Subject: Notice of Availability of the Draft Supplemental Environmental Impact Report for the Middlefield Park Master Plan (SCH No.: 2021100026)

Dear Ms. Hagan:

Comment B.1
The Santa Clara Valley Water District (Valley Water) has reviewed the Draft Supplemental Environmental Import Report (SEIR) for the Middlefield Park Master Plan (MPMP), received on April 2, 2022. Valley Water has the following comments:

The East Whisman Precise Plan EIR concluded that proposed development could result in water supply shortfalls of 18% in a single dry year and 20% in multiple dry years. Given this impact to water supply, Valley Water appreciates the City requiring new development to be dual plumbed and the project's commitment to the use of recycled water. In addition to the use of recycled water, the City should require the project to install individual water submeters for each unit to encourage the efficient use of water. Studies have shown that adding submeters can reduce water use 15% - 30%.

Comment B.2
Section 3.2.3.2, Building Heating and Cooling (Page 19): The paragraph on page 19 states that "...approximately 2,820 vertical bores of six inches in diameter, spaced 18 feet apart, would be drilled approximately 85 to 110 feet bgs of each proposed building." Valley Water recommends that this sentence be modified to clarify if there would be 2,820 borings for each building or 2,820 borings for the entire project site. Valley Water is also concerned about the number of borings in an area with significant groundwater contamination. The bottom of each boring should be completed within the regional aquitard to minimize the potential for cross contamination.

Comment B.3
Section 3.5 (Page 32): The list of permits that may be required includes "Review and permits may be required if wells or soil borings are required (for environmental clean-up, for example) or if abandoned wells or septic tanks are proposed to be destroyed during construction of the project" under the Santa Clara County Department of Environmental Health. Well construction and destruction permits, including soil borings greater than 45 feet in depth, are reviewed and issued by Valley Water. This table should be updated accordingly. Please note that well construction/destruction permits may also be required if it is necessary to destroy or move existing wells due to the project.

Comment B.4
Section 5.6.1.2 (Page 111) states the project is located within the Santa Clara Valley Subbasin and that the subbasin is 225 square miles in area. The name of the subbasin and size are incorrect. The project is located within the Santa Clara Subbasin (DWR Basin 2-9.02) and it covers a surface area of 297 square miles.

Comment B.5
Section 5.6.1.2 (Page 111) states, soil borings were performed at select properties within the site and ranged between six and 16 feet below ground surface. Valley Water recommends clarifying and expanding this sentence to more clearly state the depths of the borings and note if groundwater was encountered. The following revision is suggested, "Soil borings, completed at depths ranging from 6 to 16 feet below ground surface, were performed at select properties within the site."

Comment B.6

Impact GEO-3 (Page 114): This section states that 57,600 to 115,200 gallons of shallow groundwater will be pumped each day during construction dewatering. These are large volumes of shallow groundwater that will be pumped. Valley Water recommends that dewatering be minimized to the greatest extent possible during construction. Valley Water also recommends that potential impacts to contaminant plumes, nearby creeks, and shallow groundwater be evaluated. Relevant best management practices from the City of Mountain View or the San Francisco Bay Regional Water Quality Control Board should also be considered, including reusing the water produced during construction dewatering for dust control, landscape irrigation, or other appropriate uses if possible.

Comment B.7

HAZ-2 (Page 137): HAZ-2 states that soil, soil vapor, and/or groundwater quality studies shall be conducted as warranted based on the findings of the property-specific Phase I ESAs. Furthermore, it states, a Site Management Plan (SMP) will be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities, which will be submitted to appropriate regulatory agency(s). Valley Water would like to be copied on all reports related to soil and groundwater quality.

Comment B.8

Section 5.9.1.1 (Page 147) and Section 5.9.1.2 (Page 150): This section includes a subsection on Valley Water's 2016 Groundwater Management Plan. The subsection should be updated to reference Valley Water's updated 2021 Groundwater Management Plan which was adopted by the Board of Directors on November 21, 2021. The updated plan can be found at https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf. It should be noted that the Regional Water Quality Control Board (RWQCB) has renewed the Municipal Regional Stormwater NPDES Permit on May 11, 2022 (Order No. R2-2022-0018, NPDES Permit No. CAS612008).

Comment B.9

Section 5.9.1.1 (Page 147): Under the Water Resources Protection Ordinance and Well Ordinance section, the text should be revised as follows: "Valley Water operates as the flood protection agency for Santa Clara County. Valley Water also provides stream stewardship and is the wholesale water supplier throughout the county, which includes the groundwater recharge program."

Comment B.10

Section 5.9.1.1 (Page 147): Well construction and deconstruction permits, including borings 45 feet or deeper, are required under Valley Water's Well Ordinance 90-1. Under Valley Water's Water Resources Protection Ordinance, projects within Valley Water property or easements are required to obtain encroachment permits.

Comment B.11

Section 5.9.1.2 (Page 150). This section states, "The 225 square mile Santa Clara groundwater basin provides municipal, domestic, industrial, and agricultural water supply to the area. Valley Water recommends that this sentence be re-written as follows: "The 297 square mile Santa Clara Subbasin provides municipal, domestic, industrial, and agricultural water supply to the area."

Comment B.12

Section 5.9.1.2 (Page 150): Under the Flooding section, the definition of Flood Zone X should be re-written as follows to reflect the FEMA definition: "Flood Zone X is defined as an area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood."

Valley Water appreciates your consideration for the review of the SEIR. Please contact Mr. Kevin Thai at kthai@valleywater.org or (408) 630-3157 if you have any questions or concerns about items discussed in this letter.

DocuSigned by:

Sincerely,

Kevin Thai

Kevin Thai, CFM
Associate Engineer
Community Projects Review Unit

cc: Y. Arroyo, M. Richert, M. Martin, V. De La Piedra, G. Cook, K. Thai, File

Santa Clara Valley Transportation Authority

June 9, 2022

City of Mountain View
Community Development Department
Attention: Lindsay Hagan, Deputy Zoning Administrator
500 Castro Street, P.O. Box 7540
Mountain View, CA 94039-7540

Dear Lindsay,

Comment C.1

VTA appreciates the opportunity to comment on the Draft Supplemental Environmental Impact Report (DSEIR) for the Middlefield Park Master Plan (MPMP) project, as well as the Multimodal Transportation Analysis (MTA) report provided as Appendix H to the DSEIR. VTA has reviewed the documents and has the following comments:

Land Use

VTA supports the proposed land use intensification and mix of land uses that the Middlefield Park Master Plan project would bring to the East Whisman Precise Plan Area, close to the Middlefield Light Rail Station. This project represents a prime opportunity to implement shared City-VTA goals to intensify land use near transit and improve sustainable travel options. VTA encourages the City and applicant to explore opportunities to increase the density of the proposed uses in the Master Plan area beyond the current proposal over time, given the long duration of the project buildout.

Comment C.2

Safety and Hazards

As VTA noted in our comments on the Notice of Preparation (NOP) for this environmental document, the 2019 CEQA Guidelines Appendix G checklist, Section XVII, calls for an analysis of potential hazards and safety issues. VTA has reviewed the safety analysis contained in the DSEIR and the MTA and we have the following comments:

Middlefield Light Rail Grade Crossing and Proposed Midblock Crossing B

As noted in our NOP comment letter, it is critical to determine the extent of queueing from nearby signalized intersections and if these queues will conflict with the light rail crossing at Middlefield Road. This is particularly important given the midblock pedestrian crossing of Middlefield Road ("midblock crossing B") proposed next to the light rail crossing, and the additional motor vehicle trips the project will generate. Under California law and other regulatory requirements, traffic signal pre-emption is a requirement when a traffic signal is within 200 feet of a railroad crossing, to minimize the possibility of any vehicles being on the trackway when a train approaches a crossing. Although the Logue Avenue intersection (228 feet away) and Ellis Street intersection (445 feet away) are more than 200 feet away from the crossing, the large size of this development may increase the queuing from these signalized intersections and possibly lead to hazards at the Middlefield Road light rail crossing.

Regarding queuing on the eastbound left turn approach to the Middlefield / Logue intersection, the

MTA report states that "The project would increase the 95th percentile queue to 225 feet during the PM peak hour, which would extend past the storage lane by one vehicle... The extended queue is not expected to create any conflicts with the VTA rail safety operations as there are gate arms at the rail to prevent vehicles from approaching the crossing. However, to minimize the possibility of the eastbound vehicle queue extending to the LRT tracks, a signal should be installed for the midblock crossing B at the LRT tracks with preemptive signals that are interconnected and coordinated with the signal at Logue Avenue and Middlefield Road. A separate queuing analysis should be conducted to confirm traffic signal coordination/operations" (MTA pp. 55-56). These recommendations are reiterated in the MTA section that discusses proposed midblock crossing B (MTA p. 60).

However, the DSEIR Transportation section makes no mention of the addition of a signal at midblock crossing B or the addition of signal preemption, interconnection and coordination. This omission is of concern given the chance of conflicts between vehicles and light rail operations at this crossing. To address safety impacts at the Middlefield Road light rail crossing, a mitigation measure should be added requiring the project to provide the necessary signal at the new mid-block crossing, and modifications to the Middlefield / Logue intersection to provide pre-emption, interconnection and coordination.

Comment C.3

Any modification to the Middlefield light rail crossing including the addition of a new parallel midblock crossing shall comply with CA MUTCD Section 8 guidance and with California Public Utilities Commission (CPUC) General Order 75 and 88 requirements. The potential mid-block crossing would require a thorough safety analysis and potential addition of new gates, channelization, and warning devices for pedestrian and bicyclist safety. Additional gate arms and push gates may be needed to prevent "wrong way" entrance from the sidewalk and bike lanes when the crossing protections are activated.

Comment C.4

VTA Bus Duck-out on Middlefield Road West of Light Rail Crossing

As noted in the DSEIR (p. 207) and MTA (pp. 60-64), the City and VTA have had discussions about potential changes to the current duck-out bus stop on Middlefield Road west of the light rail crossing, due to the MPMP project. VTA has provided preliminary feedback on early proposals. As noted in the MTA report, modifications to this bus stop could have safety implications for pedestrians, bicyclists, or vehicles depending on the distance of the stop from the light rail crossing and proposed midblock crossing B, whether buses stop in-lane or in a duck-out, whether a bus boarding island is provided, and whether a raised protected bicycle lane or buffered in-street bike lane is provided. To address safety impacts of modifying the VTA bus duck-out, a mitigation measure should be added requiring the project to provide necessary safety measures determined via coordination between the City, VTA and CPUC and through the CPUC GO 88-B process. In addition, VTA requests that the City coordinate with VTA regarding potential relocation of the bus stop on eastbound Middlefield Road east of Ellis Street to ensure safe operations with changes to the westbound duck-out and proposed midblock crossing B.

Comment C.5

Bus Stop Safety Considerations

VTA Local Route 21 and the MVGo shuttle operate through the MPMP project area, and their routes and stop locations may be impacted by construction. Any route detours, stop closures or temporary stop relocations should be coordinated with VTA, and bus stop locations just before driveways or intersections should be avoided due to hazards from vehicles driving around a stopped bus and making

a right hook turn.

The eastbound VTA Route 21 bus stop on Maude Avenue before Clyde Avenue has no paved boarding area and no sidewalk or crosswalk access. While the DSEIR and MTA state that the project would include pedestrian improvements such as "construction of wider sidewalks with landscaping along project frontages" (DSEIR p. 206), the documents do not address providing safe pedestrian access to this bus stop, which appears to be just beyond a parcel in the MPMP project area. VTA recommends that the City require the applicant to provide an accessible bus stop boarding area, sidewalk connection to the Maude / Clyde intersection, and crosswalk on the western leg of this intersection.

Comment C.6

Safety at Bus Stops with Boarding Islands

The MTA states that "The project would implement Class IV protected bike lanes on Middlefield Road and Class II buffered bike lanes on Ellis Street, Logue Avenue, Maude Avenue, and Clyde Avenue along the project frontages" (MTA p. 97). The Master Plan document states that "Subject to approval by the City of Mountain View and the VTA, the VTA bus stops on westbound Middlefield Road (just west of the VTA tracks) and westbound Maude Avenue (just west of Clyde Avenue) may be designed with floating passenger loading islands to eliminate conflicts between buses and bicyclists, following best practices for bike safety" (Master Plan p. 111). VTA supports improvements to bicycle accommodations at these locations, and notes that design of boarding islands needs to consider access and circulation for patrons with disabilities along with bus ramp deployment, and potential impacts to following traffic (i.e., waiting vehicles behind a stopped bus encroaching on the opposing lane to go around). Railings may be needed to separate bus patrons from the bike lanes. Please refer to VTA's *Design Guidance for Bike Lanes and Cycle Tracks at Bus Stops* and latest *Transit Passenger Facilities Standards* for in-lane stopping and cycle track configurations at bus stops. In addition, VTA requests that the City provide more information and coordinate with VTA regarding how bus stops will be treated at all locations planned for Class IV protected or Class II buffered bike lanes, including other stops on Middlefield Road, Logue Avenue and Maude Avenue.

Comment C.7

Safety Near Middlefield Light Rail Station and Along Light Rail Right-of-Way

It is likely that the pedestrian crossings of the tracks at the north end of the Middlefield station platform will need to have additional safety features (such as automatic swing gates and warning devices) added due to the increased volume of pedestrians generated by the development. Similar to the proposed mid-block crossing at the south end of the station, any modifications to grade crossings would require authorization through the CPUC General Order 88-B process, which VTA would be closely involved in.

Comment C.8

Currently the light rail Right-of-Way (ROW) has fencing protecting the ROW from unauthorized intrusion. Given the land use intensification and the linear open space proposed along the corridor, the development design should include clear and direct pedestrian paths and wayfinding to the station platform to prevent trespassing on the trackway. Whenever possible, pedestrian travel between the two sides of the trackway must be channeled towards the authorized crossings. The fencing along the western side of the light rail ROW should be raised if ball courts or other recreational uses are included in the linear park. Location of playgrounds and dog parks should be placed sufficiently away from the station entrance to prevent unattended children or pets from wandering onto the track zone. If trees

are to be located outside the light rail ROW fencing, the City and applicant should consult with VTA to select species that are manageable for debris removal, to prevent overgrowth, and to ensure that their mature canopy does not come within 10 feet of the Overhead Contact System (OCS).

Comment C.9

A pathway should be included for emergency vehicles and maintenance personnel along the light rail ROW, and authorized gate access to the trackway and other VTA equipment must be preserved. If there is parking alongside the fence line, bollards or other solid barriers need to be installed to prevent vehicles from impacting the fence into the trackway. The DSEIR notes that the proposed modifications to the bus duck-out west of the light rail crossing would include "a driveway with bollards to restrict access to emergency vehicles" (DSEIR p. 207). These bollards should be placed far enough to allow multiple emergency units to wait for the bollards to be unlocked and moved, and still be clear of the track zone, and preferably also clear of the bike lane and the bus stop. A turn around location should be included to prevent the need for emergency vehicles to reverse into traffic and onto the track zone.

Comment C.10

Northbound US101 Off-Ramp / Ellis Street Intersection

The MTA report indicates that the MPMP project "would add 92 and 137 trips to the US 101 southbound off-ramp during the AM and PM peak hours, respectively, and 79 and 52 trips to the US 101 northbound off-ramp during the AM and PM peak hours, respectively... The project trips would contribute to the ramp operational/queueing issues identified in the EWPP EIR" (MTA p. 56). The Northbound US 101 Off-Ramp / Ellis Street intersection has an existing issue with the proximity of the crossing gates and stop bar limit line on the off-ramp approach. When the gates come down at this location, occasionally a vehicle on the off-ramp approach travels beyond the stop bar limit and gets hit by the closing gate. An increase in traffic due to the MPMP project would exacerbate this hazard. A reconfiguration of the striping and/or adjustment to the far-side clear out signal programmed visibility is needed at this location. VTA recommends that a mitigation measure be added to the DSEIR for the project to provide a fair share contribution to improvements to the striping and/or equipment at this location. In addition, it is VTA's understanding that other improvements to the US 101/Ellis Street interchange area are being considered by the City and Google; VTA recommends that the City work with the applicant to provide a fair share contribution to any feasible improvements.

Comment C.11

Other Safety and Hazards Considerations

The MPMP project development should take into account the following other considerations regarding safety and hazards:

- Any utilities that are being proposed under the VTA light rail trackway and any nearby excavation need to consider the safety of the track bed, traction power and railroad signals and provide protection from improper shoring, localized flooding, and stray electrical currents. As noted in DSEIR Section 3.5, encroachment of utilities below the VTA trackway will require VTA review and approval, and permits for construction activity in proximity to the rail right-of-way.
- The design of the future pedestrian-bicycle overcrossing must preserve emergency and maintenance access to the light rail crossover switches, be high enough to clear the OCS, and prevent objects from being thrown down the trackway.
- Appropriate accommodations for shared and personal bike and micro mobility devices should be located in convenient locations to prevent parking/abandonment of these conveyances

inside the light rail station, bus stops or anywhere that can impede the track zone, bike lanes, pedestrian access or EVA lane.

- The design of the MPMP project should utilize Crime Prevention Through Environmental Design (CPTED) principles to make the area defensible and give users a sense of safety and security.

Comment C.12

Bicycle Accommodations

The DSEIR and MTA both state that the project will implement a Class IV bikeway on Middlefield Road. However, these documents differ from the Master Plan, which identifies more roads as receiving Class IV bikeways. The Master Plan says Class IV bikeways will be built on "both sides of Maude Avenue west of SR 237" (p. 99) and "The Middlefield Park Project further proposes the implementation of Class IV separated bikeways along select segments of Middlefield Road, Logue, Maude, and Clyde Avenues" (p. 100). VTA requests that the DSEIR and MTA be revised to clarify which roadway segments will have Class IV bikeways implemented by the project.

Comment C.13

The DSEIR, MTA and Master Plan summarize the quantity of office building short-term bicycle parking provided by the MPMP project by referencing the standard in the East Whisman Precise Plan, which is based on square footage of office space. VTA recommends that the City and the applicant also reference VTA's *Bicycle Technical Guidelines* recommendations (a minimum of 4 short-term spaces per office building entrance, and a goal of 10 spaces per building entrance), and consider increasing the amount of short-term bicycle parking provided.

Comment C.14

Vehicle Miles Traveled (VMT) and Transportation Demand Management (TDM)

VTA recognizes that the DSEIR finds that the MPMP project is consistent with the City's June 2020 VMT policy and its impacts would be less than significant in the area of VMT. However, VTA notes that the project will still generate a considerable amount of VMT and motor vehicle trips, so implementation of a robust TDM program will be important to address Greenhouse Gas reduction goals as well as to minimize impacts on the Congestion Management Program (CMP) system, including roadways, transit services, bike routes and pedestrian facilities.

VTA commends the applicant for proposing a robust TDM Plan for the MPMP project (documented in Appendix J to the MTA report) which builds on the TDM requirements established by the City in the East Whisman Precise Plan. VTA particularly supports the inclusion of strong TDM monitoring and data-sharing requirements, as this will be important as residential development is introduced to the East Whisman area, to demonstrate the effects of balancing jobs and housing in close proximity to each other. The DSEIR states that Residential TDM Monitoring "shall include parking counts to measure the peak parking demand and resulting parking rate" (DSEIR p. 27); VTA recommends that Residential TDM Monitoring should also include other measures such as surveys of residents, and collection of empirical data by third parties.

Comment C.15

Congestion Management Program (CMP) System Effects and Offsetting Improvements

While VTA fully supports the City's use of VMT as the primary as metric for CEQA Transportation analysis in conformance with SB 743, and accompanying efforts to reduce VMT through land use mix and TDM

requirements, as VTA noted in our comment letter on the NOP for this project, the City is still required to analyze the project's impacts on the CMP system using the adopted VTA Transportation Impact Analysis (TIA) Guidelines. While the MTA report does include analysis covering most topic areas in VTA's TIA Guidelines, the MTA does not identify specific improvements or contributions that would be required of the MPMP project in a number of areas with adverse effects.

Comment C.16

The East Whisman Precise Plan EIR disclosed that the buildout of the Precise Plan area would lead to adverse effects (at the time considered significant and unavoidable CEQA impacts) to numerous freeway segments near the plan area, as well as some CMP and local intersections. As noted in the 'Project Contributions to the EWPP' section of the MTA report (pp. 108-109), the MPMP project will contribute a considerable percentage of the overall trips expected from the buildout of the East Whisman Precise Plan. Therefore, VTA recommends that the project should provide voluntary, fair share contributions to nearby projects on the regional/CMP transportation system, as discussed in Attachment B to the East Whisman Precise Plan FEIR. Contributions could be directed to:

- Modifications to the SR 237/Maude/Middlefield ramps (which would include pedestrian and bicycle safety improvements at the ramp intersections)
- Improvements along SR 237 between US 101 and Mathilda Avenue which would help relieve a bottleneck affecting the Express Lanes segments east of Mathilda
- Ellis Street Shared Use path - future shared-use path planned on the west side of the Ellis Street at the US 101 undercrossing (a project led by the City of Mountain View)
- Bernardo Undercrossing of Caltrain and Central Expressway - joint effort by Sunnyvale, Mountain View, VTA, and Caltrain; this undercrossing will provide a vital future bike/ped connection between the MPMP project and neighborhoods south of Central Expressway/Caltrain tracks

Thank you again for the opportunity to review this project. VTA would like to meet with City staff to discuss the recommendations in this letter. Please do not hesitate to contact me at 408-321-5949 or robert.swierk@vta.org to schedule a meeting, or to discuss any questions you may have on this letter.

Sincerely,

Robert Swierk

Robert Swierk, AICP
Principal Transportation Planner

Mountain View
Whisman
School District

District Office
T 650.526.3500
1400 Montecito Ave.
Mountain View, CA 94043

June 9, 2022

City of Mountain View
Community Development Department
Attn: Lindsay Hagan, Deputy Zoning Administrator
500 Castro Street, PO Box 7540
Mountain View, CA 94039-7540
Lindsay.Hagan@mountainview.gov

RE: Mountain View Whisman School District Comment Letter on the Draft Supplemental EIR for the Middlefield Park Master Plan

Dear Ms. Hagan:

Comment D.1

The Mountain View Whisman School District ("District") hereby submits its comments on the City of Mountain View's ("City") Draft Supplemental EIR ("Draft EIR") for the Middlefield Park Master Plan ("Project"). The District's comments concern the need to provide assurances that funding for new schools to serve the area will be in place and the unstudied impacts of the Project on the Districts' schools will be analyzed. As a result, the Draft EIR needs revision and recirculation to disclose the significant new information to the public and allow comment on the new information.

Although this letter is technical in nature due to the subject matter, the District wishes to emphasize that its comments are meant to help the City fully evaluate and mitigate the potential impacts to the schools—not to be critical or confrontational. Instead, the District desires to continue cooperating and collaborating with the City to ensure the continued high quality of life in the City and education in its schools.

Draft EIR Comments

Although the Project will generate almost 600 new students to the District's schools, the Draft EIR fails to analyze any impacts on the District's schools except to say that the Developer Fees will mitigate any impacts. Since school facilities are a critical part of any residential development and are a critical part of this development, impacts on the District's schools should have been considered, and need to be considered, throughout the Draft EIR impact categories.

Mountain View Whisman School District

Comment D.2

I. Air Quality

The Air Quality analysis fails to analyze potential air quality impacts on the District's Jose Vargas Elementary School ("Jose Vargas"), which is only 0.38 miles from the Project site. The air quality analysis acknowledges that ROG emissions would exceed BAAQMD thresholds due to construction emissions. Thus, since Jose Vargas is in very close in proximity to the Project site and students will be walking, biking, and traveling to and from Jose Vargas, the ROG emissions' impacts on Jose Vargas and its students need to be analyzed and presented in a revised, recirculated draft EIR.

Comment D.3

II. Public Services

The Draft EIR states that the Project would not result in substantial adverse physical impacts associated with the need for new or physically altered governmental facilities and that there is sufficient capacity at the schools to accommodate Project-generated students. (Draft EIR, p. 187.) However, the Project would generate 247 elementary school students, 153 middle school students, and 190 high school students, an additional nearly 600 students to the District's schools.

Table 5.14-1 presents enrollment and capacity data for the District's Jose Vargas and Edith Landels Elementary ("Landels") Schools, Graham Middle School, and Mountain View High School ("Receiving Schools"). The analysis assumes that half of the new elementary school students would attend Jose Vargas and the other half would attend Landels. The District has its own process for determining which students attend which schools, and it is incorrect to assume that the students would be evenly split between Jose Vargas and Landels. Landels can only accommodate an additional 62 students without being over capacity, which means the other 185 students must attend Jose Vargas. The addition of 185 students would put Jose Vargas very near capacity. Similarly, Mountain View High School is already over capacity, and the Project will increase capacity at the high school by an additional 190 students. Thus, the Project actually exacerbates the impacts to the District's school facilities. The District is not equipped to house these excess students, and additional analysis is needed to analyze housing options for these students.

Accordingly, this section of the Draft EIR must be revised and recirculated in a new draft EIR.

Comment D.4

The Draft EIR also states that payment of Developer Fees will fully and completely mitigate all school impacts and that the Project would contribute to the repayment of local general obligation bonds that would provide financing for capital projects at the schools assigned to the Project. Even though payment of Developer Fees legally mitigates capacity needs at schools, the reality is Developer Fees are sorely lacking to construct new classrooms. Further, payment of Developer Fees does not mitigate the Project's significant impacts on the District's schools concerning air quality, noise, pedestrian safety, utilities, and any other environmental impact. These must be analyzed and provided for in a recirculated draft EIR.

Comment D.5

The City's General Plan Policies POS 5.2 states the City will collaborate with the District on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds; POS 5.3 states that the City will ensure school facilities are constructed to serve community needs to the extend allowed by state law; and POS 5.4 states that the City will collaborate with local school districts on their facility needs and provide information on development and growth trends. Because the District's schools are at or near capacity, and the Project will increase capacity, in line with the

above policies, the City should consult with the District to ensure that school facilities that need to be expanded as a result of the Project are adequately funded to meet these General Plan policies.

Comment D.6

III. Recreation

Although the Recreation section discusses various General Plan policies to avoid significant impacts due to recreation impacts and discusses the City's recreational facilities, it omitted a discussion and analysis of the Project's impacts on the District's recreational facilities. Per the General Plan, the District owns about two-thirds of the City's park acreage, 85 out of 133 acres to be exact (General Plan, p. 145), and joint use agreements with the City allows use of 12 school park sites for recreational use outside of school hours. Further, Policy POS 5.2 requires the City to collaborate with the District on new school development and intensification to accommodate population growth while preserving and protecting public parks and playgrounds. Thus, with an increased population to the area, which deteriorates facilities, the Draft EIR needs to include an analysis of the Project's potential impacts on the recreational facilities at Jose Vargas, since the site is less than half a mile from the Project site.

Comment D.7

IV. Transportation

Although CEQA no longer considers vehicle delay as a significant impact, potential educational disruption and safety impacts are still required where increased traffic and congestion causes secondary impacts to students' education and safety hazards for pedestrians, bicyclists, and other traffic. The District is concerned with the Project's potential addition to, and delay on, bus and automobile drop-off and pick-up activities at the Receiving Schools. The added delay could disrupt the educational day and contribute to more frequent absences. Such disruptions would detract from the most effective educational program.

Considering that the Project will generate almost 600 new students into the District, the Draft EIR needs to include analysis of the safety impacts of increased vehicle traffic and student pedestrian traffic to and from the District's school sites. Specifically, impacts on the Receiving Schools should have been analyzed because these are the schools that would serve the Project site. Thus, the Draft EIR must be revised with an analysis of the Project's impacts on the vehicle movements to and from the Receiving Schools, impacts on pedestrian traffic to and from the Receiving Schools, circulation and congestion during student drop-off and pickup, and impacts on the routes and safety of students traveling to and from the school during construction and Project operation. Without the additional analysis, there is no way to confirm whether the Project will have less than significant transportation impacts upon the Receiving Schools' operations.

The General Plan's MOB 6.1 and 6.2 policies promote Safe Routes to Schools programs for all schools serving the City and prioritizes projects to ensure that bicycle and pedestrian safety improvements include projects to enhance safe accessibility to schools. Thus, the Draft EIR needs to include an analysis of the Project's potential student pedestrian impacts to ensure that the Project does not compromise adequate, accessible sidewalks, bike lanes, and protected crosswalks for the students walking or biking to and from the Project site from Jose Vargas.

Comment D.8

V. Conclusion

The District desires that the Project's potential significant impacts to the students, parents, faculty, and staff of the District's schools are fully analyzed and mitigated. Given the lack of analyses in the Draft EIR, the

Mountain View
Whisman
School District

District respectfully requests that the Draft EIR be revised to include those analyses and mitigation measures, as set forth herein and recirculated per the requirements of the California Environmental Quality Act.

Best regards,

Ron Wheelehan
Interim Chief Business Officer
Mountain View Whisman School District

Exhibit B

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

FOR THE MIDDLEFIELD PARK MASTER PLAN SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

City of Mountain View

OCTOBER 2022

SECTION 1: INTRODUCTION

1.1 Statutory Requirements for Findings

To support a decision on a project for which an Environmental Impact Report (EIR), or Supplemental EIR (SEIR), is prepared, the lead or responsible agency must prepare written findings of fact (Findings) for each significant effect on the environment identified in the EIR (e.g., Section 21081 of the Public Resources Code). The City of Mountain View, as the lead agency, has prepared these Findings for the Middlefield Park Master Plan (Project), located at the northeast corner of Ellis Street and East Middlefield Road and north of West Maude Avenue, between Logue Avenue and Clyde Avenue. The Findings must be adopted by the Mountain View City Council, which the City Council hereby elects to do as detailed more fully herein.

Section 15091(a) of the California Environmental Quality Act (CEQA) Guidelines states that:

> "(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
>
> (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
>
> (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
>
> (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR."

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives where feasible to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of a project. For those significant effects that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, legal,

social, technological, or other benefits of the project outweigh the significant effects on the environment.[1] CEQA Guidelines Section 15093 states:

> "If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'"

1.2 Record of Proceedings

For purposes of CEQA and the findings set forth herein, the record of proceedings for the City's decision on the Project consists of: (a) matters of common knowledge to the City, including, but not limited to, Federal, State and local laws and regulations; and (b) the following documents which are in the custody of the City:

- Notice of Preparation and all other public notices issued by the City in conjunction with the Project (see Appendix B of the Draft SEIR for the Notice of Preparation);

- The Public Review Draft SEIR and supporting documentation prepared for the Project (Draft SEIR published in April 2022 and all attached appendices), and all documents cited, incorporated by reference, or referred to therein;

- All written and verbal comments and documents submitted to the City by agencies, organizations, and members of the public on the Project and the Final SEIR (before, during, and after the close of the public comment period up through the close of the public testimony portion of the City Council's public hearing on the Project);

- The Project's Mitigation, Monitoring, and Reporting Program (MMRP), which incorporates the Precise Plan EIR MMRP as Appendix A to the Project MMRP;

- The Public Review Final SEIR/Response to Comments document and supporting documentation prepared for the Project (Final SEIR published in August 2022) and all decisions, determinations, documents cited, incorporated by reference, or referenced to therein;

- A written response dated September 27, 2022 to a public comment received after August 29, 2022 related to vapor intrusion, monitoring wells, and other volatile organic compound mitigation recommendations;

- An Errata document dated October 10, 2022;

[1] Public Resources Code Section 21081(b).

- All findings and resolutions adopted by the City in connection with the Project, and all documents cited, incorporated by reference, referred to therein;

- All locally adopted land use plans and ordinances, including, without limitation, general plan, precise plans, and ordinances, together with environmental review documents, findings, mitigation monitoring and reporting programs, and other documentation relevant to planned growth in the area, such as the City of Mountain View 2030 General Plan and Greenhouse Gas Reduction Program adopted by the City Council on July 10, 2012 and the City's Climate Action Plan (Climate Protection Roadmap adopted in 2015);

- The City of Mountain View 2030 General Plan and Greenhouse Gas Reduction Program Environmental Impact Report (SCH No. 2011012069), including all appendices attached thereto, certified by the Mountain View City Council on July 10, 2012, and all findings, decisions, determinations, and resolutions adopted by the City in connection with the General Plan EIR;

- The City of Mountain View East Whisman Precise Plan (EWPP) Program Final Environmental Impact Report (SCH No. 2017082051), including all appendices attached thereto, certified by the Mountain View City Council on November 5, 2019, and all findings, decisions, determinations, and resolutions adopted by the City in connection with the Precise Plan EIR;

- All staff reports, presentation materials, and other documents prepared by the City with respect to the Final SEIR and the Project, and any minutes or verbatim transcripts of all information and Study Sessions, workshops, public meetings, and public hearings held by the City in connection with the Project; and

- Any other materials required to be in the record of proceedings by Public Resources Code Section 21167.6, Subdivision (e).

The location and custodian of the documents and other materials that constitute the record of proceedings are:

City of Mountain View
Community Development Department
500 Castro Street
Mountain View, CA 94041
Contact: Lindsay Hagan, 650-903-6306

1.3 Incorporation by Reference

The Final SEIR is hereby incorporated into these Findings in its entirety. Without limitation, this incorporation is intended to elaborate on the comparative analysis of alternatives, the basis for determining the significance of impacts, the scope and nature of mitigation measures, and the

reasons for approving the Project despite the conclusion regarding associated significant and unavoidable adverse impacts.

1.4 Findings

The Findings set forth herein are based on substantial evidence contained in the Record of Proceedings, including, without limitation, the Final SEIR, including relevant technical studies, reports, and evaluations supporting the Final SEIR's analysis. As previously stated, the Draft SEIR (including, without limitations, all appendices attached thereto) addresses the potential effects on the environment that are associated with the Project as required under CEQA, and the Final SEIR and written response dated September 27, 2022 to a late comment includes the public comments received on the Draft SEIR and minor text and graphic revisions to the Draft SEIR, which includes the Errata document dated October 10, 2022. See Section 1.2 above for information regarding the location and custodian of the documents that comprise the Record of Proceedings.

SECTION 2: PROJECT BACKGROUND AND OVERVIEW

This section provides a brief description of the Project, lists the objectives of the proposed Project, lists the Precise Plan Guiding Principles, and lists the Project alternatives evaluated in the Draft SEIR.

2.1 Brief Project Description

The proposed Project would demolish the existing 23 office and light industrial buildings totaling approximately 684,645 square feet, landscaping, and surface parking lots on a 40-acre site and construct 1,317,000 square feet of office uses, up to 1,900 residential units, and up to 50,000 square feet of ground-floor commercial space (referred to as active use space). The Project would also dedicate approximately 7.28 acres for three new public parks and construct a 2.87-acre privately owned, publicly accessible (POPA) park. The Project would include new vehicular, bicycle, and pedestrian circulation. As a Project option, the applicant could develop a private district utilities system with underground utility lines to serve some buildings within the Project site with wastewater, recycled water, thermal energy (heating and cooling), and electric power. A more detailed project description is provided in Section 3.0 of the Draft SEIR.

2.2 Project Objectives

a. Develop the Project area with residential and office uses at an increased density and floor area ratio (FAR) (consistent with the character areas development targets in the Precise Plan) near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit.

b. Redevelop the Project site with approximately 1,900 new residential units to better balance the City's jobs-housing ratio.

c. Provide approximately 1.3 million square feet of office uses consistent with the Precise Plan and the following General Plan policies:

- **LUD 3.1: Land use and transportation.** Focus higher land use intensities and densities within one-half mile of public transit service and along major commute corridors.

- **LUD 3.8: Preserved land use districts.** Promote and preserve commercial and industrial districts that support a diversified economic base.

- **LUD 9.2: Compatible transit-oriented development.** Encourage transit-oriented development that is compatible with surrounding uses and accessible to transit stations.

- **LUD 14.3: Business attraction.** Attract innovative and emerging technology businesses.

d. Develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan's Jobs-Housing Linkage Program.

e. Implement a robust transportation demand management (TDM) plan with trip-reduction measures and on-site amenities that promote walking, bicycling, use of shuttles, transit, and other transportation alternatives, consistent with the requirements of the Precise Plan.

f. Support VTA's investment in light rail transit by providing transit-oriented residential and commercial development that facilitates pedestrian and bicycle access to and ridership of transit.

g. Implement sustainable building practices promoting energy and water efficiency consistent with the Precise Plan.

h. Dedicate up to approximately seven acres of land to the City for the creation of new public parks to serve the existing uses, the proposed Project, and the broader community.

i. Support both Precise Plan goals and City Council and staff guidance through the delivery of people-centric community benefits that help people live, work, play, and stay in Mountain View, including measures that support:

    - Housing opportunities and anti-displacement;

    - Retention and growth of small businesses and workforce development;

    - Safe and expanded connections for pedestrians and bicyclists, while consolidating infrastructure for vehicles; and

    - Quality open space for recreation, relaxation, and entertainment.

2.3 Precise Plan Guiding Principles

To provide additional context, each alternative discussed in the SEIR was evaluated against the Precise Plan's Guiding Principles, which support and establish the vision for growth in the Precise Plan area and are used as a reference point for stakeholders and decision-makers in evaluating development projects. These principles include:

1. Transform East Whisman into a mixed-income community with a balance of renters and owners;

2. Create a complete neighborhood;

3. Focus activity and development around Middlefield Light Rail station;

4. Respect North Whisman Area neighborhood character;

5. Enhance the Middlefield/Whisman Village Center;

6. Integrate new housing harmoniously with office uses;

7. Maximize land use flexibility while balancing jobs and housing;

8. Minimize vehicle trips;

9. Build complete streets for active transportation; and

10. Create a highly sustainable community.

2.4 Alternatives

Based on the Project objectives and anticipated environmental consequences and pursuant to Section 15126.6 of the CEQA Guidelines, the following Project alternatives were selected for analysis:

- **No Project, No New Development Alternative:** The Project would not be built, and the site would remain in its existing condition with 684,645 square feet of office/research and development/light industrial.

- **No Project, Redevelopment Alternative:** This alternative assumes redevelopment of the site to the base allowable floor area for office (691,285 square feet) and minimum required retail (5,000 square feet).

- **Mitigated 19% Reduced Development Alternative:** This alternative assumes a 19% reduction in all proposed development to avoid the Project's significant and unavoidable

operational reactive organic gas (ROG) emissions impacts with incorporation of air quality mitigation measures, resulting in 1,066,770 square feet of office, 1,539 residential units, 24,300 square feet of retail, 16,200 square feet of community space, and 7.8 acres of public parks.

- **31% Reduced Development Alternative:** This alternative assumes a 31% reduction in all proposed development to avoid the Project's significant and unavoidable operational ROG emissions impacts without air quality mitigation measures, resulting in 908,000 square feet of office, 1,311 residential units, 20,700 square feet of retail, 13,800 square feet of community space, and 6.6 acres of public parks.

- **Rescheduled Construction Alternative:** This alternative reschedules the proposed Project phasing to construct Phase 2 (office development) first before the 400 Logue Avenue residential project (the nearby sensitive receptors) is occupied to reduce the Project's health risk impacts on residents at 400 Logue Avenue.

A more detailed description of these alternatives and required findings are set forth in Section 5 of this document, Feasibility of Project Alternatives. The detailed description is also provided in Section 9.0 of the Draft SEIR.

SECTION 3: EFFECTS DETERMINED TO BE MITIGATED TO LESS-THAN-SIGNIFICANT LEVELS

The Final SEIR indicated that significant effects on the environment to the following environmental resources would occur if the Project were implemented:

- **Air Quality:** Impact AQ-1, AQ-2, AQ-3, AQ-4, and AQ-C regarding conflict with an air quality plan, increase in criteria air pollutant emissions, construction toxic air contaminants, and generation of odors.

- **Hazardous Materials:** Impact HAZ-2 regarding exposure to hazardous materials.

- **Noise and Vibration:** Impact NOI-2 regarding groundborne vibration.

- **Utilities:** Impact UTL-1 regarding utility infrastructure impacts.

The Final SEIR includes analysis of the Project (with standard City utility connections) and Project with District Utilities System Option (with private district utility connections), so each impact and mitigation measure (MM) identifies if it applies to both Project options or just one Project option. The environmental impacts listed above would be reduced to less-than-significant levels through the incorporation of City standard conditions of approval and mitigation measures into the Project. The mitigation measures are listed under each of the impacts below and are included in a MMRP, which has been prepared separately from these findings (Citation 4).

NOTE: As described in Section 4.1, Air Quality, of the Draft SEIR, the Air Quality analysis covers several different topics and pollutant types, including consistency with plans, modeling for various criteria pollutants, and health risk assessments, which are evaluated for both project construction as well as operation. These are often discussed together, but are measured and analyzed differently. Because some of the technical results under each Air Quality impact heading were found to be less than significant with mitigation incorporated, and some were found to be significant and unavoidable even with mitigation, several of the Air Quality topics are discussed in both Section 3 and Section 4 of this Statement of Findings.

3.1 Air Quality

Impact AQ-1: Both Project Options: The Project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in construction criteria air pollutant emissions in excess of Bay Area Air Quality Management District (BAAQMD) thresholds; however, with implementation of the identified mitigation, this impact would be less than significant.

Precise Plan EIR MM AQ-3.1: Both Project Options: Construction criteria pollutant and toxic air contaminant (TAC) quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to

identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through the following measures:

- Construction equipment selection for low emissions;
- Use of alternative fuels, engine retrofits, and added exhaust devices;
- Low Volatile Organic Compounds (VOC) paints;
- Modification of construction schedule; and
- Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust.

MM AQ-1.1: Both Project Options: Pursuant to Precise Plan EIR MM AQ-3.1, the Project (under either option) shall implement the following measures during all phases of construction:

- All construction equipment larger than 25 horsepower used at the site for more than two continuous days or 20 hours total shall meet U.S. EPA Tier 4 Final emission standards for NO_x and PM (PM_{10} and $PM_{2.5}$), if feasible, otherwise:
    - If use of Tier 4 Final equipment is not commercially available, the Project applicant shall use alternative equipment that meets U.S. EPA emission standards for Tier 2 or 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices that altogether achieve an 85% reduction in particulate matter exhaust in comparison to uncontrolled equipment, alternatively (or in combination). The Project applicant shall provide to the City for review and approval documentation showing that engines that comply with Tier 4 Final off-road emission standards are not commercially available for the specific off-road equipment necessary during construction. For purposes of this mitigation measure, "commercially available" shall take into consideration the following factors: (i) potential significant delays to critical-path timing of construction; and (ii) the geographic proximity to the Project site of Tier 4 Final equipment.
    - Use of alternatively fueled equipment with lower NO_x emissions compared to traditional diesel fuel equipment that meets or exceeds the NO_x and PM reduction requirements of U.S. EPA Tier 4 Final engine emission standards, as required above.
- Use electric equipment, such as aerial lifts, air compressors, cement mortar mixers, concrete/industrial saws, cranes, and welders. Portable equipment shall be powered by grid electricity or alternative fuels (i.e., not diesel) instead of by diesel generators.

- Diesel engines, whether for off-road equipment or on-road vehicles, shall not be left idling for more than two minutes, except as provided in exceptions to the applicable State regulations (e.g., traffic conditions, safe operating conditions). The construction sites shall have posted legible and visible signs in designated queuing areas and at the construction site to clearly notify operators of idling limit.

- Provide line power to the site during the early phases of construction to minimize the use of diesel-powered stationary equipment.

- Use low VOC coatings to reduce ROG emissions during construction. The Project shall use low VOC coatings that are below current BAAQMD requirements (i.e., Regulation 8, Rule 3, Architectural Coatings), for at least 80% of all residential and nonresidential interior paint and exterior paints. This includes all architectural coatings applied during both construction and reapplications throughout the Project's operational lifetime. At least 80% of coatings applied must meet a "super-compliant" VOC standard of less than 10 grams of VOC per liter of paint. For reapplication of coatings during the Project's operational lifetime, the Declaration of Covenants, Conditions, and Restrictions shall contain a stipulation for low-VOC coatings to be used. Examples of "super-compliance" coatings are contained in the South Coast Air Quality Management District's website.[2]

Findings

Through implementation of Precise Plan mitigation measures MM AQ-3.1 and MM AQ-1.1, the Project (under either option) would not conflict with or obstruct implementation of the applicable air quality plan by resulting in construction criteria air pollutant emissions in excess of BAAQMD thresholds, resulting in less-than-significant impacts.

As described herein, the above mitigation measures have been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

[2] South Coast Air Quality Management District. "Super-Compliant Architectural Coatings." Accessed December 20, 2021. http://www.aqmd.gov/home/rules-compliance/compliance/vocs/architectural-coatings/super-compliant-coatings

Impact AQ-2: Both Project Options: The Project (under either option) would result in a cumulatively considerable net increase of construction criteria pollutants for which the Project region is nonattainment under an applicable Federal or State ambient air quality standard; however, with implementation of the identified mitigation, this impact would be less than significant.

Refer to **MM AQ-1.1.**

Findings

Through implementation of mitigation measure MM AQ-1.1, the Project (under either option) would not result in a cumulatively considerable net increase of construction criteria pollutants for which the Project region is nonattainment under an applicable Federal or State ambient air quality standard, resulting in a less-than-significant impact.

As described herein, the above mitigation measures have been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

Impact AQ-4: Project with District Utilities Systems Option: The Project with District Utilities Systems Option would have the potential to result in other emissions (such as those leading to odors); however, with implementation of the identified mitigation, this impact would be reduced to a less-than-significant level.

MM AQ-4.1: Project with District Utilities System Option: The Project applicant shall develop and implement an odor-control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor-control plan shall describe the design elements and best management practices built into the facility, including the following:

- Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility;

- Odorproofing of refuse containers used to store and transport grit and screenings or biosolids; and

- Injection of chemicals to control hydrogen sulfide.

The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint, and corrective actions could include installing specific odor-control technologies (e.g., odor-control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's designee) and BAAQMD prior to issuance of building permits for the Conditional Use Permit (CUP). In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor-control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to fewer than five per year, the plant shall cease operations. All wastewater generated by the Project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility.

MM AQ-4.2: Project with District Utilities System Option: Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The air district's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.

Findings

Through implementation of mitigation measures MM AQ-4.1 and MM AQ-4.2 and compliance with BAAQMD regulations, the Project with District Utilities System Option would limit the discharge of odorous substances and respond to upset conditions and odor complaints with corrective actions, reducing impacts to a less-than-significant level.

As described herein, the above mitigation measures have been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

Impact AQ-C: Both Project Options: The Project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant exposure of sensitive receptors to substantial pollutant concentration impact; however, with incorporation of the identified mitigation, this impact would be reduced to a less-than-significant level.

Refer to **Precise Plan EIR MM AQ-3.1** and **MM AQ-1.1 above**; and

MM AQ-1.2: Both Project Options: All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.

Findings

Modeling shows the cumulative health risk (specifically excess cancer risk and annual $PM_{2.5}$ concentration) is below the BAAQMD thresholds of significance with the Project's implementation of the City's standard condition of approval, Precise Plan EIR MM AQ-3.1, and Project mitigation measures MM AQ-1.1 and MM AQ-1.2. The impact is, therefore, considered less than significant with mitigation incorporated.

As described herein, the above mitigation measures have been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

3.2 Hazards and Hazardous Materials

Impact HAZ-2: Both Project Options: The Project (under both options) would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; however, with implementation of the identified mitigation, this impact would be reduced to a less-than-significant level.

Precise Plan EIR MM HAZ-3.1: Both Project Options: Prior to the start of any redevelopment activity, a property-specific Phase I Environmental Site Assessment (ESA) shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical

releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted, if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents.

At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soil, soil vapor and/or groundwater (based on the professional judgment of the environmental professional and/or determination by the City based on the property-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., U.S. Environmental Protection Agency, Regional Water Quality Control Board, and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected shall be described. Worker training requirements and health and safety measures shall be described. The SMP shall also be submitted to the City of Mountain View Planning Division for review. The Project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the Project.

Findings

The Project (under either option) is consistent with the land uses for the site identified and anticipated in the EWPP and as analyzed in the Precise Plan EIR. According to the Precise Plan EIR, future development projects within the Middlefield-Ellis-Whisman (MEW) Superfund Study Area would be subject to the Environmental Protection Agency's (EPA) Record of Decision (ROD) Amendment for the Vapor Intrusion Pathway, MEW Superfund Study Area, and the Statement of Work Remedial Design and Remedial Action to Address the Vapor Intrusion Pathway, MEW Superfund Study Area. Furthermore, all future development would be required to prepare and submit an air-monitoring plan, vapor intrusion control system remedial design plan, and additional requirements as needed by the EPA for review and approval and by the City for review (refer to the Precise Plan EIR for details).

The Project site is located within the MEW Superfund Study Area, and groundwater contamination and soil vapor levels on-site are similar to other sites within the MEW Superfund Study Area. Therefore, the Project would have the same impacts as disclosed in the Precise Plan EIR for sites within the MEW Superfund Study Area and would be required to comply with the EPA-required ROD measures described in the Precise Plan EIR to minimize potential impacts associated with the contaminated groundwater and soil vapor during Project construction and operation.

Consistent with Precise Plan EIR MM HAZ-3.1, Phase I ESAs have been prepared for the Project site (refer to Appendix G of the Draft SEIR). Pursuant to Precise Plan EIR MM HAZ-3.1, to protect

construction workers and the environment, an SMP would be prepared and implemented. With implementation of the vapor control measures and SMP described in Precise Plan EIR MM HAZ-3.1 above, impacts associated with hazardous materials would be less than significant because contaminated soil, groundwater, and soil vapor would be properly managed and remediated during Project construction and operation. The impact is, therefore, considered less than significant with mitigation incorporated.

As described herein, the above mitigation measure has been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

3.3 Noise

Impact NOI-2: Both Project Options: The Project would result in the generation of excessive groundborne vibration or groundborne noise levels; however, with implementation of the identified mitigation measures, this impact would be reduced to a less-than-significant level.

Precise Plan EIR MM NOI-4.1: Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where Project construction is anticipated to include vibration-generating activities, such as pile driving or use of vibratory rollers, in close proximity to existing structures, site-specific vibration studies shall be conducted to determine the area of impact and to identify appropriate mitigation measures, which may include the following:

- Identification of sites that would include vibration compaction activities, such as pile driving, and have the potential to generate groundborne vibration and the sensitivity of nearby structures to groundborne vibration. Vibration limits should be applied to all vibration-sensitive structures located within 200’ of the project. A qualified structural engineer should conduct this task.

- Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions.

- Construction contingencies would be identified for when vibration levels approached the limits.

- At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements.

- When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.

- Conduct postsurvey on structures where either monitoring has indicated high levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

Findings

With the incorporation of Precise Plan EIR MM NOI-4.1, the Project (under either option) would result in a less-than-significant vibration impact because the Project (under either option) would not include pile driving, locate vibration compaction activities away from vibration sensitive structures, implement a vibration monitoring and construction contingency plan, monitor structures affected by vibration, and conduct a postconstruction survey of affected structures.

As described herein, the above mitigation measure has been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

3.4 Utilities and Service Systems

Impact UTL-1: Both Project Options: The Project would require or result in the relocation of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which would cause significant environmental impacts; however, with implementation of the identified mitigation measure, this impact would be reduced to a less-than-significant level.

Precise Plan EIR MM UTL-1.1: The City shall require, determined on a project-by-project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.

Findings

The Project (under either option) is consistent with the land uses for the site identified and anticipated in the EWPP and as analyzed in the Precise Plan EIR. A site-specific Utility Impact Study (UIS) was prepared for the Project consistent with Precise Plan EIR MM UTL-1.1 (see Appendix I of the Draft SEIR), which confirmed the Project would result in the same impact as disclosed in the Precise Plan EIR. The Project will be required to pay the appropriate impact fee adopted for the Precise Plan. The impact is, therefore, considered less than significant with mitigation incorporated.

As described herein, the above mitigation measure has been incorporated into the Project that avoid or reduce this significant impact to a less-than-significant level. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which avoid or substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

SECTION 4: SIGNIFICANT EFFECTS THAT CANNOT BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

A significant unavoidable impact is an impact that cannot be mitigated to a less-than-significant level if the Project is implemented. Except for the impact described below, all significant impacts associated with the proposed Project would be reduced to a less-than-significant level with incorporation of mitigation measures identified in the Final SEIR. The Final SEIR includes analysis of the Project (with standard City utility connections) and Project with District Utilities System Option (with private district utility connections), so each impact and mitigation measure (MM) identifies if it applies to both Project options or just one Project option.

NOTE: As described in Section 4.1, Air Quality, of the Draft SEIR, the Air Quality analysis covers several different topics and pollutant types, including consistency with plans, modeling for various criteria pollutants, and health risk assessments, which are evaluated for both project construction as well as operation. These are often discussed together, but are measured and analyzed differently. Because some of the technical results under each Air Quality impact heading were found to be less than significant with mitigation incorporated, and some were found to be significant and unavoidable even with mitigation, several of the Air Quality topics are discussed in both Section 3 and Section 4 of this Statement of Findings.

The Project would result in the following significant unavoidable impacts:

4.1 Air Quality

Impact AQ-1: Both Project Options: The Project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds.

Refer to **MM AQ-1.1**, **Precise Plan EIR MM AQ-3.1**, and **MM AQ-1.2** described previously, which will be required of the Project as conditions of approval.

Findings

The Precise Plan EIR disclosed that the implementation of the Precise Plan would result in long-term pollutant emissions from building operations (including operation of stationary sources, such as emergency back-up diesel generators) and vehicle use. The BAAQMD CEQA Air Quality Guidelines do not have numeric thresholds related to direct and indirect regional criterial air pollutant emissions (including ROG) resulting from plan implementation; rather, BAAQMD only requires emission computations for project-level analysis. For this reason, the Precise Plan EIR stated future projects under the Precise Plan would be reviewed against BAAQMD operational criteria pollutant thresholds when proposed. Therefore, the operational emissions of the Project were modeled and compared to BAAQMD thresholds. Operational criteria pollutant emissions

associated with the Project (under either option) would be generated primarily from vehicles driven by future employees, residents, customers, and vendors to and from the Project site and from consumer products.

While the proposed Project is consistent with the assumptions and land uses in the Precise Plan EIR, because of the different modeling requirements for a specific project versus a plan, the operational criteria pollutant emissions associated with the proposed Project (under either option) would exceed BAAQMD significance thresholds for ROG. In addition, the Project would exceed BAAQMD project-level thresholds for health risk. Therefore, while the Project (under either option) would not conflict with or obstruct implementation of the 2017 Clean Air Plan (CAP) control measures and goals, the Project is found to be inconsistent with the 2017 CAP based on the Project exceeding BAAQMD project-level thresholds and would result in significant, unavoidable (with the above mitigation incorporated) operational criteria air pollutant (ROG emissions) and health risk impacts (primarily due to construction emissions).

As described herein, mitigation measures have been incorporated into the Project that reduce this significant impact. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect, but not to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

Impact AQ-2: Both Project Options: The Project (under either option) would result in a cumulatively considerable net increase of operational criteria pollutants (ROG) for which the Project region is nonattainment under an applicable Federal or State ambient air quality standard.

Refer to **MM AQ-1.1,** described previously, which will be required of the Project as a condition of approval.

Findings

The Bay Area does not meet State and/or Federal ambient air quality standards for ground-level ozone, fine particulate matter ($PM_{2.5}$), or coarse particulate matter (PM_{10}). High ozone levels are caused by cumulative emissions of ROG and nitrogen oxides (NO_x). Construction period criteria pollutant emissions associated with the proposed Project (under either option) were modeled and found to be below the BAAQMD significance threshold with the implementation of the above mitigation measure. Operational criteria pollutant emissions associated with the proposed Project (under either option) would not exceed BAAQMD significance thresholds, with the exception of ROG. While it is feasible and enforceable for the City to require super-compliant VOC coatings be applied initially (as required by the above mitigation measure), the City cannot ensure that future occupants or tenants would use super-compliant VOC coatings during

reapplication for the lifetime of the Project. In addition, there is no feasible mitigation measure to ensure consumer products (such as inks, coatings, and adhesives) used by future residents and tenants would be low in VOCs. Therefore, the Project's ROG emissions would be significant and unavoidable.

Impact AQ-3: Both Project Options: The Project (under either option) would expose sensitive receptors to substantial pollutant concentrations.

Refer to **MM AQ-1.1**, **MM AQ-1.2**, and **Precise Plan EIR MM AQ-3.1**, described previously, which will be required of the Project as a condition of approval.

Findings

The Project (under either option) would result in the exposure of sensitive receptors near the Project site to TAC emissions in excess of BAAQMD risk thresholds for excess cancer cases and annual $PM_{2.5}$ concentrations primarily from construction emissions. Modeling completed found implementation of City standard condition of approval and mitigation measure Precise Plan EIR MM AQ-3.1, MM AQ-1.1, and MM AQ-1.2 would reduce the health risk, but not to a less-than-significant level, and, therefore, the impact is significant and unavoidable.

As described herein, mitigation measures have been incorporated into the Project that reduce this significant impact. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which substantially lessen the significant effects as identified in the Final SEIR, and adoption of the mitigation measure set forth above will reduce the significant effect, but not to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

Impact AQ-C: Both Project Options: The Project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact in regard to the implementation of the 2017 CAP and net increase in criteria pollutants.

See **Precise Plan EIR MM AQ-3.1**, **MM AQ-1.1** above.

Findings

By its very nature, air pollution is largely a cumulative impact. In developing thresholds of significance for air pollution, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's air quality conditions. That is, if a project exceeds the BAAQMD significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

- *Implementation of the 2017 CAP*: As described above under Impact AQ-1, the Project (under either option) would be consistent with the 2017 CAP goals but would result in significant, unavoidable health risks (primarily due to construction emissions) and operational ROG emissions. The Project's implementation of City standard conditions of approval, Precise Plan EIR MM AQ-3.1, and MM AQ-1.1 would reduce these impacts, but not to a less-than-significant level. The Project (under either option), therefore, would result in a cumulatively considerable impact to the implementation of the 2017 CAP.

- *Net Increase in Criteria Pollutants*: As discussed under Impact AQ-1, the Project (under either option) would result in significant, unavoidable ROG emissions during operations. Implementation of Project mitigation measure MM AQ-1.1 requiring the use of low VOC exterior finishes pursuant to Precise Plan EIR MM AQ-3.1 would reduce this impact, but not to a less-than-significant level. The Project (under either option), therefore, would result in a cumulatively considerable criteria pollutant impact.

As described herein, mitigation measures have been incorporated into the Project that reduce this significant impact. The City of Mountain View hereby finds that implementation of the mitigation measures described above are feasible, and they are hereby adopted and incorporated into the Project as conditions of approval for the Project. Accordingly, changes or alterations have been required or incorporated into the Project which substantially lessen the significant effects as identified in the Final SEIR and adoption of the mitigation measure set forth above will reduce the significant effect, but not to a less-than-significant level. Adoption of the conditions of approval will effectively make the mitigation measure part of the Project.

SECTION 5: FEASIBILITY OF ALTERNATIVES TO THE PROPOSED PROJECT

The Draft SEIR included several Project alternatives. The City hereby concludes that the Draft SEIR sets forth a reasonable range of alternatives to the proposed Project so as to foster informed public participation and informed decision-making. The City finds that the alternatives identified and described in the Draft SEIR were considered and further finds that two of them (a Location Alternative and Alternative Site Design, Smaller Project Site Alternative) to be infeasible for the specific economic, social, or other considerations set forth below pursuant to CEQA Section 21081 as described in Sections 9.2.1.1 and 9.2.1.2 of the Draft SEIR.

In addition to the Project, the following alternatives were evaluated in the Draft SEIR and are more fully described in Section 9.0 of the Draft SEIR. Each alternative was evaluated against the Project Objectives (objectives a. through j.) listed in Section 2.2 of this document, and the Precise Plan's Guiding Principles (principles 1 through 10) listed in Section 2.3 of this document, as reference points for stakeholders and decision-makers in evaluating Project alternatives.

5.1 No Project, No New Development Alternative

Under the No Project, No New Development Alternative, the Project site would remain as it is today. Under existing conditions, the site is developed with a total of 684,645 square feet of office, research, and development and light industrial uses.

Findings

The No Project, No New Development Alternative would avoid the Project's significant, unavoidable air quality impacts related to operational ROG emissions and health risks (primarily due to construction emissions) as well as avoid all other impacts because it would not change existing conditions.

The No Project, No New Development Alternative would not meet any of the Project objectives because it would not redevelop the site with a high-density mix of uses (including residential) at a density consistent with the Precise Plan (objectives a. through d., f., and h.) or implement sustainable building practices (objective g.). Additionally, because the No Project, No New Development Alternative would not involve a change in the square footage of development on-site, it would not be required to implement a TDM program under the Precise Plan and would, therefore, not meet Project objective e., nor would it provide community benefit, housing, multi-modal connections, and open space identified in objectives h. and i. This alternative would not meet any of the Precise Plan's guiding principles because it would not redevelop the site consistent with the Precise Plan.

Further, this alternative would not assist the City in meeting its Regional Housing Needs Allocation (RHNA) for new housing.

5.2 No Project, Redevelopment Alternative

The No Project, Redevelopment Alternative would result in the redevelopment of the site with developments that would meet the Base FAR allowed on the site, which is 0.4 FAR for nonresidential uses in the Precise Plan Mixed-Use and Employment Area North Character Areas and include the minimum amount of retail uses required. Assuming the whole site (40 acres) is developed with nonresidential uses, the No Project, Redevelopment Alternative would redevelop the site with up to 696,285 square feet (0.4 FAR) of nonresidential office uses, including a minimum 5,000 square feet of retail required by the Precise Plan. It is also assumed this alternative would implement sustainable building practices and a TDM program consistent with the requirements of the Precise Plan. No residential development would occur.

Findings

Given the scale of development under this alternative, it is assumed that construction air quality emissions and health risks impacts would be less than the Project (under either option) because the amount of development is reduced, providing only a small increase from existing square footage, but the proximity to sensitive receptors is the same. Based on the reduced size of development under this alternative, it is assumed that operational ROG emissions would be less than significant. This alternative would require a project-specific vehicle miles traveled (VMT) analysis because it does not meet the City's density screening criteria of 0.75 FAR for development projects located near transit. Therefore, this alternative could result in a significant VMT impact requiring mitigation.

The No Project, Redevelopment Alternative would result in less or similar impacts for other impacts due to its consistency with the development evaluated in the Precise Plan EIR and existing conditions but would not include housing or as much office square footage as proposed by the Project (under either option). This alternative would provide approximately 0.5% of the planned office square footage in the Precise Plan. Additionally, because this alternative does not include Bonus FAR (i.e., this alternative is less dense), the required sustainable building practices that would apply to this alternative would be less than those required of the proposed Project. For example, this alternative would be required to meet LEED Gold® standards, whereas the Project (with about twice as much office development) is required to meet LEED Platinum® standards.

The No Project, Redevelopment Alternative partially meets Project objectives a., c., and f. because it does not include residential uses and proposes an incremental increase over existing office square footage. The alternative would not meet Project objective b. because it does not include housing and, thus, does not require park land. Objectives d. and i., pertaining to the City's Jobs-Housing Linkage Program and community benefits, are not applicable because the Project would not be subject to the Jobs-Housing Linkage Program or be required to provide community benefits.

The No Project, Redevelopment Alternative would implement sustainable building practices and a TDM program consistent with Precise Plan requirements and, therefore, meet objectives e. and g. Additionally, while the Redevelopment Alternative does not include transit-oriented residential development (as identified in objective f.), it could deliver safe and expanded pedestrian and bicycle connections in accordance with the Precise Plan (refer to objective f.). The Redevelopment Alternative would not include park land dedication, Bonus FAR, community benefits, or housing; therefore, objectives h. and i. would not be met.

The No Project, Redevelopment Alternative could align with some portions of the Precise Plan's Guiding Principles 8, 9, and 10 by incorporating a TDM program for trip reductions and providing active transportation improvements (e.g., bike lanes, sidewalks) and green building design as required per the Precise Plan. This alternative can partially align with principle 3 as it provides some increased development near transit, but not at the highest intensities. However, this alternative would not align with principles 1, 2, 6, and 7 as it does not establish a mix of new land uses (residential, retail and open space) or balance jobs and housing opportunities with greater intensity near transit. Guiding Principles 4 and 5 are not applicable based on the Project location.

Because this alternative would not include housing, it would also not assist the City in meeting its RHNA for new housing.

5.3 Mitigated 19% Reduced Development Alternative

The purpose of the Mitigated 19% Reduced Development Alternative is to avoid the Project's significant and unavoidable operational ROG emissions impacts with the incorporation of the air quality mitigation measures identified for the Project (under either option). To reduce the Project's ROG emissions during operations, the overall development would have to be reduced by approximately 19% to achieve less-than-significant impacts with mitigation incorporated. This alternative, therefore, assumes approximately 1,066,770 square feet of office uses, 1,539 residential units, 24,300 square feet of retail uses, 16,200 square feet of community/civic uses, and 7.8 acres of park land. This alternative would have a total FAR of approximately 1.29.

Findings

The Mitigated 19% Reduced Development Alternative would avoid the Project's significant, unavoidable operational ROG impact with incorporation of the same mitigation measures identified for the Project (under either option). This alternative would meet the City's VMT density screening criteria of 0.75 FAR for development projects located near transit. Therefore, as with the proposed Project, this alternative would have a less-than-significant VMT impact under the City's current VMT policy. All other impacts would be the same or similar to the proposed Project because the Mitigated 19% Reduced Development Alternative would be consistent with the development evaluated in the Precise Plan EIR and subject to the same existing site conditions as the Project.

This alternative would develop the site with residential and office uses at an increased density and FAR consistent with the Precise Plan Character Areas and would, therefore, meet objective a. The Mitigated 19% Reduced Development Alternative would provide 19% less office square footage and residential dwelling units than identified in objectives b. (1,900 dwelling units) and c. (1.3 million square feet); therefore, it would partially meet these objectives. The Mitigated 19% Reduced Development Alternative would develop residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan; therefore, it would meet objectives d. and e. Because this alternative would develop transit-oriented residential and office uses and could include on-site amenities to promote multi-modal transportation options, it would meet objective f. The Mitigated 19% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan; thus, it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate 7.8 acres of land to the City for development of future parks pursuant to the City's Park Land Dedication Ordinance. Therefore, the Mitigated 19% Reduced Development Alternative would meet objective h. Additionally, because this alternative would develop a mix of uses on-site, it could include community benefits, such as those identified in objective i., although to a lesser extent than the Project.

This alternative aligns with Precise Plan Principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. However, the alternative's alignment with Guiding Principle 7 would be substantially lessened by reduced development. In particular, the Precise Plan's Jobs-Housing Linkage Program establishes a minimum requirement of housing units to new office development, such that a 19% reduction in office square footage would directly impact the number of residential units delivered by a factor of three units per 1,000 square feet of net new office. For this alternative, the Project applicant would be minimally required to construct 1,146 residential units (754 units or 40% fewer than the proposed Project). Therefore, this alternative would assist the City in meeting its RHNA for new housing to a lesser extent than the proposed Project. Guiding Principles 4 and 5 are not applicable based on the Project location.

5.4 31% Reduced Development Alternative

The purpose of the 31% Reduced Development Alternative is to avoid the Project's significant and unavoidable operational ROG emissions impacts without requiring mitigation. To reduce the Project's ROG emissions during operations to the extent that mitigation is not required, the overall development would have to be reduced by approximately 31%. This alternative, therefore, assumes approximately 908,730 square feet of office uses, 1,311 residential units, 20,700 square feet of ground floor retail space, 13,800 square feet of community/civic uses, and 6.6 acres of park land. This alternative would have a total FAR of approximately 1.10.

Findings

The 31% Reduced Development Alternative would reduce the Project's significant, unavoidable operational ROG impact to a less-than-significant level with no mitigation measures required. All other impacts would be similar as described for the Mitigated 19% Reduced Development Alternative above, though construction and operational criteria pollutant emissions and health risks would be lesser than disclosed for the Mitigated 19% Reduced Development Alternative because this alternative assumes less development on-site.

The 31% Reduced Development Alternative would develop residential and office uses at an increased density and FAR consistent with the Character Areas and would, therefore, meet objective a. The 31% Reduced Development Alternative would provide 31% less office square footage and less residential dwelling units than identified in objectives b. (1.3 million square feet) and c. (1,900 dwelling units); therefore, it would only partially meet these objectives. The 31% Reduced Development Alternative would develop the appropriate number of residential units prior to the corresponding commercial uses consistent with the Precise Plan and implement a TDM program consistent with the requirements of the Precise Plan; therefore, it would meet objectives d. and e. Because this alternative would develop the same mix of uses on-site as the proposed Project (under either option), it would support light rail transit and meet objective f. The 31% Reduced Development Alternative would implement sustainable building practices consistent with the Precise Plan; thus it would meet objective g. Because this alternative would include development of residential units on-site, it would be required to dedicate land to the City for development of future parks at a similar rate as the proposed Project (under either option). Therefore, the 31% Reduced Development Alternative would dedicate 6.6 acres of park land and meet objective h. (which calls for up to seven acres of park land). Additionally, because this alternative would develop the same mix of uses on-site as the proposed Project (under either option), it could include community benefits, such as those identified in objective i., although to a lesser extent than the Project.

This alternative would have the same alignment with the Precise Plan Guiding Principles as the Mitigated 19% Alternative but would result in an even greater reduction in housing units in relation to principle 7 and the Jobs-Housing Linkage Program as outlined above for the Mitigated 19% Alternative. For this alternative, the Project applicant would be minimally required to construct 672 residential units (1,228 units or 65% fewer than the proposed Project). Therefore, this alternative would assist the City in meeting its RHNA for new housing to a lesser extent than the proposed Project or the 19% Reduced Development Alternative. Guiding Principles 4 and 5 are not applicable based on the Project location.

5.5 Rescheduled Construction Alternative

The Project would result in significant, unavoidable construction health risk impacts at the approved 400 Logue Avenue residential project due to the location of Phase II construction activities (under either option) adjacent to these future receptors. The purpose of this alternative is to avoid the Project's significant, unavoidable health risk impact. The approved 400 Logue

Residential project would be constructed and operational in 2025. Rescheduling Phase II construction activities to occur first would ensure pollutants associated with health risks from the Project (under either option) are emitted before the approved 400 Logue Residential project is occupied, reducing the Project's health risk impacts on residents at 400 Logue Avenue. Under this alternative, Phase II construction would begin in November 2022 and extend until approximately October 2026, with the heavy construction activities (demolition, site preparation, grading, excavation, and trenching) being completed by approximately July 2024. The purpose of this alternative is to ensure pollutants associated with health risks from the Project (under either option) are emitted before the approved 400 Logue Residential project is occupied, reducing the Project's health risk impacts on residents at 400 Logue Avenue.

Findings

The Rescheduled Construction Alternative would avoid the Project's significant, unavoidable health risk impacts. All other impacts would be the same as the proposed Project. The alternative would meet all of the Project Objectives to the same extent as the proposed Project, except for objective d. as the residential units would not be delivered prior to the office development. Implementing the Rescheduled Construction Alternative, per the Precise Plan, would result in constructing office buildings that cannot be occupied until the residential units have been constructed per Precise Plan requirements for the Jobs-Housing Linkage Program.

This alternative aligns with the Precise Plan Principles 1, 2, 3, 6, 8, 9, and 10 as it promotes a new mixed-use neighborhood with residential, commercial, retail, and open space uses in greater intensities near transit. In the alternative's aligning with Guiding Principle 7, it would impact the development since the Precise Plan requires new office built under the Job-Housing Linkage program to obtain occupancy only once the associated residential development obtains occupancy. This would result in the office buildings remaining vacant for multiple years, which is not a typical development or business practice. Additionally, the applicant has indicated advancing the office development in the Project first would be logistically and physically challenging as the Phase II development sites are used for construction staging of Phase I development, which is immediately adjacent; there are no alternative sites immediately adjacent to Phase I to locate construction staging. Guiding Principles 4 and 5 are not applicable based on the Project location.

5.4 Environmentally Superior Alternative(s)

CEQA Guidelines Section 15126.6 (e)(2) states that an EIR shall identify an environmentally superior alternative. If the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the discussion of Project alternatives, the environmentally superior alternative to the Project is the No Project, No New Development Alternative because it would avoid all of the Project's significant environmental impacts. In addition to the No Project alternatives, the Mitigated 19% Reduced Development Alternative, 31% Reduced Development Alternative, and

Rescheduled Construction Alternative would be environmentally superior alternatives because they would each avoid one of the Project's significant, unavoidable impacts (operational ROG emissions and/or health risks primarily from construction operations). Of these three alternatives, the 31% Reduced Development is the most environmentally superior because it avoids one of the Project's significant and unavoidable air quality impacts and would have the least amount of development (which would result in less energy use, noise generation, and utility demand) compared to the Mitigated 19% Reduced Development Alternative and Rescheduled Construction Alternative.

SECTION 6: STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable risks when determining whether to approve a project. If the specific economic, legal, social, technological, or other benefits of the project outweigh the unavoidable adverse environmental effects, those effects may be considered acceptable. CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the Final EIR or elsewhere in the administrative record.

The Final SEIR and the CEQA Findings of Fact conclude that implementing the Middlefield Park Master Plan will result in certain significant impacts to the environment that cannot be avoided or substantially lessened with the application of feasible mitigation measures or feasible alternatives. A Statement of Overriding Considerations is, therefore, necessary to comply with CEQA, Public Resources Code, Section 21081, and the State CEQA Guidelines, Section 15093. The significant and unavoidable impacts and the benefits related to the Project are:

- **Air Quality: Conflict with Air Quality Plan (Impact AQ-1, Impact AQ-C):** The Project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds.

- **Air Quality: Increase of Any Criteria Pollutant (Impact AQ-1, Impact AQ-2, and Impact AQ-C):** The Project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable Federal or State ambient air quality standard.

- **Air Quality: Exposure to Substantial Pollutant Concentrations (Impact AQ-1, Impact AQ-3, Impact AQ-C):** The Project (under either option) would expose sensitive receptors to substantial pollutant concentrations.

The City further specifically finds that the significant unavoidable impacts are outweighed by the proposed Project's benefits and are acceptable in light of the benefits of the Project based on the findings below:

- The City has made a reasonable and good-faith effort to eliminate or substantially mitigate the potential impacts resulting from the Project, as described above.

- All Mitigation Measures recommended in the Final SEIR have been incorporated into the Project and will be implemented through the MMRP, incorporated by reference herein.

- In accordance with CEQA Guidelines Section 15093, the City has, in determining whether or not to approve the Project, balanced the economic, legal, social, technological, and other benefits, including regionwide or Statewide environmental benefits of the Project against these unavoidable environmental risks, and has found that the benefits of the Project outweigh the unavoidable adverse environmental effects. The following statements specify the reasons why, in the City's judgment, the benefits of the Project outweigh its unavoidable environmental risks. The City also finds that any one of the following reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the City will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the City's Findings and the benefits described below can be found in the Record of Proceedings.

The City of Mountain View finds that the Middlefield Park Master Plan has benefits that outweigh the significant, unavoidable impacts identified above. The benefits of the Project are:

6.1 Economic Benefits

- The Project develops the area with residential and office uses at an increased density and FAR near public transit and major roadways, providing a more efficient use of available land and increased pedestrian and bicycle access to transit. The Project redevelops an underutilized site with a greater land-use intensity office development, residential, and retail that supports business growth in the City and, specifically, continued growth in the EWPP area.

- The Project would include a high-quality office development, attracting regional enterprises to or retaining existing enterprises in the City.

- The Project would implement the EWPP and would add higher-intensity office uses, housing, and new retail/services in the EWPP area.

- The Project would provide for beneficial, City revenue-generating infill in support of the City's long-term fiscal health, including offsetting any increased City staffing needs generated by the population growth.

- The Project would advance the vision of the EWPP by providing a sustainable, transit-oriented employment center.

- The Project would generate revenue for the City through increased property tax revenue and Community Benefit Contribution from the Project.

- Development of the Project would create new jobs.

6.2 Social Benefits

- The Project would lead to the redevelopment of an underutilized site served by existing transportation and utility infrastructure.

- The Project would expand and enhance recreational open space options within the City by providing new public parks and publicly accessible open space near Middlefield Road.

- The Project would also meet the City's General Plan land use goals and policies which promote pedestrian and bicyclist connections to services and employers by creating on-site pedestrian and bicycle amenities; and the Project will upgrade the existing Valley Transportation Authority (VTA) bus stop on Middlefield Road to accommodate a new pedestrian midblock crossing, bike lanes, and a new bus stop.

- The Project would increase housing supply in the City, which further improves the jobs-housing imbalance and would contribute to the City's upcoming RHNA cycle starting in 2023.

- The Project would provide support to targeted small business in the City through their Community Benefits Program, which will further available neighborhood-serving uses to residents, workers, and visitors in the area.

- The Project would improve the overall aesthetic and visual quality of the EWPP area and has the potential to encourage further redevelopment activity and revitalization within the area.

- The Project would extend Citywide pedestrian and bicycle pathways to connect neighborhoods, open space resources, and major destinations within the City and into the City of Sunnyvale.

6.3 Regionwide or Statewide Environmental Benefits

- The Project would promote compact growth by increasing job opportunities at a location near existing transportation and utility infrastructure with the goal of reducing the region's overall greenhouse gas emissions and VMT by focusing development near transit and infrastructure with a TDM program.

- The Project would further support the operations of the VTA light rail system by providing an increased mix of new land uses at greater intensities adjacent to the existing Middlefield Light Rail station, which increases potential ridership that supports expanded services.

The City Council has carefully weighed these impacts and benefits and finds that the benefits of implementing the Project outweigh the above significant and unavoidable environmental impacts.

The City Council finds that each of the following specific economic, legal, social, technological, environmental, and other considerations and benefits of the Middlefield Park Master Plan, separately and independently, outweigh the unavoidable adverse environmental effects of the Project, and each one is an overriding consideration independently warranting project approval. Council finds that the significant unavoidable impacts of the Project are overridden by each of these individual considerations standing alone. The significant unavoidable environmental effects remaining after adoption of mitigation measures are considered acceptable in light of these significant benefits of the Middlefield Park Master Plan, as described in this statement of overriding considerations.

If Council certifies the Final SEIR and approves the Middlefield Park Master Plan, future zoning and other City permits would be subject to City review, subsequent environmental review as required, and public hearings.

In accordance with CEQA Guidelines, a Notice of Preparation (NOP) was circulated to the public and responsible agencies for input regarding the analysis in the Draft SEIR from October 1, 2021, through November 1, 2021, and a public SEIR scoping session for the Project was held on October 14, 2021. The Draft SEIR was circulated for public review for a 45-day comment period, which commenced on April 26, 2022 and ended on June 10, 2022 (Citation 2).

Formal written responses to each of the comments received during the comment period are included in the Final SEIR as well as text revisions to the Draft SEIR. No substantial changes to the Draft SEIR were required, and the Final SEIR includes the entire Draft SEIR by reference. The Final SEIR was made available to the public on August 19, 2022 (Citation 3).

SECTION 7: CONCLUSION; NO RECIRCULATION OF THE FINAL EIR IS REQUIRED

An EIR is adequate as long as it provides specific response to all specific questions about significant environmental issues and as long as the EIR, as a whole, reflects a good-faith effort at full disclosure. "Recirculation is not required where the new information added to an EIR merely clarifies or amplifies or makes insignificant modification in an adequate EIR." (CEQA Guidelines Section 15088.5(b))

Per CEQA Guidelines Section 15088.5(a), new information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect on the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement. "Significant new information" requiring recirculation includes, for example, a disclosure showing:

1. A new significant environmental impact that would result from the project (or any alternative) or from a new mitigation measure proposed to be implemented.

2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.

4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The City finds the SEIR is adequate and none of the commenters disclose any new "significant information" as defined by CEQA that would require recirculation of the SEIR. No new significant or substantially more severe environmental impacts have been identified that would result from the Project or from an alternative or a new mitigation measure proposed as part of the Project. Moreover, no new feasible mitigation measures or alternatives have been identified that are considerably different from others previously analyzed and would clearly lessen the significant environmental impacts of the Project that the City and the applicant have declined to implement. All of the responses to comments contained in this Final SEIR merely provide information that clarifies and amplifies the evaluation of impacts contained in the Draft SEIR.

Pursuant to CEQA Guidelines Section 15091(a), based on the foregoing Findings of Fact and the information contained in the record, the City Council has made one or more of the following findings with respect to each of the significant effects of the Project:

1. Changes or alterations have been required in, or incorporated into, the Project, which avoid or substantially lessen the significant effects as identified in the Final SEIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or Project alternatives identified in the Final SEIR.

CITATIONS

1. City of Mountain View. Final Environmental Impact Report for the East Whisman Precise Plan Project. State Clearinghouse No. 2017082051. January 2020.

2. City of Mountain View. Draft Environmental Impact Report for the Middlefield Park Master Plan Project. State Clearinghouse No. 2021100026. April 2022.

3. City of Mountain View. 2022. Final Environmental Impact Report for the Middlefield Park Master Plan Project. State Clearinghouse No. 2021100026. August 2022.

4. City of Mountain View. Mitigation Monitoring and Reporting Program for the Middlefield Park Master Plan. August 2022.

City of Mountain View

MITIGATION MONITORING & REPORTING PROGRAM
Middlefield Park Master Plan Project
State Clearinghouse #2021100026

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
Project-Specific Mitigation Measures				
Air Quality Impacts				
Impact AQ-1: Both Project Options: The project (under either option) would conflict with or obstruct implementation of the applicable air quality plan by resulting in operational ROG emissions and health risks (primarily due to construction emissions) in excess of BAAQMD thresholds. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])** **Impact AQ-2: Both Project Options:** The project (under either option) would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	**MM AQ-1.2: Both Project Options:** All on-site diesel emergency generators (under either option) shall be equipped with engines that meet or exceed U.S. EPA Tier 4 standards for particulate matter emissions.	Project applicant	All mitigation measures shall be printed on all construction documents, contracts, and project plans. Oversight of implementation by City of Mountain View Building and Fire Inspection Director (or the Director's Designee)	Prior to issuance of grading and demolition permits

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated]) **Impact AQ-3: Both Project Options:** The project (under either option) would expose sensitive receptors to substantial pollutant concentrations. **(New Impact [Significant, Unavoidable Impact with Mitigation Incorporated])**				
Impact AQ-4: Project with District Utilities Systems Option: The project with District Utilities Systems Option would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people with the implementation of mitigation. **(New Impact [Less than Significant Impact with Mitigation Incorporated])**	**MM AQ-4.1: Project with District Utilities System Option:** The project applicant shall develop an odor control plan that addresses plant design issues to control odors, identifies operating and maintenance procedures to prevent odors, and includes a corrective action plan to respond to upset conditions and odor complaints. The odor control plan shall describe the design elements and best management practices built into the facility, including the following: • Ventilation of the system using carbon absorption, biofiltration, ammonia scrubbers, or other effective means to treat exhausted air from the enclosed facility; • Odor proofing of refuse containers used to store and transport grit and screenings or biosolids; and • Injection of chemicals to control hydrogen sulfide.	Project applicant	Odor control plan submitted to the City and BAAQMD. Oversight of implementation by City of Mountain View Public Works Director (or the Director's Designee) and BAAQMD	Prior to issuance of building permits for the CUP

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
	The plan shall describe procedures to address upset conditions caused by equipment failures, power outages, flow control, or treatment issues, as well as odor complaints. Procedures would include investigating and identifying the source of the odor/odor complaint and corrective actions could include installing specific odor control technologies (e.g., odor control units) or adjusting plant operations (e.g., by adding ferrous chloride injections). The plan shall be reviewed and approved by the Public Works Director (or the Director's Designee) and BAAQMD prior to issuance of building permits for the CUP. In the event the facility receives confirmed complaints related to five separate incidents per year averaged over a three-year period, pursuant to BAAQMD CEQA Guidelines, the plant shall revise the odor control plan and resubmit it to the City for review and approval. If implementation of additional measures to control odors described in the plan does not lessen the complaints to less than five per year, the plant shall cease operations. All wastewater generated by the project shall be directed to the municipal wastewater system, and subsequent environmental review shall be required to assess the impacts of continued operations of the facility.			

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
	MM AQ-4.2: Project with District Utilities System Option: Post a publicly visible sign with the telephone number and person to contact regarding odor complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. A log of odor complaints and procedures implemented to respond to complaints shall be maintained by the operator and provided to the City upon request.	Project applicant	Posting of notification sign on-site. Maintenance of odor complaint log and corresponding responses by operator. Oversight of implementation by City of Mountain View Public Works Director (or the Director's Designee).	On-going during project operations

SOURCE: City of Mountain View. *Middlefield Park Master Plan Project Environmental Impact Report*. April 2022.

CITY OF MOUNTAIN VIEW

MITIGATION MONITORING & REPORTING PROGRAM
East Whisman Precise Plan Project
State Clearinghouse #2017082051

Environmental Impacts	Mitigation and Avoidance Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
Air Quality Impacts				
Impact AQ-3: Emissions of criteria pollutants during construction of future project under the Precise Plan could exceed Bay Area Air Quality Management District (BAAQMD) thresholds and result in a significant impact.	**MM AQ-3.1:** Construction criteria pollutant and toxic air contaminant quantification shall be required on individual projects developed under the Precise Plan once construction equipment and phasing details are available through modeling to identify impacts and, if necessary, include measures to reduce emissions below the applicable BAAQMD construction thresholds. Reductions in emissions can be accomplished through, not limited to, the following measures: • Construction equipment selection for low emissions; • Use of alternative fuels, engine retrofits, and added exhaust devices; • Low-VOC paints; • Modify construction schedule; and Implementation of BAAQMD Basic and/or Additional Construction Mitigation Measures for control of fugitive dust.	Project applicant and contractors implementing the project	Measures will be required to be implemented as part of demolition and development permits. Measures will be printed on all construction documents, contracts, and project plans prior to issuance of permits. Oversight of implementation by the City's Community Development Department.	Prior to and during any construction activities, as specified
Impact AQ-4: Health risks associated with exposure to TACs during temporary construction activities associated with development under the Precise Plan could significantly impact sensitive receptors.	Implementation of MM AQ-3.1 during development of future projects under the Precise Plan would reduce TAC-related health impacts at sensitive receptors to a less than significant level.			

Environmental Impacts	Mitigation and Avoidance Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
Hazards and Hazardous Materials Impacts				
Impact HAZ-3: Future construction and demolition activities could expose construction workers, the environment, and area residents to potentially unacceptable health risks from contaminated groundwater, soils, and soil gas.	**MM HAZ-3.1:** Prior to the start of any redevelopment activity, a property-specific Phase I Environmental Site Assessment (ESA) shall be completed in accordance with ASTM Standard Designation E 1527-13 (or the standard that is effective at the time the Phase I ESA is conducted) to identify Recognized Environmental Conditions, evaluate the property history, and establish if the property is likely to have been impacted by chemical releases. Soil, soil vapor, and/or groundwater quality studies shall subsequently be conducted, if warranted based on the findings of the property-specific Phase I ESAs, to evaluate if mitigation measures are needed to protect the health and safety of construction workers, the environment, and area residents. At properties identified as being impacted or potentially impacted by Recognized Environmental Conditions pertaining to contaminated soil, soil vapor and/or groundwater (based on the professional judgement of the environmental professional and/or determination by the City based on the property-specific Phase I ESA or subsequent studies), a Site Management Plan (SMP) shall be prepared prior to development activities to establish management practices for handling contaminated soil, soil vapor, groundwater, or other materials during construction activities. The SMP shall be prepared by an Environmental Professional and submitted to the overseeing regulatory agency (e.g., U.S.	Project applicant and contractors implementing the project.	Project will be evaluated during the development review and entitlement process to identify their compliance with this measure. Measures will be required as part of demolition and development permits, as applicable. Measures will be printed on all construction documents, contracts, and project plans prior to issuance of permits. Oversight of implementation by the City's Community Development Department, EPA, RWQCB, and/or County Department of Environmental Health	Prior to the approval of grading permits.

Environmental Impacts	Mitigation and Avoidance Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
	Environmental Protection Agency [EPA], Regional Water Quality Control Board [RWQCB] and/or County Department of Environmental Health) for review and approval prior to commencing construction activities. Management of site risks during earthwork activities in areas where impacted soil, soil vapor, and/or groundwater are present or suspected, shall be described. Worker training requirements and health and safety shall be described. The SMP shall be submitted to the City of Mountain View Planning Division for review. The project developer shall also submit to the City agency approval of the SMP or provide documentation of a regulatory agency's decision declining involvement in the project.			
Noise and Vibration				
Impact NOI-4: Construction activities during implementation of the Precise Plan could result in significant groundborne vibration-related impacts to existing structures.	**MM NOI-4.1:** Use drilled piles (which cause lower vibration levels) where geological conditions permit their use. In areas where project construction is anticipated to include vibration-generating activities, such as pile driving or use of vibratory rollers, in close proximity to existing structures, site-specific vibration studies should be conducted to determine the area of impact and to identify appropriate mitigation measures which may include the following: • Identification of sites that would include vibration compaction activities such as pile driving and have the potential to generate ground-borne vibration, and the sensitivity of	Project applicant and contractors implementing the project	Measures will be required to be implemented construction and development permits. Measures will be printed on all construction documents, contracts, and project plans prior to issuance of permits. Oversight of implementation by the City's Community Development Department.	During construction activities, as specified

Environmental Impacts	Mitigation and Avoidance Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
	nearby structures to ground-borne vibration. Vibration limits should be applied to all vibration-sensitive structures located within 200 feet of the project. A qualified structural engineer should conduct this task. • Development of a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. • Construction contingencies would be identified for when vibration levels approached the limits. • At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements. • When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures. • Conduct post-survey on structures where either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.			

Environmental Impacts	Mitigation and Avoidance Measures	Responsibility for Compliance	Method of Compliance and Oversight of Implementation	Timing of Compliance
Transportation				
Impact TRA-4: Street C would result in increased light rail vehicle delay due to the slower train speeds through the crossing, disrupting the existing facility.	**MM TRA-4.1:** The proposed Street C shall be removed from the Precise Plan and replaced with a grade-separated multi-use path (public pedestrian and bicycle access). This improvement would eliminate disruption of the existing light rail facility and there would be no impact.	The Adopted Precise Plan reflects this change. The multi-use path may be constructed by the City or project applicants during construction of adjacent projects	Oversight of implementation by the City's Community Development Department and/or implementation of the improvement through the City's Capital Improvement Program by the Public Works Department.	As adjacent properties redevelop
Utilities and Service Systems				
Impact UTL-1: Future large-scale, site-specific development projects associated with implementation of the Precise Plan could result in impacts to the existing water, sewer, and storm drainage infrastructure. Proposed new development may require upsizing and/or improvements to nearby water distribution, sewer, and storm drainage infrastructure to accommodate growth associated with larger projects.	**MM UTL-1.1:** The City shall require, determined on a project by project basis, the preparation of a site-specific utility analysis of applicable water, sewer, and stormwater infrastructure systems adjacent to and downstream of the project site to identify capacity issues. The utility impact analysis will be submitted to the Planning Division as part of future project applications. The analysis will determine the proportional utility impact fees to be paid under the nexus study and will identify any other utility infrastructure improvements required as a result of individual projects.	Project applicant and contractors implementing the project	Measures will be required to be implemented as part of development permits based on the findings of the future site-specific utility studies and public works requirements. Measures will be printed on all construction documents, contracts, and project plans prior to issuance of permits. Oversight of implementation by the City's Community Development Department and Public Works Department.	Prior to and during any construction activities, as specified

SOURCE: City of Mountain View. East Whisman Precise Plan Draft Environmental Impact Report (EIR). June 2019. and Final EIR. September 2019.

City of Mountain View

ERRATA

Middlefield Park Master Plan
Supplemental Environmental Impact Report (SCH No. 2021100026)
October 10, 2022

BACKGROUND AND PURPOSE OF ERRATA

The Draft Supplemental Environmental Impact Report (Draft SEIR) for the Middlefield Park Master Plan was published for public review on April 26, 2022. The public review period ended on June 10, 2022. A total of four comment letters were received, some of which resulted in minor text changes to the Draft SEIR. A Final SEIR which included these comments, formal responses, and text changes to the Draft SEIR was circulated on August 19, 2022. The following errata to the Draft SEIR is made to correct an omission in the Draft SEIR after publishing the Final SEIR for circulation.

CEQA Guidelines Section 15088.5 requires that a lead agency recirculate an EIR (including SEIR) when:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

(c) If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified.
(d) Recirculation of an EIR requires notice pursuant to Section 15087, and consultation pursuant to Section 15086.
(e) A decision not to recirculate an EIR must be supported by substantial evidence in the administrative record.
(f) The lead agency shall evaluate and respond to comments as provided in Section 15088. Recirculating an EIR can result in the lead agency receiving more than one set of comments from reviewers. The following are two ways in which the lead agency may identify the set of comments to which it will respond. This dual approach avoids confusion over whether the lead agency must respond to comments which are duplicates or which are no longer pertinent due to revisions to the EIR. In no case shall the lead agency fail to respond to pertinent comments on significant environmental issues.

As shown below, the following revisions made to the Draft SEIR would not alter the analysis or conclusions of the Draft SEIR. The following changes are intended to correct an omission in the Draft SEIR and clarifies the existing analysis. Therefore, modifications are insignificant and recirculation of an EIR is not required under CEQA Guidelines.

DRAFT EIR TEXT REVISIONS

This section contains revisions to the text of the Middlefield Park Master Plan Draft SEIR dated April 26, 2022. Revised or new language is underlined. All deletions are shown with a ~~line through the text~~.

The following bullet was **ADDED** to correct an inadvertent omission in the list of significant unavoidable impacts on Page 232 of the Draft SEIR:

- **Impact AQ-C: Both Project Options:** The project (under either option) would result in a cumulatively considerable contribution to a cumulatively significant air quality impact. **(New Impact [Significant, Unavoidable Impact with Mitigation])**

The last bullet on page 26 was **REVISED** to clarify trip cap calculations in the Precise Plan area:

- **Trip Cap:** The Precise Plan established a long-term vehicle trip cap across the entire East Whisman area ~~of~~, which for new office development is 0.83 a.m. and 0.72 p.m. peak-hour trips per 1,000 ~~net new~~ square feet ~~cap, as established through the Precise Plan's Office Trip Cap Phasing Program and Administrative Guidelines~~. The proposed project would implement a trip cap of 1,097 a.m. peak hour trips and 952 p.m. peak hour trips.

The above text changes are minor corrections that do not present new information or changes in the analysis or findings of the Draft SEIR. The AQ-C impact was discussed and disclosed in the Draft SEIR analysis, but this bullet was omitted from page 232 of the Draft SEIR, which summarized the list

of significant unavoidable impacts; this is not a new impact or discussion and is not new significant information under CEQA.

In conformance with Section 15121 of the CEQA Guidelines, the Draft SEIR, technical appendices and reports, Final SEIR, together with the Errata and the information contained in this document are intended to inform the decision-makers and the public of the environmental effects of the Middlefield Park Master Plan project.