

Draft Environmental Impact Report

Mountain View High School Lights & Public Address System

SCH # 2020010296



Prepared by the

MVLA
HIGH SCHOOL DISTRICT

In Consultation with

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& ASSOCIATES, INC.

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EXECUTIVE SUMMARY

PROJECT LOCATION

The project site is located within the Mountain View High School campus at 3535 Truman Avenue in the City of Mountain View. The project site is the existing turf athletic field at the southwest corner of the campus, bounded by Truman Avenue to the west and Oak Avenue to the south. The project site is located just north of the City of Los Altos and west of the City of Sunnyvale.

EXITING SITE CONDITIONS

The project site consists a rubberized track, turf athletic field, metal and wood bleachers on the western side of the track and metal bleachers on the eastern side of the track. In addition, there is an approximately 20-foot tall scorekeeping booth (i.e. press box) adjacent to the western bleachers, two approximately 25-foot tall pole-mounted loudspeakers on the western side of the track, a scoreboard, and various auxiliary single-story buildings.

PROJECT OVERVIEW

The project proposes the installation and operation of new stadium field lights and an upgraded public address system at the existing track and sports field. The project would install four 90-foot tall light poles, two on each opposing length of the field, and a total of 12 loudspeakers at 12 to 18 feet in height, located on the east and west sides of the field. The proposed lights and public address system would be used for sports practices, games, marching band practice, and a select few special events throughout the year. The use of the field lights and public address system would be regulated by the Mountain View Los Altos High School District's Administrative Regulations 7325 and Board Policy 7325. An increase in number of sports events and attendees is expected by having games at night as opposed to afternoon events. Construction of the project is anticipated to last six months.

SUMMARY OF SIGNIFICANT IMPACTS

Significant Impact	Mitigation Measures
<i>Air Quality</i>	
Impact AIR-2: The project, with implementation of mitigation measures, would not 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. (Less than Significant Impact with Mitigation Incorporated)	MM AIR-2.1: During any construction period ground disturbance, the School District shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD as listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following best management practices that are required of all projects: <ul style="list-style-type: none">• 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 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 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- 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 District regarding dust 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.

Impact AIR-3: The project, with implementation of mitigation measures, would not expose sensitive receptors to substantial pollutant concentrations.
(Less than Significant Impact with Mitigation Incorporated)

MM AIR-3.1: The project shall use equipment that has low DPM or zero emissions, implementing the following measures:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet U.S. EPA particulate matter emissions standards for Tier 4 or use engines that include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices (VDECs). Alternatively (or in combination), the use of alternatively-fueled or electric equipment (i.e., non-diesel) would be consistent with this requirement.
 - Avoid diesel generator use by supplying line power to the construction site and limiting the use of diesel generators to no more than 50 total hours.
-

- Avoid staging of construction equipment near portions of the site that are adjacent to residences.

Biological Resources

Impact BIO-4: The project, with implementation of mitigation measures, would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact with Mitigation Incorporated)**

MM BIO-4.1: The District shall schedule construction activities to avoid the nesting season, to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area extends from February 1st through August 31st (inclusive).

If it is not possible to schedule demolition and construction between September 1st and January 31st (inclusive) to avoid the nesting season, pre-construction surveys for nesting raptors and other migratory nesting birds shall be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation on-site and within 250 feet of the site. The pre-construction survey for nesting birds shall be conducted prior to initiation of construction, demolition activities, or tree removals no more than 14 days during the early part of the nesting season between February 1st and April 30th (inclusive) and no more than 30 days prior to initiation of these activities during the late part of the nesting season between May 1st and August 31st (inclusive).

If an active nest is found in or close enough to the project area to be disturbed by construction activities, a qualified ornithologist, in consultation with the CDFW, shall determine the extent of a construction-free buffer zone (typically 250 feet for raptors and 100 feet for other birds) around the nest, to ensure that raptor or migratory bird nests would not be disturbed during ground disturbing activities. The construction-free buffer zones shall be maintained until after the nesting season has ended and/or the ornithologist has determined that the nest is no longer active.

Impact BIO-5: The project, with implementation of mitigation measures, would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

MM BIO-5.1: The proposed project shall implement the following tree protection measures:

- Prior to commencement of construction, construction fencing shall be placed around the drip line of all trees proposed for preservation.
 - No grading or other construction shall occur within the drip line of any tree proposed for preservation except in conformance with a Tree Protection Plan approved by a certified arborist.
-

- No vehicle, equipment or materials shall be parked or stored within the drip line of any tree proposed for preservation.
- No signs, wires, or any other object shall be attached to any tree.

Cultural Resources

Impact CUL-2: The project, with implementation of mitigation measures, would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

MM CUL-2.1: In the event that cultural resources are found, all work within 50 feet of the find will stop and a qualified professional archaeologist or paleontologist will examine the find. If the find is determined to be significant, treatment recommendations will be developed and implemented before earthmoving or construction activities can recommence within the designated resource area

Impact CUL-3: The project, with implementation of mitigation measures, would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

MM CUL-3.1: If human remains are discovered during construction, construction activities that could disturb the remains and any associated artifacts would halt and the project proponent shall contact the local Coroner's Office. The Coroner shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC would then name a Most Likely Descendant (MLD) to advise the project proponent on the manner of exposure and removal of burials and associated grave goods, and to help designate a place for the reburial of these materials. The MLD may make any recommendations they feel are culturally appropriate which may include keeping the remains in place.

Geology and Soils

Impact GEO-6: The project, with implementation of mitigation measures, would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

MM GEO-6.1: If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The District will be responsible for implementing the recommendations of the paleontological monitor, and a final report documenting the implementation of the treatment program shall be prepared.

Hazards and Hazardous Materials

Impact HAZ-2: The project, with implementation of mitigation measures, 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. **(Less than Significant Impact with Mitigation Incorporated)**

MM HAZ-2.1: The project shall implement the following mitigation measures to reduce impacts from exposure to OCPs, arsenic, and lead to a less than significant level:

- Prior to excavation at the project site, additional soil sampling/testing shall be completed to define the lateral and vertical extent of the impacted soil.
 - The soil detected above the regulatory standards for residential uses shall be excavated and disposed off-site at a permitted facility.
 - The soils that remain shall undergo confirmation sampling to ensure their concentrations are below the appropriate regulatory thresholds.
-

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The Mountain View Los Altos (MVLA) High School District (District), as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the Mountain View High School Stadium Lights and Public Address System 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 District 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, cumulative impacts, mitigation measures, and alternatives. It is not the intent of an EIR to recommend either approval or denial of a project.

1.2 EIR PROCESS

1.2.1 Notice of Preparation and Scoping

In accordance with Section 15082 of the CEQA Guidelines, the District prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to local, state, and federal agencies on January 24, 2020. The standard 30-day comment period concluded on February 24, 2020. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project. The District also held a public scoping meeting on February 10, 2020 to discuss the project and solicit public input as to the scope and contents of this EIR. The meeting was held at the District Office at 1299 Bryant Avenue, Mountain View, CA 94040. Appendix A of this EIR includes the NOP and comments received on the NOP.

1.2.2 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 availability and completion of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP, as well as the Office of Planning and Research. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

Mike Mathiesen
Associate Superintendent
Mountain View Los Altos High School District
1299 Bryant Avenue
Mountain View, CA 94040
mike.mathiesen@mvla.net

1.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the District 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;
- 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 which 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.

1.3.1 Notice of Determination

If the project is approved, the District 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 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 PROJECT LOCATION

The Mountain View High School (MVHS) campus is located at 3535 Truman Avenue in the City of Mountain View. The project site is the existing turf athletic field at the southwest corner of the campus, bounded by Truman Avenue to the west and Oak Avenue to the south. The project site is located just north of the City of Los Altos and west of the City of Sunnyvale. A regional map and vicinity map of the site are shown on Figure 2.2-1 and Figure 2.2-2, respectively. An aerial photograph of the site and surrounding land uses is shown on Figure 2.2-3.

2.2 PROJECT DESCRIPTION

The proposed project is the installation and operation of field lights and an upgraded public address (PA) system at the MVHS track and athletic field. The field lights would provide for safe and flexible nighttime use of the field for various sporting and marching band activities, including practices and games. The field lights would also allow for evening special events, such as commencement exercises. A select number of nighttime events would include the use of the PA system. The PA system will also be used for sporting events, marching band, and school activities during daytime hours. The conceptual site plan for the project is shown on Figure 2.2-4.

2.2.1 Existing Development

The project site is a track and sports field located at the southwestern corner of the Mountain View High School campus. The project site consists a rubberized track, turf athletic field, and metal and wood bleachers on the eastern and western sides of the track. In addition, there is an approximately 20-foot tall scorekeeping booth (i.e. press box) adjacent to the western bleachers, two approximately 25-foot tall pole-mounted loudspeakers on the western side of the track, a scoreboard, and various auxiliary single-story buildings. The pole-mounted loudspeakers have been abandoned and are not in use; the current system consists of three speakers which are attached to the press box at the western bleachers.

MVHS currently uses portable, temporary lights for two to five football games per year. The highest attendance is typically for football games, with an approximate 1,000 attendees for most football games, increasing to over 2,000 attendees for a rivalry or homecoming game.¹ All other sporting events, marching band activities, and special events are currently held on campus without the use of portable lights (i.e. during daylight hours). The approximate attendance for these other events is up to 200 people.

2.2.2 Proposed Development

2.2.2.1 *Schedule of Use*

The use of the stadium field lights and public address system would be guided by the District's Board Policy 7325 and Administrative Regulations 7325, as described in Table 2.2-1 below.

¹ Mike Mathiesen. Associate Superintendent Business Services, MVLA High School District. Personal Communication. October 2, 2019.

Table 2.2-1: Proposed Use of the Field Lights and Public Address System

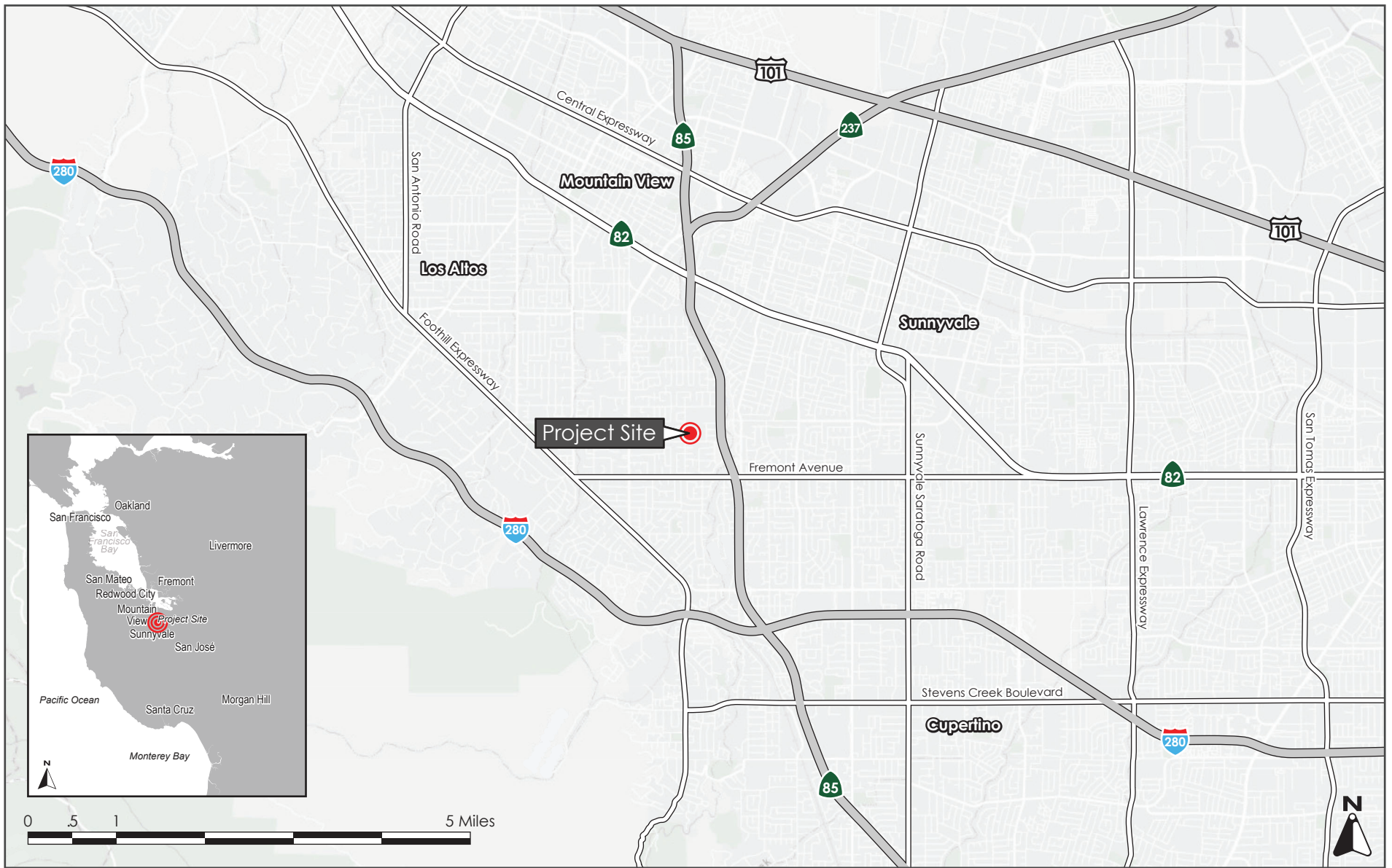
Proposed Use of Field	Use of Field Lights	Use of Public Address System
Sports Games	A total of up to 25 nights of varsity/junior varsity interscholastic competition per year, comprised of the annual seasons for football (five games), boy's and girls' soccer (10 games), and boy's and girls' lacrosse (10 games), concluding by 10:00 PM at the latest ¹	Yes (play-by-play commentary only permitted during football games). All other athletic competitions shall limit the use of the public address systems to announcements, warm-up music or similar uses without running commentary.
Sports Practices	Monday through Friday, concluding by 8:30 PM. Not during weekend nights unless under unusual circumstances approved by the Superintendent or designee	No
Marching Band Practice	Two weeknights per week between August and November; one practice concluding by 8:00 PM and one practice concluding by 6:30 PM. ²	Yes
Marching Band Performance	Five football competitions, commencement, and up to three special evening events.	Yes
Special Events	Commencement and up to three special evening events per year, concluding by 9:00 PM.	Yes
Holiday Use	The stadium field lights will not be used on school holidays, or in the period of time between commencement ceremonies and the beginning of sports practice for the season, as permitted by CIF rules. ⁴	Use would be limited by all provisions described in BP 7325 policy and shall require prior approval by the superintendent or designee. Use of public address systems during holidays shall not begin prior to 10:00 AM ³ ; shall be limited to necessary and occasional announcements, and occasional music played at volumes low enough not to interfere with ordinary conversation at the school site's boundary lines; and shall end by 2:00 PM.

¹ Football competitions would typically end by 10:00 PM; all other competitions would typically end by 8:30 PM. Adequate lighting (non-competition level) would be maintained after games to allow for safe exiting of the field.

² Marching band practices would not occur within 12 hours of each other. Practices could be extended in the event of postseason regional or national competitions, but not beyond December 31, except by permission of the Superintendent or designee. Marching band practice may be held during morning, afternoon and Saturday hours without stadium lights with no restriction.

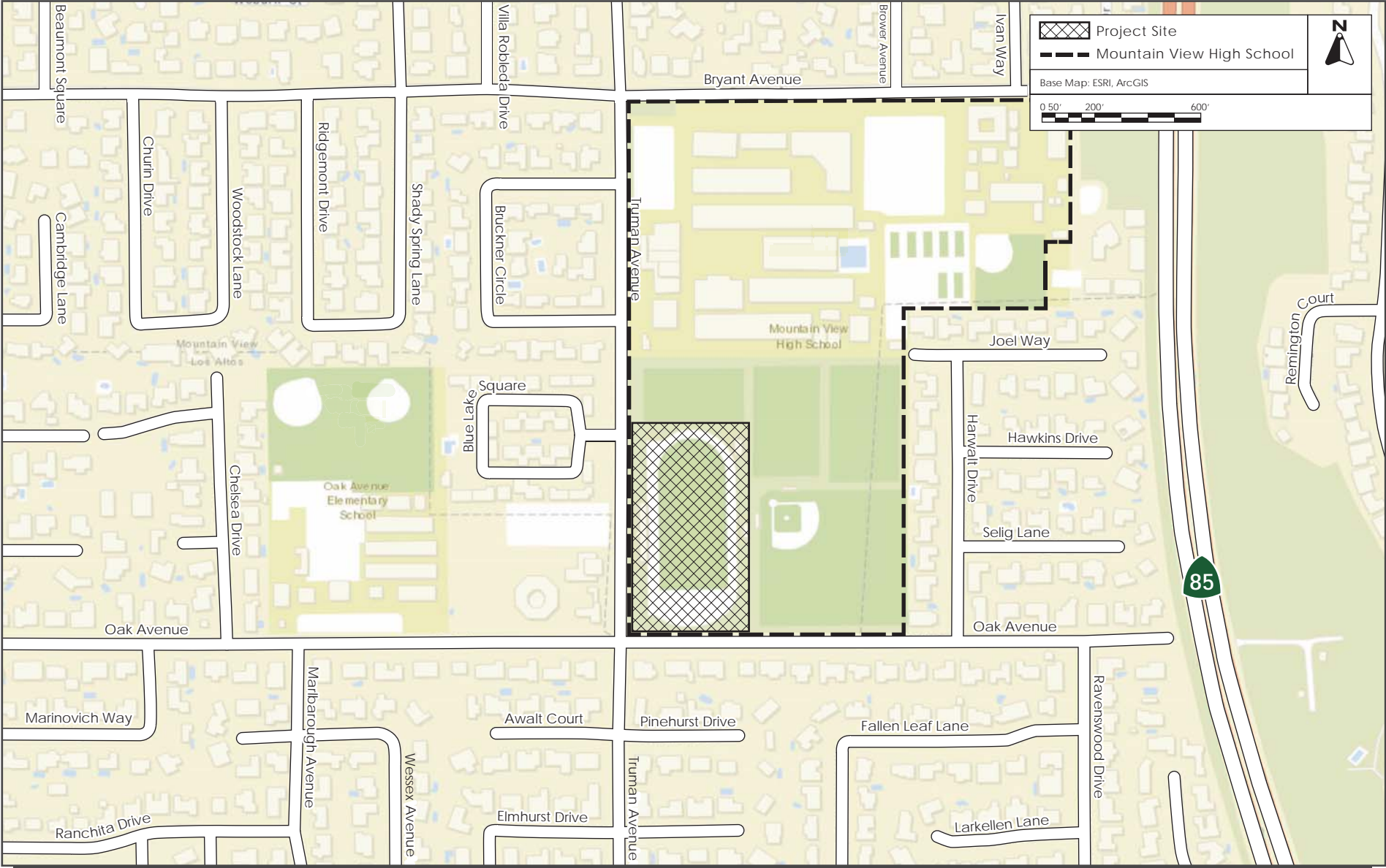
³ The one exception being Thanksgiving morning (Turkey Trot event, where sound equipment would be in use starting at 8:00 AM)

⁴ CIF/CCS schedule shows the first day of practice as August 9, 2020 for fall sports.



REGIONAL MAP

FIGURE 2.2-1



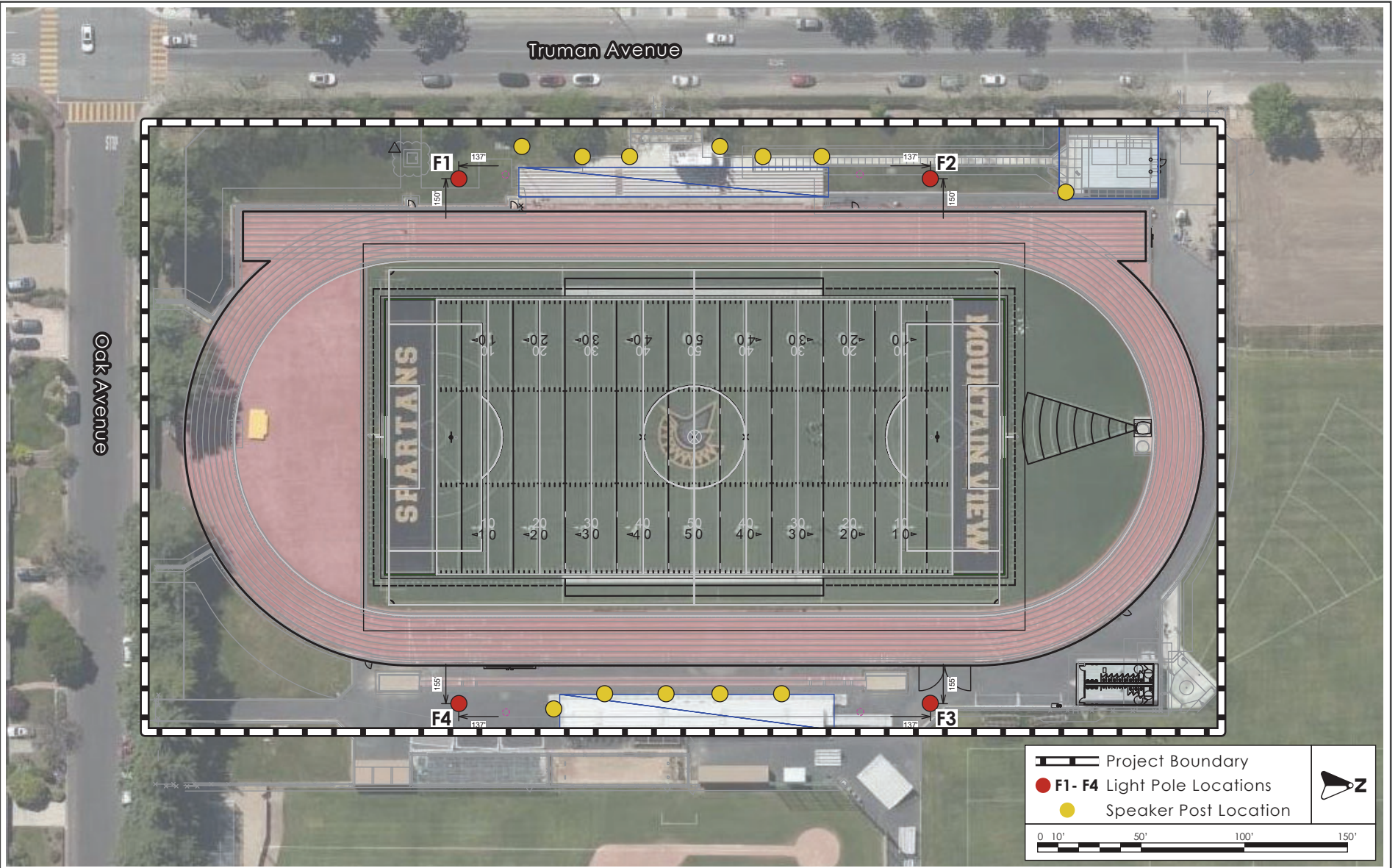
VICINITY MAP

FIGURE 2.2-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.2-3



CONCEPTUAL SITE PLAN

FIGURE 2.2-4

2.2.2.2 Attendance

The estimated attendance for athletic competitions upon installation of the proposed field lights would vary by sport and other factors, such as level of competition (e.g. regular season vs. postseason) and weather conditions. As described in *Section 2.2.1 Existing Development*, the highest attendance is typically for football games, with an estimated 1,000 attendees for most football games, increasing to over 2,000 attendees for a rivalry or homecoming game. An increase in number of sporting events and attendance is expected by having games at night as opposed to afternoon events. The installation of sports lights at MVHS is expected to increase attendance from 1,000 attendees to 1,500 attendees for most football games and from 2,000 attendees to 2,200 attendees for rivalry or homecoming games. For all other sporting events, attendance is expected to increase from 200 to 500 attendees.

2.2.2.3 Physical Design

Field Lights

The Lighting Design will adhere to the recommendations of the Illuminating Engineering Society of North America (IESNA). According to the IESNA, a high school facility with spectator capacity under 5,000 is considered a Class II facility and a facility with provisions for up to 2,000 spectators is considered a Class III facility.² The attendance of the Mountain View High School versus Los Altos High School football game in the 2018 season was approximately 2,000 people. The IESNA recommends an average light level of 30 maintained foot-candles³ for a football field at a Class III facility and 50 maintained foot-candles at a Class II facility.⁴ The track and football field would be considered a Class III facility and would be required to provide a minimum of 30 maintained foot-candles of illuminance during games.

The physical elements of the proposed athletic lighting includes four 90-foot tall light poles. Two light poles would be located on both the eastern and western sides of the track and sports field, adjacent to each end of the home and away bleachers (see Figure 2.2-4). The light poles would be affixed with LED luminaires.⁵ Each of the light poles would include lighting fixtures at varying heights to illuminate different areas of the track and sports field (i.e. bleachers, playing field, entryways), with the majority of luminaires installed at the poles' maximum height. In total, the light poles would provide 42 luminaires and have a maximum load of 46.22 kW.

The project proposes LED luminaires which would be Musco Luminaire Types TLC-LED-1500, TLC-LED-900, and TLC-LED-400. These lights are designed to be energy efficient and to emit no more light than is necessary to illuminate the playing field.

² Illuminating Engineering Society of North America. *Sports and Recreational Area Lighting – IES RP-6-15*. 2015.

³ A footcandle (fc) is one lumen of uniform luminance over an area of one square foot. For reference, a foot-candle is comparable to the level of light emitted from a lit birthday candle when observed from a distance of one foot.

⁴ "Maintained Footcandles" is the term used to describe the light level that a lamp is expected to provide over the long-term, after there is a loss of light due to dirt accumulation on the reflector and lens, and a loss of lamp output. For comparison, "Initial Footcandles" is the term used for the amount of light measured after only 100 hours of lamp operation and is generally 20% higher than the maintained footcandles. This is the amount of light that can be expected immediately after installation of the proposed lighting.

⁵ A luminaire, otherwise known as a light fixture, is defined as complete lighting unit, comprised of a light source (lamp or lamps), together with the parts that distribute and direct the light, position and protect the lamps, and connect the lamps to the power supply.

Public Address System

As described in *Section 2.2.1 Existing Development*, the current PA system consists of three speakers which are attached to the press box at the western bleachers. The proposed project includes installation of an upgraded PA system, comprised of up to 12 speakers. Two of the speakers would be attached to the existing press box and the remaining 10 would be pole-mounted speakers, at 12 to 18 feet in height, located on the east and west sides of the field (see Figure 2.2-4).

The proposed development will only be utilizing the new poles with speakers and usage will abide by the new policies that have been adopted (See Table 2.2-1). The public address system would be designed to conform to the exterior noise limits section of the City of Mountain View Municipal Code and 2030 General Plan. The applicable noise standards are described in *Section 3.13 Noise*.

2.2.2.4 Parking

At MVHS, a total of 493 standard parking stalls and 15 accessible stalls are available for attendees of sporting events. Available parking is distributed between three parking lots on-campus. As the most highly attended events would bring more attendees to the campus than are available parking spaces, some overflow parking would occur onto surrounding streets, primarily Truman Avenue and Oak Avenue. As it exists, daytime events or night games at MVHS hosted with portable lights have resulted in the surrounding street parking being utilized, in addition to use of the Foothill Covenant Church parking lot, located at 1555 Oak Avenue in Los Altos, across Truman Avenue from the stadium. No additional parking is proposed as part of the lighting project.

2.2.2.5 Construction Schedule and Details

Project construction would occur over a period of six months. Construction activities would include materials delivery, excavation for pole foundation installation, trenching and boring for electrical conduit installation, installation via hydraulic crane of the lighting poles, mounting of the luminaires, and restoration of disturbed surfaces including pavement and landscaping that was removed during excavation and trenching. Typical construction equipment would be used, such as an excavator, boring machine, concrete truck and pump, and a crane for pole installation and luminaire mounting, as well as semi-trucks for materials delivery.

2.3 PROJECT OBJECTIVES

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

- Provide the capability to host sport events and games at the athletic stadium on the Mountain View High School campus at night when students, parents, and community members can more easily attend.
- Provide athlete and spectator safety by providing superior lighting conditions during sports events and games at night.
- Provide an upgraded PA system that focuses and contains sound within the stadium area.
- Provide outdoor athletic facilities for outdoor night sport events that are consistent with typical high school facilities throughout Santa Clara County and the San Francisco Bay Area.

- Provide practice times for after school sports and marching band due to school bell schedule and limited available daylight.

2.4 USES OF THE EIR

The District, as the lead agency, anticipates that discretionary approvals by the respective public agencies, including but not limited to the following, will be required to implement the proposed project addressed in this EIR:

- District Board Approval
- California Division of the State Architect Approval

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

3.1	Aesthetics	3.11	Land Use and Planning
3.2	Agriculture and Forestry Resources	3.12	Mineral Resources
3.3	Air Quality	3.13	Noise
3.4	Biological Resources	3.14	Population and Housing
3.5	Cultural Resources	3.15	Public Services
3.6	Energy	3.16	Recreation
3.7	Geology and Soils	3.17	Transportation
3.8	Greenhouse Gas Emissions	3.18	Tribal Cultural Resources
3.9	Hazards and Hazardous Materials	3.19	Utilities and Service Systems
3.10	Hydrology and Water Quality	3.20	Wildfire

The discussion for each environmental subject 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.

- **Project Impacts** – This subsection 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 BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.
- **Cumulative Impacts** – This subsection discusses the project’s cumulative impact on the environmental subject. 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 that 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)). This EIR uses the list of projects approach.

Table 3.0-1 identifies the approved (but not yet constructed or occupied) and pending projects in the project vicinity that are evaluated in the cumulative analysis.

Table 3.0-1: Cumulative Projects List		
Project Name	Location	Description
Mountain View High School Expansion Project	3535 Truman Avenue	The project proposes the expansion of Mountain View High School to accommodate an increase of 410 students at the school from 1,969 students to 2,379 students. To accommodate the additional students, the project proposes to construct a new 55,000 square feet two-story classroom building, a one-story 7,648 square-foot engineering building, an approximately 43,700 square-foot student services building, and an approximately 10,350 square-foot auxiliary gymnasium building on the project site. In addition, the project proposes to repurpose the existing cafeteria into a Performing Arts classroom, modernize Packard Hall, alterations to and repurposing of existing small gym, install artificial turf at existing fields, and convert the current spaces that are proposed to be vacated in existing student services building to future library use.
St. Francis High School	1885 Miramonte	Increase the number of students from 1,600 to 1,760 at an existing private high school; allow two new buildings (Center for Innovation and Dining Commons) totaling 94,000 square feet to replace two existing buildings (Buildings 100 and 300) totaling approximately 42,000 square feet on an existing campus.
840 East El Camino Real	840 East El Camino Real	The project proposes four-story, 18,366 square-foot addition to an existing four-story, 160-room hotel, including 38 new guest rooms and 4,024 square feet of ground floor commercial space.
982 Bonita Avenue	982 Bonita Avenue	Construct eight condominiums with below grade parking to replace 4 existing residential units on 0.47-acre project site.

999 Fremont Avenue	999 Fremont Avenue	Construct new two-story mixed-use building with 1,600 square feet of commercial space and three condominium units and surface parking with a mechanical parking lift system. The project site is currently developed an 1,100 square-foot one-story commercial building with a drive-thru and surface parking and is located on a triangular site bounded by Fremont Avenue, Miramonte Avenue and A Street.
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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?

For each resource area, cumulative impacts may occur over different geographic areas. For example, the project effects on air quality would combine with the effects of projects in the entire air basin, whereas noise impacts would primarily be localized to the surrounding area. The geographic area that could be affected by the proposed project varies depending upon the type of environmental issue being considered. Section 15130(b)(3) of the CEQA Guidelines states that lead agencies should define the geographic scope of the area affected by the cumulative effect. Table 3.0-2 provides a summary of the different geographic areas used to evaluate cumulative impacts.

Table 3.0-2: Geographic Considerations in Cumulative Analysis	
Resource Area	Geographic Area
Aesthetics	Project site and adjacent parcels
Agriculture and Forestry Resources	Countywide
Air Quality	San Francisco Bay Area Air Basin
Biological Resources	Project site and adjacent parcels
Cultural Resources	Project site and adjacent parcels
Energy	Energy provider's territory
Geology and Soils	Project site and adjacent parcels
GHGs	Global
Hazards and Hazardous Materials	Project site and adjacent parcels
Hydrology and Water Quality	Permanente Creek watershed
Land Use and Planning/Population and Housing	Citywide

Table 3.0-2: Geographic Considerations in Cumulative Analysis	
Resource Area	Geographic Area
Minerals	Identified mineral recovery or resource area
Noise and Vibration	Project site and adjacent parcels
Public Services and Recreation	Citywide
Transportation/Traffic	Citywide
Tribal Cultural Resources	Project site and adjacent parcels
Utilities and Service Systems	Citywide
Wildfire	Within or adjacent to the wildfire hazard zone

3.1 AESTHETICS

The following discussion is based, in part, on a photometric study prepared for the proposed project by *Musco Sports Lighting, LLC*. The study, dated January 2, 2020, is attached to this EIR as Appendix B. In addition, photo simulations of the proposed project were prepared by *Previsualists, Inc.* and are included in the aesthetic impact discussion.

3.1.1 Environmental Setting

3.1.1.1 *Regulatory Framework*

State

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. There are no officially designated or state-designated scenic highways in the City of Mountain View. In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City Limit.⁶ Eligible State Scenic Highways (not officially designated) include: SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

Local

Mountain View Los Altos High School District Board and Administrative Policies

The District has adopted policies which regulate the use of stadium lights and public address systems on District facilities. Board Policy (BP) 7325 sets guidelines for the creation and periodic review of administrative regulations that guide the use of stadium lights and public address systems. Administrative Regulation (AR) 7325(a) sets general regulations and use guidelines for stadium lights and public address systems. The following regulations and use guidelines in AR 7325(a) are applicable to the proposed project's aesthetic impacts:

-General Regulations

- 1) In order to reduce the impact of sound and light on the surrounding neighborhood, the stadium lights and public address system shall not be rented for non-school District purposes. Rental of the stadium lights or the public address system to non-school sponsored groups shall not be permitted, with the exception of (1) rental to other public school districts for school-related purposes consistent with this policy, or (2) rental to non-profit organizations that are school-connected organizations under Board Policy/Administrative Regulation 1230, and whose primary mission is to support MVLA students and programs (e.g., athletic boosters, music boosters). Any such exceptional uses shall be for school-related purposes

⁶ California Department of Transportation. *California Scenic Highway Mapping System*. Accessed March 2, 2020. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>.

consistent with MVLA's policies and regulations, and directly for the benefit of District pupils and pupils of other public schools located within MVLA's boundaries and operating therein as public schools. In support of the District's goal of distributing these exceptional uses nearly equally between its comprehensive high schools, the District shall encourage would-be renters to locate their events accordingly. Evening exceptional uses shall be subject to all the restrictions of paragraph number 3 under "Use Guidelines for Stadium Field Lights," below.

-Use Guidelines for Stadium Lights

The use of the stadium field lights shall be limited by the following restrictions except under unusual circumstances, and then as approved by the Superintendent or designee.

- 1) Athletic Competitions: No more than five nights of varsity or junior varsity interscholastic competitions per year plus postseason competition (as determined by the California Interscholastic Federation) for each of the following sports: football, girls soccer, boys soccer, girls lacrosse, boys lacrosse, field hockey, track and field, and any new varsity field sport to be approved by the District. The lights may also be used for additional nights of postseason competition involving an MVLA high school team as one of the two teams playing (unless league rules as determined by the California Interscholastic Federation determine that one of the MVLA schools must host the competition). Football competitions typically end by 10 p.m. All other competitions typically end by 8:30 p.m., barring unforeseen issues such as injuries and overtime contests.
- 2) Athletic Practice: Stadium field lights shall not be used for athletic practice on Saturdays or Sundays. Stadium field lights may be used at any levels for athletic practice on Mondays through Fridays, but at competition levels only until 8:00 p.m. Stadium field lights at non-competition levels may be used for at most thirty minutes after practice, to exit safely or for other low-noise activities as deemed necessary by the coach. The Superintendent or designee may grant exceptions to these limitations on the use of stadium field lights, for considerations such as the health and safety of students or staff (e.g. summer heat wave), or overlap of team tryout schedules with practices and/or competitions.
- 3) Evening Special Events: Commencement exercises using stadium field lights may be held during evening hours. Additionally, up to three evening special events that use stadium field lights and the public address systems may be held per year on each campus, but only if such an event ends by 9:00 p.m., and is sponsored by the District, or by other public schools located within MVLA's boundaries and operating therein as public schools, or by District-connected organizations as described in the General Regulations above.
- 4) Duration of Competition Levels of Stadium Field Lighting: Stadium field lights will be reduced to less than competition levels within 15 minutes of the conclusion of athletic competitions and evening special events. The District will maintain adequate lighting following competitions, for safe crowd disbursement or unforeseen circumstances that require additional lighting. The sponsors of evening special events shall do likewise.
- 5) School Holiday and Summer Use: The stadium field lights at either high school will not be used on school holidays, or after the Commencement ceremonies until CIF rules allow the beginning of practice for the season.

- 6) Stadium field lights will be Musco #TLC-LED-1150 or else equivalent/superior thereto, to the extent that acquisition of such equivalent or superior field lights is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

3.1.1.2 *Existing Conditions*

Project Site

The project site is a turf athletic field and running track located at the southwest corner of the Mountain View High School campus. The running track and football field is oriented north-south in the long direction, with the home bleachers on the west side and the visitor bleachers on the east side of the track. An artificial berm appears to have been constructed for the support of the home side bleachers and existing press box. The berm ranges in height from one to five feet relative to the track with the high point at the press box behind the center of the bleachers. A concrete ramp located behind the press box and bleacher area provides access to the sidewalk at street level to the west. The berm around the bleachers is covered with grass and a row of medium-sized trees and a hedge borders the west side of the site. The visitor bleacher area is relatively flat and covered with asphalt-pavement. In addition, the site contains an approximately 20-foot tall scorekeeping booth, two approximately 25-foot tall pole-mounted loudspeakers, a scoreboard, a restroom building, and a storage building. The site includes manicured lawn areas and the track is bordered on the west and south sides by dense perimeter vegetation. The existing condition of the project site is shown in Photos 1 through 4 on the following pages.

The campus is not located on a ridgeline or hillside, and the campus and surrounding area are relatively flat, with a site elevation of approximately 188 feet above mean sea level. Due to the flat topography and existing development in the project area, views of the Mountain View High School campus are limited to the immediate surrounding area, and only those buildings and other site features that can be seen from adjacent public streets, while the interior of the campus is not readily visible from off-site and does not contribute to the visual character of the area.

Surrounding Land Uses

The project site is a part of the Mountain View High School campus. The main campus is located across a grass field to the north of the site. A baseball field borders the project site to the east. Oak Avenue is located south of the site, beyond which there are single-family residential neighborhoods. Truman Avenue is located west of the site. Across Truman Avenue, there is an existing church and single-family residential neighborhoods. The surrounding aesthetic environment is characterized primarily by one-story residential dwellings with landscaped front yards and one- and two-story classroom buildings within the Mountain View High School campus.

The project site is located in the City of Mountain View at its southern border with the City of Los Altos; to the south the zoning is Single-Family (R1-10) in Los Altos and to the west the zoning is Single-Family (R1-8) in Mountain View. The allowable structure height in these zoning districts is 27 feet and 28 feet, respectively.

Scenic Vistas and Corridors

The project site is not located within a designated scenic vista or view corridor and is not visible from a designated scenic highway. State Route (SR) 9, between Highway 17 and Highway 35, is the only officially designated state scenic highway in Santa Clara County. SR 9 is located approximately seven miles southwest of the project site. Interstate 280 (I-280) from Santa Clara County line to the San Bruno City limit is the nearest Eligible State Scenic Highway near the project site. I-280 is located approximately 1.6 miles southwest of the project site. The project site is not visible from SR 9 or I-280.

Light and Glare

The existing high school campus includes security lights, parking lot lights, and walkway lighting. Streetlights and other lighting is found in the project vicinity. Sources of light and glare in the surrounding area are those typical of developed suburban areas, including headlights, streetlights, parking lot lights, security lights, and reflective surfaces such as windows. As mentioned in *Section 2.2.1 Existing Development*, portable lights have been used for past sporting events to temporarily illuminate the playing field.



Photo 1 View of the track and sports field, looking east.



Photo 2 View of the southern end of the track and sports field and residences beyond, looking southeast.

PHOTOS 1 & 2



Photo 3 View of the northwestern corner of the track and sports field, looking north.



Photo 4 View of the track and sports field from the intersection of Oak Avenue and Truman Avenue, looking northeast.

PHOTOS 3 & 4

3.1.2 Impact Discussion

For the purpose of determining the significance of the project's impact on aesthetics, 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) Substantially degrade the existing visual character or quality of public views⁷ of the site and its surroundings? 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?

3.1.2.1 *Project Impacts*

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(No Impact)**

The project site and surrounding area are flat and prominent viewpoints, other than buildings, are limited. The project area has minimal to no scenic views due to the existing built environment and the lack of designated scenic resources. The hills south of the high school campus are visible from the surrounding neighborhood. However, these views are intermittent and obstructed by existing development. The proposed field lights and PA system would not substantially block existing views of the hills or any other scenic viewpoints. Therefore, impacts related to scenic vistas would not occur. **(No Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(Less than Significant Impact)**

As discussed in *Section 3.1.1.2 Existing Conditions* above, the project is not on a ridgeline or visible from a state scenic highway. While views of the site would change with the project, the proposed lights would not obstruct public views of any identified resources which contribute to the scenic quality of the area. Further, no existing trees would be removed by the project. Therefore, the proposed lighting project would not substantially damage scenic resources. **(Less than Significant Impact)**

⁷ Public views are those that are experienced from publicly accessible vantage points.

Impact AES-3: The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project is in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The project is located in an urbanized residential area. The project proposes four 90-foot tall ground-mounted field lights at the existing high school track and sports field. The two sets of light poles would be located on either side of the home and away bleachers, set back from the track approximately 150 and 155 feet, respectively. The project also includes a new PA system, comprised of 12 speakers approximately 12 to 18 feet in height (refer to Figure 2.2-4: Conceptual Site Plan). Photosimulations of the proposed project were prepared to show the visual change expected to result from the proposed field lights. The primary visual component of the project is the 90-foot tall light poles, which are shown from various vantage points on the following figures. Figure 3.1-1 shows the locations at which photosimulations were rendered for the proposed light poles. Daytime and nighttime simulations of the proposed lights are shown on Figure 3.1-2 through Figure 3.1-17.

The structure heights are limited to 27 and 28 feet in adjacent zoning districts; thus, the proposed lights would be substantially taller than existing development. While the visual character of the site and surrounding areas would change with the project, the proposed lights and PA system would not degrade public views of the site and its surroundings. As shown on the figures in the following pages, the lights would not be visually obtrusive from public viewpoints and would be partially screened from view by existing trees lining the nearby streets (see Figure 3.1-11 and Figure 3.1-15). The proposed light poles would not be out of character with communications infrastructure (i.e. telephone poles and wires) that is common to the area, nor would the light poles be visually incompatible with existing development at MVHS. Pole-mounted sports lights are common features of public educational facilities throughout the San Francisco Bay Area and are typically found adjacent to residential neighborhoods. The proposed field lights would not detract from the single-family residential character of the surrounding neighborhoods. As shown in the nighttime simulations (Figure 3.1-5, Figure 3.1-9, Figure 3.1-13, and Figure 3.1-17), the proposed lights would be visible from surrounding areas when in use at night. The project site is located in an urban area which contains existing light sources (car lights, security lights, and streetlights). The proposed lights would marginally contribute to existing light levels but would not remove or diminish any recognized nighttime viewpoint in the area, such as a lookout point or an observatory. For further discussion on light and glare, refer to Impact AES-4. For the reasons described above, the project's impact on the visual character of the area would be less than significant.

The proposed project is located within the District's jurisdiction; therefore, the development would not be subject to any city regulations pertaining to scenic quality. The proposed project would, however, be subject to design review by the DSA. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

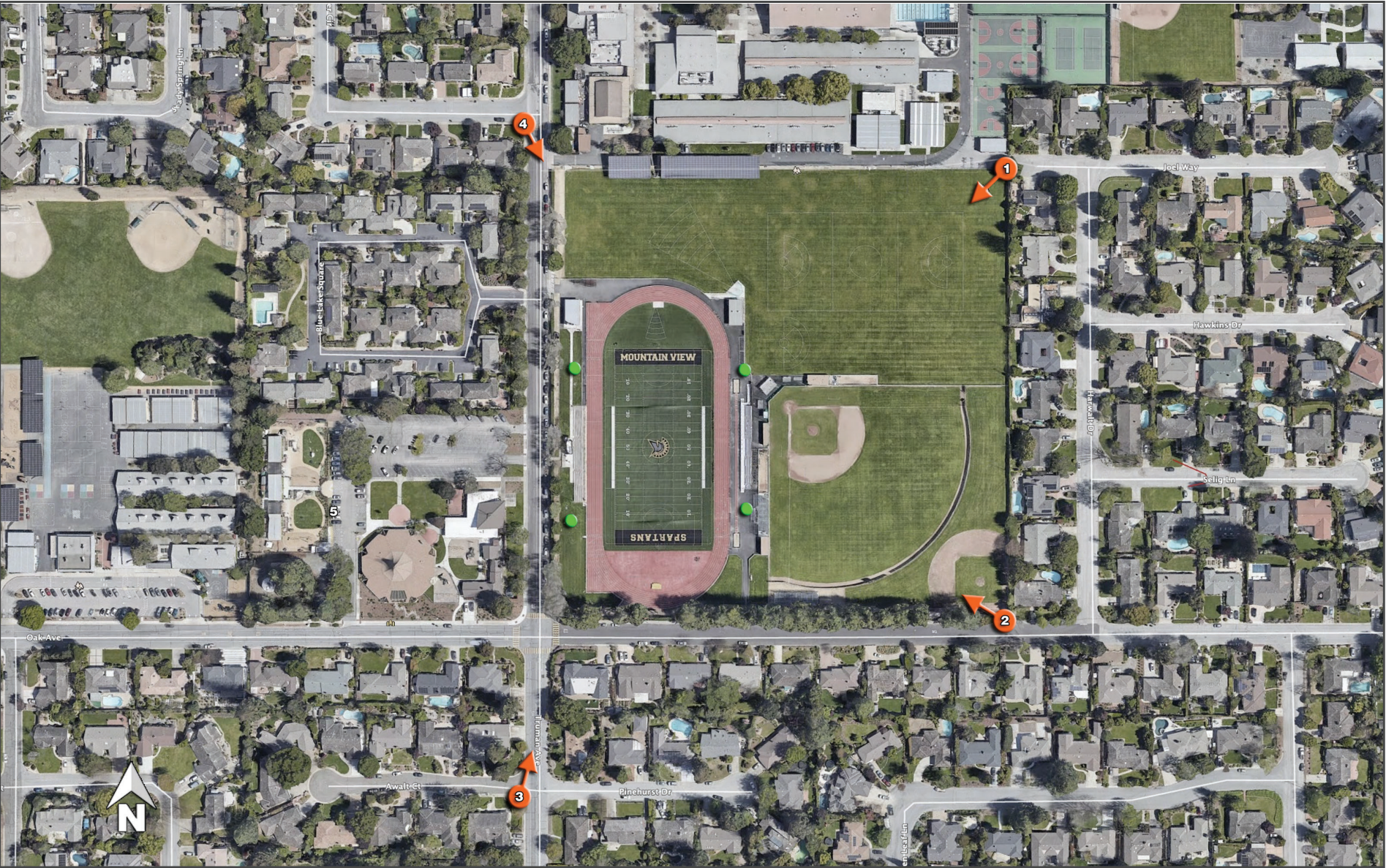


FIGURE 3.1-1

PHOTOSIMULATION LOCATIONS



Figure 3.1-2: Viewpoint 1 - Daytime Existing



Figure 3.1-3: Viewpoint 1 - Daytime Proposed

FIGURES 3.1-2 & 3.1-3



Figure 3.1-4: Viewpoint 1 – Nighttime Existing



Figure 3.1-5 Viewpoint 1 – Nighttime Proposed

FIGURES 3.1-4 & 3.1-5



Daytime Existing

Figure 3.1-6: Viewpoint 2 - Daytime Existing



Daytime Proposed

Figure 3.1-7: Viewpoint 2 - Daytime Proposed

FIGURES 3.1-6 & 3.1-7



Figure 3.1-8: Viewpoint 2 – Nighttime Existing



Figure 3.1-9: Viewpoint 2 – Nighttime Proposed

FIGURES 3.1-8 & 3.1-9



Figure 3.1-10: Viewpoint 3 - Daytime Existing



Figure 3.1-11: Viewpoint 3 - Daytime Proposed

FIGURES 3.1-10 & 3.1-11



Figure 3.1-12: Viewpoint 3 – Nighttime Existing



Figure 3.1-13: Viewpoint 3 – Nighttime Proposed

FIGURES 3.1-12 & 3.1-13



Figure 3.1-14: Viewpoint 4 - Daytime Existing



Figure 3.1-15: Viewpoint 4 - Daytime Proposed

FIGURES 3.1-14 & 3.1-15



Figure 3.1-16: Viewpoint 4 – Nighttime Existing



Figure 3.1-17: Viewpoint 4 – Nighttime Proposed

FIGURES 3.1-16 & 3.1-17

Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The field lights are proposed to allow for flexibility in use and safe nighttime use of the existing track and sports field. The lights would also allow for safe egress from the field following nighttime events. Four ground-mounted field lights would be installed at the existing field, with two poles located on each opposing length of the field. The poles would be set back from the track by approximately 150 to 155 feet, on either side of the home and away bleachers. Each light pole would be 90 feet in height and affixed with LED luminaires; the luminaires would be installed at varying heights to allow for illumination of the playing field, the bleachers, and egress pathways. The lights would provide an average illumination at field level of 40 foot-candles. Figure 3.1-18 and Figure 3.1-19 on the following pages show the anticipated illumination at field level from the four field lights in foot-candles, for both soccer and football games, respectively.⁸

The proposed field lights would be designed to focus the beam onto the playing surface and minimize the amount of light escaping into the sky or onto adjacent uses. While the majority of the light generated by the proposed field lights would be contained within the existing site, there would be a minimal amount of spillover light.⁹ A photometric study (refer to Appendix B) was prepared for the proposed project to analyze the extent at which spillover light would affect adjacent uses. The light levels at the property lines of adjacent uses, including the residential uses to the west across Truman Avenue and to the south across Oak Avenue, were quantified in horizontal foot-candles.¹⁰ As shown on Figure 3.1-20, the spillover light levels at the adjacent uses would be negligible. The maximum spillover would occur at the parking lot of the church to the west of the project site, opposite Truman Avenue. No spill light would occur at the adjacent residential properties. The spill light levels shown on Figure 3.1-20 do not take into account grade changes or shielding provided by existing structures or vegetation and, therefore, spill light would be lower than projected at some locations.

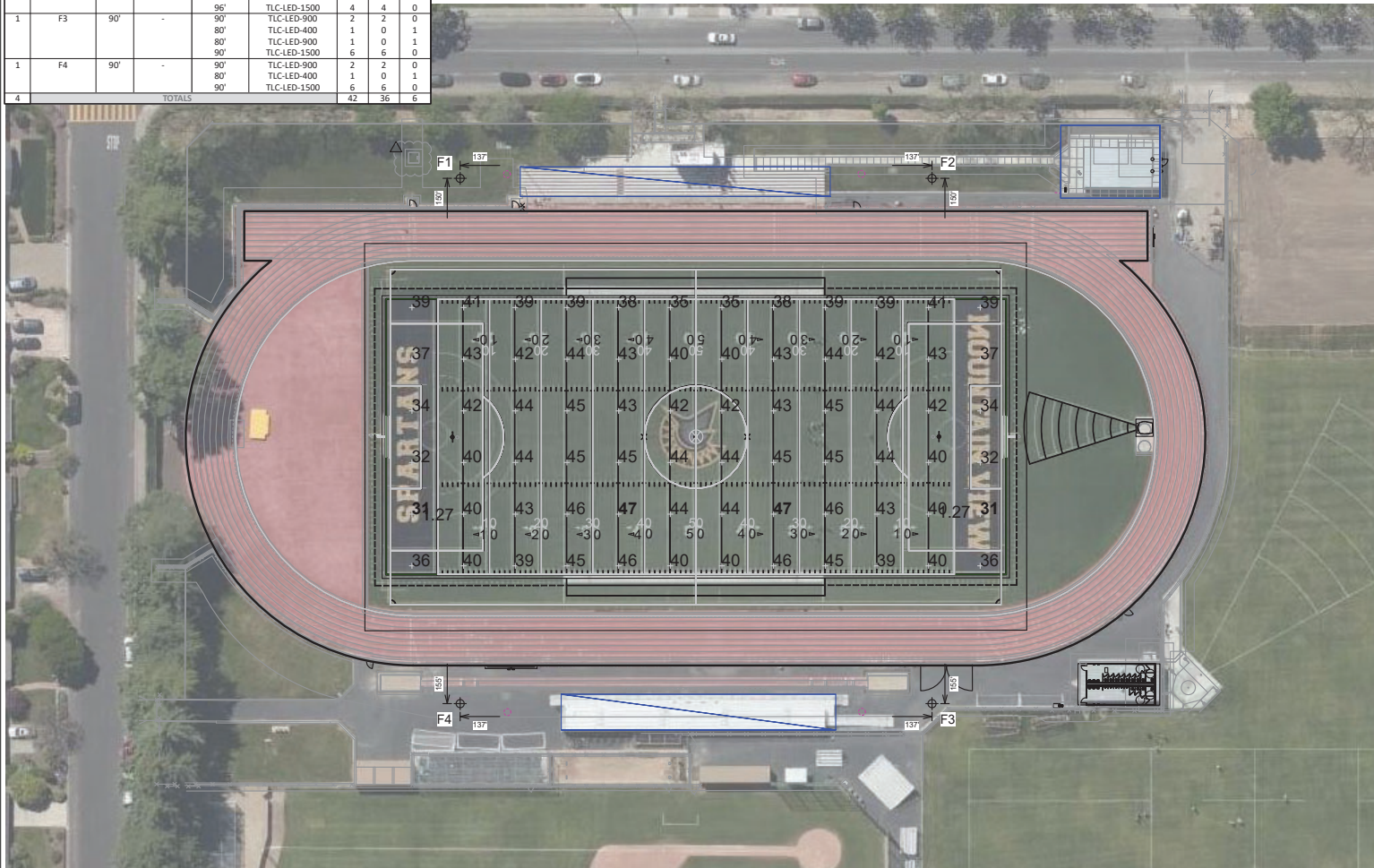
Light levels are generally additive. As discussed previously, streetlights, headlights, security lighting, and other sources of light currently illuminate the project area. When in use, spill light from the sports lighting will add to these existing light levels. While the proposed field lights would increase nighttime light levels immediately adjacent to the site, the spill light would be confined to the existing campus and adjacent public streets; no spill light would occur on the adjacent residential uses. Furthermore, the use of the lights would be regulated by District's Board and Administrative Policies AR 7325 and BP 7325 (see *Section 3.1.1.1*), thus ensuring that the lights are used no later than 10:00 PM during sporting events, no later than 8:30 PM for sports practices, and no later than 9:00 PM for commencement exercises and District-sponsored evening special events (which are limited to three events per year). As mentioned in *Section 3.1.1.1*, the field lights would be reduced to less than competition levels (10 foot-candles or less along egress pathways and bleachers) within 15 minutes of the conclusion of athletic competitions to allow for safe egress from the field.

⁸ Light levels at field level are different for soccer and football games because the width of the playing surface and the required illuminated area varies between the two sports.

⁹ Spillover light is any light where it is unintended or unwanted.

¹⁰ Horizontal foot-candles are a measurement of light levels when viewed along a horizontal plane at approximately three feet above the ground surface.

EQUIPMENT LIST FOR AREAS SHOWN									
Pole			Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
1	F1	90'	6'	96'	TLC-LED-900	6	0	0	
				86'	TLC-LED-400	1	0	1	
				96'	TLC-LED-1500	4	4	0	
1	F2	90'	6'	96'	TLC-LED-900	6	6	0	
				86'	TLC-LED-400	1	0	1	
				86'	TLC-LED-900	1	0	1	
				96'	TLC-LED-1500	4	4	0	
1	F3	90'	-	90'	TLC-LED-900	2	2	0	
				80'	TLC-LED-400	1	0	1	
				80'	TLC-LED-900	1	0	1	
				90'	TLC-LED-1500	6	6	0	
1	F4	90'	-	90'	TLC-LED-900	2	2	0	
				80'	TLC-LED-400	1	0	1	
				80'	TLC-LED-1500	6	6	0	
4	TOTALS					42	36	6	



SCALE IN FEET 1 : 60

0' 60' 120'

GRID SUMMARY

Name: Football
Size: 360' x 160'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

Guaranteed Average: 40

Scan Average: 41.00

Maximum: 47

Minimum: 31

Avg / Min: 1.30

Guaranteed Max / Min: 2.5

Max / Min: 1.49

UG (adjacent pts): 1.27

CU: 0.58

No. of Points: 72

LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI

Luminaire Output: 160,000 / 89,600 lumens

No. of Luminaires: 36

Total Load: 42.84 kW

Lumen Maintenance

Luminaire Type L90 hrs L80 hrs L70 hrs

TLC-LED-1500 >81,000 >81,000 >81,000

TLC-LED-900 >81,000 >81,000 >81,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described

above is guaranteed per your Musco

Warranty document and includes a 0.95

dirt depreciation factor.

Field Measurements: Individual field measurements may vary from

computer-calculated predictions and should be taken

in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage

Draw Chart and/or the "Musco Control System Summary"

for electrical sizing.

Installation Requirements: Results assume ± 3%

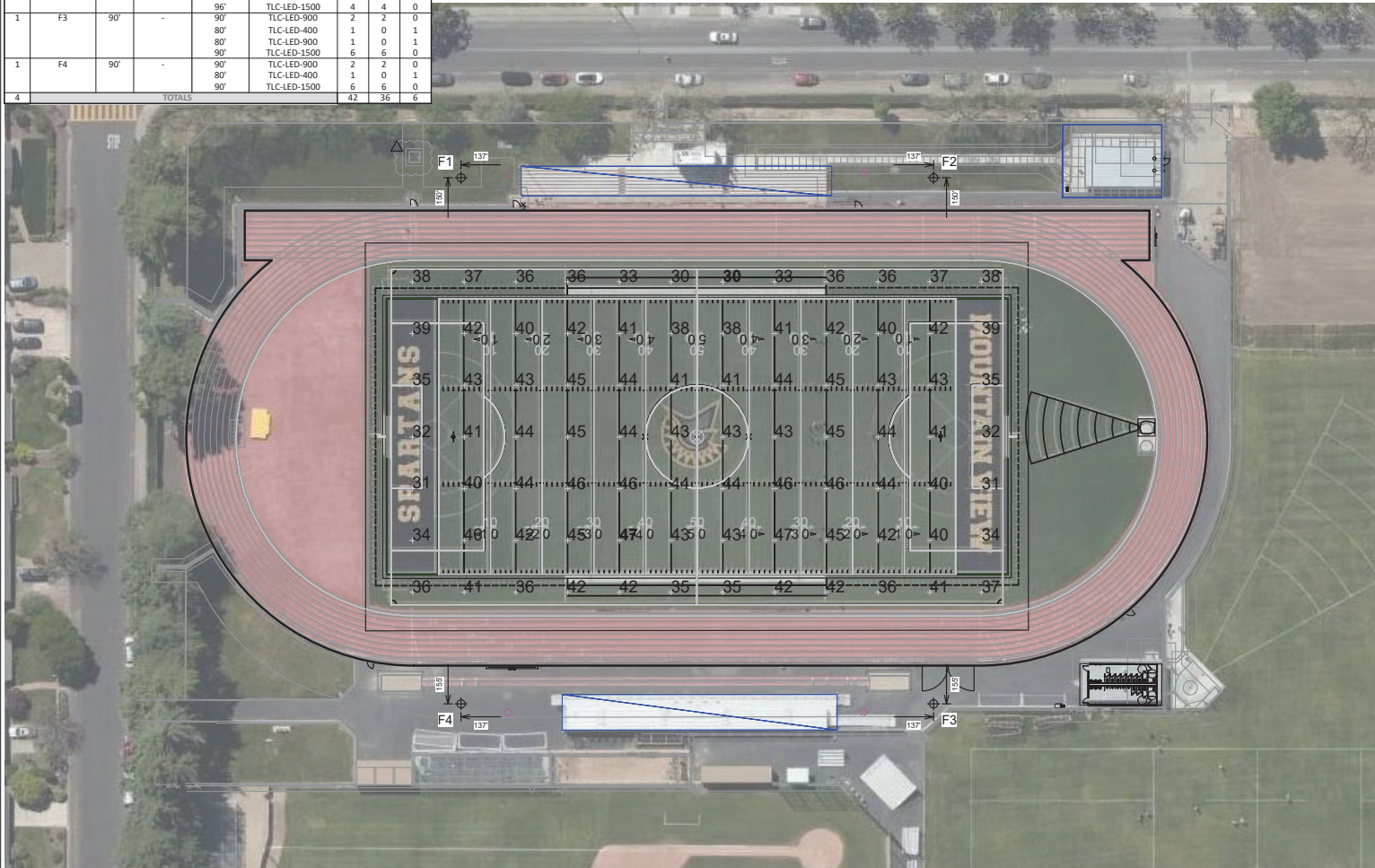
nominal voltage at line side of the driver and structures

located within 3 feet (1m) of design locations.

ILLUMINATION AT FIELD LEVEL FOR FOOTBALL

FIGURE 3.1-18

EQUIPMENT LIST FOR AREAS SHOWN									
Pole			Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
1	F1	90'	6'	96'	TLC-LED-900	6	6	0	
				86'	TLC-LED-400	1	0	1	
				96'	TLC-LED-1500	4	4	0	
1	F2	90'	6'	96'	TLC-LED-900	6	6	0	
				86'	TLC-LED-400	1	0	1	
				96'	TLC-LED-1500	1	0	1	
1	F3	90'	-	90'	TLC-LED-900	2	2	0	
				80'	TLC-LED-400	1	0	1	
				90'	TLC-LED-900	1	0	1	
1	F4	90'	-	90'	TLC-LED-900	2	2	0	
				80'	TLC-LED-400	1	0	1	
				90'	TLC-LED-1500	6	6	0	
4	TOTALS					42	36	6	



GRID SUMMARY	
Name:	Soccer
Size:	355' x 195'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
Scan Average:	40.14		
Maximum:	47		
Minimum:	30		
Avg / Min:	1.33		
Max / Min:	1.55		
UG (adjacent pts):	1.31		
CU:	0.66		
No. of Points:	84		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	160,000 / 89,600 lumens		
No. of Luminaires:	36		
Total Load:	42.84 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-LED-900	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

ILLUMINATION AT FIELD LEVEL FOR SOCCER

FIGURE 3.1-19



GRID SUMMARY	
Name:	Property Spill
Spacing:	10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
HORIZONTAL FOOTCANDLES			
	Entire Grid		
Scan Average:	0.0071		
Maximum:	0.06		
Minimum:	0.00		
No. of Points:	174		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	160,000 / 89,600 / 46,500 lumens		
No. of Luminaires:	42		
Total Load:	46.22 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000

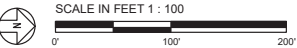
Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



LIGHT SPILLOVER AT NEARBY PROPERTY LINES

FIGURE 3.1-20

Because the proposed project would result in negligible spill light at adjacent property lines and would be regulated by District policies, the proposed stadium lights would not substantially affect nighttime light and glare in the surrounding areas. **(Less than Significant Impact)**

3.1.2.2 *Cumulative Impacts*

Impact AES-C: The project would not result in a cumulatively considerable contribution to a significant cumulative aesthetics impact. **(Less than Significant Cumulative Impact)**

The cumulative projects analyzed in this Draft EIR in the City of Mountain View and Los Altos may demolish existing buildings, construct taller buildings, remove trees, and possibly affect scenic views and resources. As discussed previously, the project would go through design review by DSA. All cumulative projects occurring within Mountain View or Los Altos would be subject to design guidelines, lighting standards, and signage regulations of their respective jurisdictions, and all future projects at the MVHS campus would be subject to DSA review and approval. Future development projects would undergo individual review to ensure that site selection, building materials, heights, and lighting is implemented in a manner that does not result in significant visual impacts. For these reasons, the cumulative projects, including the proposed lighting project, would not result in a significant cumulative aesthetic or visual impact. **(Less than Significant Cumulative Impact)**

3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 Environmental Setting

3.2.1.1 *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 best quality land is called 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.¹¹

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.¹²

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.¹³ Programs such as CAL FIRE's Fire and Resource Assessment Program 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.¹⁴

3.2.1.2 *Existing Conditions*

The project site and surrounding land uses are not designated, zoned, or used for agricultural purposes, forest land, or timberland. The project site is not subject to a Williamson Act contract.

¹¹ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 26, 2019. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

¹² California Department of Conservation. "Williamson Act." Accessed April 26, 2019. <http://www.conservation.ca.gov/dlrp/lca>.

¹³ 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)).

¹⁴ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 26, 2019. <http://frap.fire.ca.gov/>.

According to the *Santa Clara County Important Farmland 2016* map, the project site is designated at “Urban and Built-Up Land,” which is defined as land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel.¹⁵ Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

The project site is part of a high school campus and has been developed as such since the mid-1950s.

3.2.2 **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?

3.2.2.1 ***Project Impacts***

Impact AG-1:	The project 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. (No Impact)
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As discussed above in *Section 3.2.1.2 Existing Conditions*, the project is designated Urban and Built-Up Land and there is no designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or near the site. The proposed lighting project would not impact agricultural resources by conversion to a non-agricultural usage. **(No Impact)**

¹⁵ California Department of Conservation. *Santa Clara County Important Farmland 2016*. Accessed July 17, 2019. <https://www.conservation.ca.gov/dlrp/fmmp/Pages/SantaClara.aspx>

Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is neither zoned for agricultural use or under a Williamson Act contract. Thus, there would be no impact. **(No Impact)**

Impact AG-3: The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The site is not zoned, or adjacent to any zoning, for forest land or timberland. Implementation of the project would allow for construction of field lights and PA system on an existing school campus. Therefore, impacts related to conflicts with existing zoning or rezoning of forest land, timberland, or timberland zoned Timberland Production would not occur. **(No Impact)**

Impact AG-4: The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project site is located within a suburban area that is designated for public facilities and residential uses. No forest land would be lost as a result of the project, nor would forest land be converted to non-forest use. **(No Impact)**

Impact AG-5: The project 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. **(No Impact)**

The proposed project does 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. For these reasons, the proposed project would not result in impacts to agricultural or forest resources. **(No Impact)**

3.2.2.2 Cumulative Impacts

Impact AG-C: The project would not result in a cumulatively considerable contribution to a significant agricultural and forestry resources impact. **(No Cumulative Impact)**

As discussed above, the proposed project would not result in the loss of farmland or forestland, the conversion of forestland to non-forest use. Since the project would not result in a project-specific impact, the proposed project would not contribute to a significant cumulative agriculture and forestry resources impact. **(No Cumulative Impact)**

3.3 AIR QUALITY

3.3.1 Environmental Setting

3.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O₃), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.¹⁶ Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 3.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 3.3-1: Health Effects of Air Pollutants		
Pollutants	Sources	Primary Effects
Ozone	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Cancer• Chronic eye, lung, or skin irritation• Neurological and reproductive disorders

High ozone 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 ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

¹⁶ 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.

Particulate matter is a problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

Toxic air contaminants are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. Toxic air contaminants 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 are deposited in the deepest regions of the lungs (most susceptible to injury).¹⁷ 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.

3.3.1.2 *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, O₃, CO, SO_x, NO_x, and lead.

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.

¹⁷ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed April 1, 2020. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.

The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. 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 that 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 that 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.¹⁸

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.

¹⁸ BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

3.3.1.3 *Existing Conditions*

The project site is an existing track and sports field on the MVHS campus. The project site does not directly create any criteria air pollutants, although pollutants are indirectly released via vehicle travel to and from the site. As mentioned in *Section 2.2.1 Existing Development*, between two and five football games are currently hosted on MVHS campus with the use of portable field lights. Portable field lights are typically powered by diesel generators, the operation of which generates DPM. Therefore, it can be reasonably assumed that a small level of DPM is generated at the project site due to the operation of portable lights at the field.

The school is located in a residential area. The closest sensitive receptors to the project site are the single-family residences to the west and south of the site across Truman Avenue and Oak Avenue, respectively.

3.3.2 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?

3.3.2.1 *Project Impacts*

Impact AIR-1:	The project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant Impact)
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The BAAQMD's 2017 Clean Air Plan (2017 CAP) prepared for the Bay Area air basin defines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors, and GHGs. The proposed control strategy is designed to complement efforts to improve air quality and protect the climate that are being implemented by partner agencies at the state, regional, and local scale. The control strategy encompasses 85 individual control measures. The control measures describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources and is based on the following four key priorities:

- Reduce emissions of criteria air pollutants and TACs from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
- Decarbonize our energy system.

The proposed project supports the primary goals of the 2017 CAP in that it does not exceed the BAAQMD thresholds for operational air pollutant emissions (as discussed in Impact AIR-2 below). In addition, the proposed project does not propose to expand development on campus. The project would not preclude implementation of the 2017 CAP control measures and would not conflict with or obstruct implementation of the 2017 CAP. The project, therefore, would not result in a significant impact related to consistency with the 2017 CAP. **(Less Than Significant Impact)**

Impact AIR-2: The project would not 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. **(Less than Significant Impact with Mitigation Incorporated)**

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal Act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

Construction

Construction of the proposed field lights and PA system would be short-term and temporary, for the duration of six months. Construction activities would include materials delivery, excavation for pole foundation installation, trenching and boring for electrical conduit installation, installation via hydraulic crane of the lighting poles, mounting of the luminaires, and restoration of disturbed surfaces including pavement and landscaping that was removed during excavation and trenching. Construction activities, particularly during site preparation, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site, which could potentially become airborne. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are implemented to reduce these emissions.

Mitigation Measures: The following measures, in accordance with BAAQMD best management practices, would reduce potential construction-related air quality impacts to a less than significant level.

MM AIR-2.1: During any construction period ground disturbance, the School District shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the measures recommended by BAAQMD as listed below would reduce the air quality impacts associated with grading and new construction to a less-than-significant level. The contractor shall implement the following best management practices that are required of all projects:

- 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 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 mph.
- Replant vegetation in disturbed areas as quickly as possible.
- 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 District regarding dust 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.

Implementation of the mitigation measure listed above would reduce potential air quality and fugitive dust-related impacts during construction to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Operation

The project does not propose to expand development on campus. The project would facilitate the use of the field for existing events which occur on campus and is unrelated to the campus expansion currently underway at MVHS. The BAAQMD CEQA Air Quality Guidelines Operational Criteria Pollutant Screening Size (shown in Table 3-1 of the CEQA Air Quality Guidelines) for a high school land use is 311,000 square feet or 2,390 students. According to BAAQMD, if a project meets the screening criteria in Table 3-1 of the BAAQMD CEQA Air Quality Guidelines, the project would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds of significance (shown in Table 3.3-1 above). The adjacent high school expansion project would result in a net increase in enrollment of 410 students and 67,198 square feet of new construction, which is below the screening size and was found to result in a less than significant operational air quality impact.¹⁹ The proposed project would accommodate existing school sporting events and activities without increasing enrollment and does not include new sources of criteria air pollutants. The project would result in a minor increase in vehicle trips and associated criteria air

¹⁹ Mountain View/Los Altos Union High School District. *Initial Study for the Mountain View High School Expansion Project*. November 2018. Page 30.

pollutants, as additional trips to and from campus would occur for nighttime practices and games. It can reasonably be assumed that student athletes would return home after school hours and return to campus in late afternoon/evening hours for practices or competitions, primarily by vehicle. However, these trips would generally be sourced from within the District boundaries and would only occur during the annual season for high school sports. Further, the increase in daily trips would be minor because it would be limited to the athletes participating in practices or events on any given day and the accompanying spectators. For these reasons, the proposed project would not result in a significant impact due to the generation of criteria air pollutants and/or precursors. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Construction of the field lights and PA system would occur in the vicinity of sensitive receptors, including residences in nearby neighborhoods and students on campus. Construction equipment and associated truck traffic generates diesel exhaust, which is a known TAC. Construction emissions may pose health risks to nearby sensitive receptors. The primary health risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors.

The high school students are assumed to be exposed to lower levels of construction emissions as they would be at the school for part of the day during school hours. In addition, some of the construction activities are assumed to occur while the students are not present at the schools. However, the surrounding residents are assumed to be present and exposed during all the construction activities. Given the close proximity of residential sensitive receptors to each project site, the construction activities are considered to result in potentially significant impacts in terms of excess cancer risk to any infants present or increased annual PM_{2.5} concentrations caused by construction equipment and traffic exhaust and fugitive dust. There are measures available that would reduce these emissions and result in less than significant impacts, as listed below.

Mitigation Measures: In addition to MM AIR-2.1 listed in Impact AIR-2 above, the following mitigation measures would be implemented during all construction activities to reduce TAC emissions impacts.

- MM AIR-3.1:** The project shall use equipment that has low DPM or zero emissions, implementing the following measures:
- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet U.S. EPA particulate matter emissions standards for Tier 4 or use engines that include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices (VDECs). Alternatively (or in combination), the use of alternatively-fueled or electric equipment (i.e., non-diesel) would be consistent with this requirement.

- Avoid diesel generator use by supplying line power to the construction site and limiting the use of diesel generators to no more than 50 total hours.
- Avoid staging of construction equipment near portions of the site that are adjacent to residences.

Implementation of the mitigation measures described above would ensure that localized construction emissions do not adversely affect sensitive receptors. The proposed stadium lights and upgraded PA system would not generate air pollutant emissions during operation. In fact, they would improve operations as these permanent lights would replace the temporary portable lights, which are typically powered by diesel generators which generate DPM. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact with Mitigation Incorporated)**

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

Construction activities for the proposed project would generate occasional odors associated with the application of paints and coatings. These emissions would occur during daytime hours only, would be localized, and would be generally confined to the project site. Additionally, the odors would be temporary. During operations, the proposed project would be consistent with the existing uses as a school site, which are not associated with generating odors. Therefore, impacts related to objectionable odors would be less than significant. **(Less than Significant Impact)**

3.3.2.2 *Cumulative Impacts*

Impact AIR-C: The project would not result in a cumulatively considerable contribution to a significant air quality impact. **(Less than Significant Cumulative Impact)**

Operation of the proposed stadium lights and PA system would not generate new sources of emissions. Construction of the proposed project would generate diesel emissions and dust. However, construction activities would be temporary and required to comply with state and local regulations and implement the mitigation measures described above. Construction of the adjacent MVHS Expansion Project is currently underway and expected to continue until 2026; mitigation measures to control construction dust and diesel emissions are being implemented to reduce these emissions to less than significant levels. Future cumulative projects undertaken by the District and/or approved in the City of Mountain View and Los Altos could result in significant air quality impacts; however, each project would undergo environmental review and incorporate mitigation measures to reduce identified air quality impacts, to the extent feasible. For these reasons, the proposed project would not result in a cumulatively considerable contribution to a significant air quality impact. **(Less than Significant Cumulative Impact)**

3.4 BIOLOGICAL RESOURCES

3.4.1 Environmental Setting

3.4.1.1 *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.²⁰ 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.

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.

²⁰ United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed July 17, 2019. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

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), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. Neither the City of Mountain View nor the District are part of the Habitat Plan. 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.

3.4.1.2 *Existing Conditions*

The project site is located within a developed area in the City of Mountain View. The proposed stadium lights are located on an athletic field within an existing 37-acre high school campus. There are numerous mature trees lining the project site perimeter, along Oak Avenue and Truman Avenue.

Habitats in developed areas are extremely low in species diversity. The wildlife species most often associated with developed areas are those that are most tolerant of periodic human disturbances, including several introduced species such as European starlings, rock doves, house mice, and Norway rats. Native species that are able to utilize these habitats include western fence lizards, American robins, Brewer's blackbirds, northern mockingbirds, mourning doves, house finches, and squirrels.

There are no sensitive habitats or wetlands on or adjacent to the project site. Due to the lack of sensitive habitats and the human disturbance of the project site, special-status plant and animal species are not expected to occur on the project site. The nearest riparian corridor to the project site is Stevens Creek, located approximately 0.3-mile east of the site.

The project site is not part of an adopted Habitat Conservation Plan.²¹

3.4.2 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,

²¹ Santa Clara Valley. "Habitat Agency Geobrowser." Accessed July 17, 2019. <http://www.hcpmaps.com/habitat/>.

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?
- 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?

3.4.2.1 *Project Impacts*

Impact BIO-1:	The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. (No Impact)
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The project site is surrounded by urban development and contains developed structures and paved areas, with areas of ornamental landscaping. The project site does not contain sensitive habitats or wetlands and is disturbed by human use, therefore, the presence of any special-status plants or animals on-site is unlikely. For this reason, the project would not result in significant impacts to special-status species or sensitive habitats. **(No Impact)**

Impact BIO-2:	The project 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. (No Impact)
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Sensitive natural communities are defined by local, state, or federal regulatory agencies as habitats that support special-status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high native biological diversity. No sensitive natural communities or riparian habitats exist on the project site. The closest riparian corridor to the project site is Stevens Creek, approximately 0.3-mile west of the site; Stevens Creek and the riparian habitat therein would be unaffected by the proposed stadium lights and PA system. Therefore, no impacts to sensitive natural communities would occur. **(No Impact)**

Impact BIO-3: The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

The project site does not contain any wetlands or waterways.²² Therefore, no impacts to wetland or waterway resources within the jurisdiction of the USACE, the CDFW, or the RWQCB would occur. **(No Impact)**

Impact BIO-4: The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact with Mitigation Incorporated)**

There are numerous landscape trees bordering the project site. The mature trees could provide nesting habitat for birds, including migratory birds and raptors. Nesting birds are among the species protected under provisions of the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 2800. Although the presence of protected birds is unlikely, urban-adopted raptors (birds of prey) or other protected birds could use the mature trees on or near the site for nesting and foraging habitat. Raptors and nesting birds are protected by the MBTA and CDFW Code. Construction of the project during the breeding season (Feb. 1-Aug. 31) could result in the incidental 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. Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute an impact. Construction activities that disturb a nesting bird or raptor on-site or immediately adjacent to the construction zone would also constitute an impact.

Mitigation Measures: The project would implement measures to avoid impacts to nesting migratory birds during construction. The project, with the incorporation of these measures, would result in a less than significant impact on nesting birds.

MM BIO-4.1: The District shall schedule construction activities to avoid the nesting season, to the extent feasible. The nesting season for most birds, including most raptors in the San Francisco Bay area extends from February 1st through August 31st (inclusive).

If it is not possible to schedule demolition and construction between September 1st and January 31st (inclusive) to avoid the nesting season, pre-construction surveys for nesting raptors and other migratory nesting birds shall be conducted by a qualified ornithologist to identify active nests that may be disturbed during project implementation on-site and within 250 feet of the site. The pre-construction survey for nesting birds shall be conducted prior to initiation of construction, demolition activities, or tree removals no

²² U.S. Fish and Wildlife Service. "National Wetlands Inventory Surface Waters and Wetlands." Accessed July 17, 2019. <https://www.fws.gov/wetlands/data/mapper.html>.

more than 14 days during the early part of the nesting season between February 1st and April 30th (inclusive) and no more than 30 days prior to initiation of these activities during the late part of the nesting season between May 1st and August 31st (inclusive).

If an active nest is found in or close enough to the project area to be disturbed by construction activities, a qualified ornithologist, in consultation with the CDFW, shall determine the extent of a construction-free buffer zone (typically 250 feet for raptors and 100 feet for other birds) around the nest, to ensure that raptor or migratory bird nests would not be disturbed during ground disturbing activities. The construction-free buffer zones shall be maintained until after the nesting season has ended and/or the ornithologist has determined that the nest is no longer active.

With implementation of the above listed mitigation measures, the impact of the project on nesting birds would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-5: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

The proposed lighting and PA system project would not involve the removal of any trees and no construction work/disturbance is expected to take place within the dripline of the existing trees. But to ensure that all existing trees on and adjacent to the site are properly protected during the construction activities, the project shall incorporate tree preservation measures such as the establishment of tree protection zones, demolition and staging area measures, and root cutting, trenching and irrigation standards as listed below in MM BIO-5.1.

Mitigation Measures: The proposed project shall implement the following tree protection measures to avoid harming the trees on-site during construction of the proposed project:

MM BIO-5.1: The proposed project shall implement the following tree protection measures:

- Prior to commencement of construction, construction fencing shall be placed around the drip line of all trees proposed for preservation.
- No grading or other construction shall occur within the drip line of any tree proposed for preservation except in conformance with a Tree Protection Plan approved by a certified arborist.
- No vehicle, equipment or materials shall be parked or stored within the drip line of any tree proposed for preservation.
- No signs, wires, or any other object shall be attached to any tree.

With implementation of the mitigation measures identified above, the proposed project would not result in a significant impact to trees. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-6: The project 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. **(No Impact)**

The project site is not located within any Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat plan area. **(No Impact)**

3.4.2.2 *Cumulative Impacts*

Impact BIO-C: The project would not result in a cumulatively considerable contribution to a significant biological resources impact. **(Less than Significant Cumulative Impact)**

The proposed project, when combined with other projects in the Cities of Mountain View and Los Altos, would not result in a significant cumulative impact to biological resources. As described above, there is potential for nesting and migratory birds to occur in the project area due to the large number of mature trees bordering the site. The project would implement mitigation measures to avoid impacts to nesting and migratory birds which could result from construction activities occurring adjacent to on-site trees. These measures would reduce the project's contribution to cumulative impacts to nesting and migratory birds to a less than significant level. The project would not impact sensitive habitats or special status species. In addition, cumulative projects in the Cities of Mountain View and Los Altos are required to undergo site-specific analyses for their potential to adversely affect sensitive natural communities, habitats and special-status plant and animal species; if potential impacts are identified, mitigation measures would be incorporated into individual projects to reduce impacts to a less than significant level. For these reasons, the project would not result in a cumulatively considerable contribution to a significant biological resources impact. **(Less than Significant Cumulative Impact)**

3.5 CULTURAL RESOURCES

3.5.1 Environmental Setting

3.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection 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) 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.

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.²³

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously 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.” 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.

²³ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” March 14, 2006.

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.

3.5.1.2 *Existing Conditions*

The project site is an athletic field and track within an existing high school campus. The site is primarily covered by artificial turf, rubberized track, concrete, and small patches of natural grass. Existing structures on-site include a single-story restroom building, storage buildings, metal and wood bleachers, and a press box.

Prior historical analysis for the Mountain View High School Expansion Project found that there are no buildings on campus or in the area which are listed in the National or California Registers or in the Mountain View Register of Historic Resources.²⁴ There are no known prehistoric or historic archaeological resources on the project site. The project site is located at a distance (approximately 0.3-mile) from the closest waterway (Stevens Creek) which makes the presence of undiscovered archaeological resources unlikely.

3.5.2 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?

²⁴ Mountain View/Los Altos Union High School District. *Initial Study for the Mountain View High School Expansion Project*. November 2018.

3.5.2.1 *Project Impacts*

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. **(No Impact)**

The proposed project would not demolish any buildings. Furthermore, as discussed in *Section 3.5.1.2 Existing Conditions*, the project site does not contain any listed historic resources. There are no historic resources in the project vicinity whose integrity could be impacted due to incompatibility with the proposed stadium lights and PA system. Therefore, the proposed project would have no impact on historical resources. **(No Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in *Section 3.5.1.2 Existing Conditions*, the project site does not contain any recognized prehistoric or historic archaeological resources. Further, the possibility of encountering as-yet undiscovered archaeological resources is unlikely due to the developed state of the project site and its surroundings and the distance from Stevens Creek. Substantial excavation and grading would not be required to erect the stadium lights and the surface area of ground-disturbance would be minimal. Ground disturbance would be limited to excavation for the lighting pole foundations and trenching or boring for the electrical conduit installation.

While disturbance of archaeological resources is not anticipated during project implementation, there still remains the possibility that archaeological deposits are uncovered during project implementation. In the event that historic or prehistoric archaeological resources are encountered during project implementation, impacts to these resources would be considered significant.

Mitigation Measures: The project proposes to implement the following mitigation measure to reduce impacts to archaeological resources to a less than significant level:

MM CUL-2.1: In the event that cultural resources are found, all work within 50 feet of the find will stop and a qualified professional archaeologist or paleontologist will examine the find. If the find is determined to be significant, treatment recommendations will be developed and implemented before earthmoving or construction activities can recommence within the designated resource area.

The proposed project, with implementation of the mitigation measure identified above (MM CUL-2.1) in the unlikely event that cultural resources are uncovered during construction, would not result in a significant cultural resources impact. **(Less than Significant Impact with Mitigation Incorporated)**

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact with Mitigation Incorporated)**

While not expected, the presence of human remains cannot be entirely ruled out. In the event that human remains are encountered during site development, impacts to these resources would be considered significant.

Mitigation Measures: The project proposes to implement the following mitigation measure to reduce impacts to human remains to a less than significant level:

MM CUL-3.1: If human remains are discovered during construction, construction activities that could disturb the remains and any associated artifacts would halt and the project proponent shall contact the local Coroner's Office. The Coroner shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC would then name a Most Likely Descendant (MLD) to advise the project proponent on the manner of exposure and removal of burials and associated grave goods, and to help designate a place for the reburial of these materials. The MLD may make any recommendations they feel are culturally appropriate which may include keeping the remains in place.

With implementation of the mitigation measure described above, impacts to human remains would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

3.5.2.2 Cumulative Impacts

Impact CUL-C: The project would not result in a cumulatively considerable contribution to a significant cultural resources impact. **(Less than Significant Cumulative Impact)**

The proposed stadium lighting and PA system project would not result in the removal or irreversible alteration of any identified historic resources, nor would the project impact the integrity of historical resources in the City. Cumulative projects in the Cities of Mountain View and Los Altos could potentially impact historic resources; however, the proposed project would not contribute to these impacts. Cumulative projects at District facilities and in the City overall, including the proposed project, have the potential to impact prehistoric and historic archaeological resources when ground-disturbing activities are proposed. The proposed project would implement mitigation measures to reduce potential impacts to archaeological resources from site development, thereby reducing its contribution to a less than significant cumulative impact. The same applies to the project's impact on human remains, which would be reduced by adherence to MM CUL-3.1. For these reasons, the proposed project would not result in a cumulatively considerable contribution to a significant cultural resources impact. **(Less than Significant Cumulative Impact)**

3.6 ENERGY

3.6.1 Environmental Setting

3.6.1.1 *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. In 2008, Executive Order 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.

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.²⁵ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.²⁶

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.

²⁵ California Building Standards Commission. "California Building Standards Code." Accessed January 21, 2020. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

²⁶ California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed January 21, 2020. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

3.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.²⁷ Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.²⁸ 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 2018 was consumed primarily by the commercial sector (77 percent), followed by the residential sector consuming 23 percent. In 2018, a total of approximately 16,668 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.²⁹

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Mountain View.³⁰ SVCE sources the electricity and the Pacific Gas and Electric Company (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. Both options are considered 100 percent GHG-emission free.

Natural Gas

PG&E provides natural gas services within the City of Mountain View. In 2018, 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.³¹ In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, the industrial sector used 21 percent, and other uses used 10 percent. Transportation accounted for one percent of natural gas use in California. In 2018, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.³²

Fuel for Motor Vehicles

In 2018, 15.5 billion gallons of gasoline were sold in California.³³ The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily

²⁷ United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed January 3, 2020. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁸ United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed January 3, 2020. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁹ California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed January 3, 2020. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

³⁰ Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed January 3, 2020. <https://www.svcleanenergy.org/faqs>.

³¹ California Gas and Electric Utilities. 2019 *California Gas Report*. Accessed August 27, 2019. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.

³² California Energy Commission. "Natural Gas Consumption by County." Accessed February 21, 2019. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

³³ California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed March 3, 2020. <https://www.cdfta.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist>.

increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2018.³⁴ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks model years 2011 through 2020.^{35,36}

3.6.2 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, or wasteful use of energy resources, during project construction or operation?
- 2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?
- 3) Result in a substantial increase in demand upon energy resources in relation to projected supplies?

3.6.2.1 *Project Impacts*

Impact EN-1:	The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. (Less than Significant Impact)
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Construction

Construction of the project would require energy for the manufacture and transportation of building materials, preparation of the project site (i.e. demolition and grading), and the construction of the stadium lights. Construction energy usage is temporary and would not result in excessive energy consumption because construction processes are generally designed to be efficient to avoid excess monetary costs. The project would be constructed in an urbanized area with close access to roadways, construction supplies, and workers, making the project more efficient than construction occurring in outlying, more isolated areas. The project would be required to implement BAAQMD Best Management Practices (as outlined in MM AIR-2.1), which would restrict unnecessary idling of construction equipment and require the applicant to post signs on the project site reminding workers to shut off idle equipment, thus reducing the potential for energy waste. For the reasons discussed above, construction of the proposed stadium lights would not result in wasteful, inefficient, or unnecessary consumption of energy. **(Less than Significant Impact)**

³⁴ United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.

³⁵ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed March 3, 2020. <http://www.afdc.energy.gov/laws/eisa>.

³⁶ Public Law 110-140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed March 3, 2020. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

Operation

The use of the proposed stadium lights would be limited by the guidelines set forth in AR 7325(a), as discussed in *Section 3.1.1.1*. The guidelines require the proposed lights to be Musco #TLC-LED-1150 or equivalent/superior thereto; these lights are designed to be energy efficient and to emit no more light than is necessary to illuminate the playing field. The guidelines limit the use of the stadium lights to weekdays and Saturdays only. Use of the lights would be allowed for sports practices until 8:30 p.m. during weekdays; for no more than 25 night varsity interscholastic competitions per annual season; and for up to three special evening events which would conclude by 9:00 p.m. In addition, competition level lights are required to be turned off within 30 minutes of an event's conclusion. The guidelines set forth in AR 7325(a) limit the unnecessary or excessive consumption of energy due to the proposed stadium lights. **(Less than Significant Impact)**

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

The proposed lights would be designed for energy efficiency. Use of the lights would be restricted to the days and times set forth by BP 7325 and AR 7325 and described in *Section 2.2.2.1 Schedule of Use*. As a public school facilities project, the project would not be subject to compliance with any of the City of Mountain View 2030 General Plan or Greenhouse Gas Reduction Program policies pertaining to renewable energy or energy efficiency. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

Impact EN-3: The project would not result in a substantial increase in demand upon energy resources in relation to projected supplies. **(Less than Significant Impact)**

The proposed project would not substantially increase energy usage at the project site or in the City as a whole. Due to population increases, it is estimated that future demand in California for electricity will grow at approximately one percent each year through 2030, and that 339,160 GWh of electricity would be utilized in the State in 2030.³⁷ The proposed lighting project would only contribute marginally to projected demand increases. The project would not require the use of natural gas or other energy resources during its operation. Therefore, the project would not result in a substantial increase in demand upon energy resources in relation to projected supplies. **(Less than Significant Impact)**

3.6.2.2 Cumulative Impacts

Impact EN-C: The project would not result in a cumulatively considerable contribution to a significant energy impact. **(Less than Significant Cumulative Impact)**

Cumulative projects in the City would result in an increase in energy use relative to existing development. The City determined in the 2030 General Plan EIR that the expected increase in energy

³⁷ California Energy Commission. California Energy Demand 2018 – 2030 Revised Forecast. February 2018.

use upon General Plan buildout would not result in a significant impact. The proposed project would contribute to the expected citywide increase in energy use, although its contribution would not be substantial. Further, the proposed lights would be energy efficient and would not be used unnecessarily or wastefully. Implementation of energy efficiency requirements in adopted building codes, such as Title 24 and CALGreen, and implementation of various sustainability and conservation policies in the General Plan would ensure that cumulative development in the City does not result in a significant energy impact. Therefore, the project would not result in a cumulatively considerable contribution to a significant energy impact. **(Less than Significant Cumulative Impact)**

3.7 GEOLOGY AND SOILS

The following discussion is based, in part, upon a Geotechnical and Geohazard Investigation and supplemental geotechnical engineering recommendations prepared by *Cleary Consultants, Inc.* The reports, dated March 2014 and December 2019 respectively, are attached to this EIR as Appendix C.

3.7.1 Environmental Setting

3.7.1.1 *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 that 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 that 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 that 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; the current version is the 2019 CBC.

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 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

3.7.1.2 *Existing Conditions*

Regional Geologic Conditions

The proposed project is located within the Santa Clara Valley, a broad alluvial basin underlain by sedimentary and metamorphic rocks of the Franciscan Complex. The Santa Clara Valley is bounded by the Diablo Range to the east and the Santa Cruz Mountains to the west. The Valley was formed when sediments derived from both mountain ranges were exposed by tectonic uplift and regression of the inland sea which previously inundated this area.

The project site is located within the seismically active San Francisco Bay Area. The San Francisco Bay Area contains several faults that are capable of generating earthquakes of magnitude 7.0 or higher. The closest faults to the project site are the Monte-Vista Shannon (2.8 miles southwest), San Andreas (5.8 miles southwest), Hayward (13.5 miles northeast), and Calaveras (15.5 miles northeast) faults. In the event of a moderate to large earthquake occurring as a result of one of the faults mentioned above, strong ground shaking is likely to occur on-site.

On-Site Geologic Conditions

Soil

Exploratory borings drilled for the geotechnical investigation encountered predominantly loose to medium dense silty sand, clayey sand and sandy gravel, and firm to stiff sandy clay and gravelly sandy clay to the maximum depth explored of 45 feet. The upper sandy clay and clayey sand soils were determined to have a low to moderate expansion potential. These soils may expand and contract as a result of seasonal or man-made soil moisture conditions. Based on the resistivity testing, the soils were considered mildly corrosive.

Groundwater

The project site is located within an area where the generalized depth to groundwater is 120 to 130 feet. Free groundwater was not encountered in the borings performed for the geotechnical investigation. The depth to historically high groundwater in the site vicinity is greater than 50 feet below ground surface (bgs). Fluctuations of localized perched groundwater and the regional

groundwater level can occur due to variations in rainfall, temperature, runoff, irrigation, and other factors.

Fault Rupture and Ground Shaking

The project site is in proximity to several regional active faults, therefore strong ground shaking is likely to occur during the lifetime of the project in the event of an earthquake on any of the nearby active faults. The U.S. Geological Survey's 2014 Working Group on California Earthquake Probabilities has compiled the earthquake fault research for the San Francisco Bay Area in order to estimate the probability of fault segment rupture. It was determined that the overall probability of a magnitude 6.7 or greater earthquake occurring in the San Francisco Region during the next 30 years (beginning in 2014) is 72 percent. The highest probabilities were assigned to the Hayward Fault (14.3 percent), Calaveras Fault (7.4 percent), and the northern segment of the San Andreas Fault (6.4 percent).

The project site is located outside of the Special Studies Zones boundaries of the Alquist-Priolo Earthquake Fault Zoning Map and there are no known active or potentially active faults that cross the project site. Therefore, the potential for surface rupture to occur at the site is low.

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. Soils that are most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained, clay-free sands and silts that lie within 50 feet of the ground surface. Liquefaction can result in adverse impacts to human and building safety, and is typically addressed in the project design.

The project site is not located within a potential liquefaction hazard zone, as defined on maps produced by the California Geological Survey (CGS)³⁸ or on the Santa Clara County Geologic Hazard Zone Map (2012).

Landslide

The project site is located on relatively level ground and there are no hillsides or elevated areas in close proximity. Correspondingly, the project site is not located within a zone of required investigation for earthquake-induced landslides, as defined on maps produced by CGS and Santa Clara County Geologic Hazard Zone Map.

Other Seismic Hazards

Due to the site's relatively flat topography, and the absence of a shallow groundwater table, the potential for soil lurching and lateral spread is low. Ground cracking may be caused by any of the

³⁸ California Geological Survey. "Earthquake Zones of Required Investigation". Accessed July 17, 2019. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>

seismic hazards discussed above, however the low risk of liquefaction and seismically induced lateral spreading of the underlying soils determines that the risk of ground cracking occurrence is also low.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Mountain View High School is situated on alluvial fan deposits of the Holocene age. Geologic units of Holocene age are generally not considered sensitive for paleontological resources because biological remains younger than 10,000 years are not usually considered fossils.

Holocene sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources; however, these recent sediments overlie sediments of older Pleistocene sediments with high potential to contain paleontological resources. These older sediments, often found at depths of 10 feet or more below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates.³⁹

3.7.2 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 waste water disposal systems where sewers are not available for the disposal of waste water?
- 6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

³⁹ Mountain View/Los Altos Union High School District. *Initial Study for the Mountain View High School Expansion Project*. November 2018.

3.7.2.1 *Project Impacts*

Impact GEO-1: The project 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. **(Less than Significant Impact)**

Fault Rupture

The project site is not located within an Alquist-Priolo Earthquake Fault Zone or a Santa Clara County Fault Rupture Hazard Zone, making fault rupture at the site unlikely. While existing faults are located in the region, the proposed project is outside of the fault zone for any regional fault systems, and significant impacts from fault ruptures are not anticipated to occur. **(Less than Significant Impact)**

Seismic Ground Shaking and Ground Failure

The potential for strong ground shaking at the project site exists due to the likelihood of seismic activity generated by faults in proximity to the site; however, adherence to the 2019 California Building Code and the recommendations of a site specific geotechnical report would ensure that the proposed pole-mounted lights and PA system would resist minor earthquakes without damage and major earthquakes without collapse. In addition, the District shall work closely with the DSA during ultimate project design. The DSA is charged with ensuring that California's K-12 schools and community colleges are seismically safe and accessible to all. DSA fulfills the role by reviewing construction project plans for structural safety, fire and life safety.

The proposed stadium lights would not cause adverse effects due to seismic ground shaking or ground failures by adhering to the recommendations of the required geotechnical investigation, the 2019 California Building Code, and referring final project designs to the DSA for approval. **(Less than Significant Impact)**

Liquefaction, Landslides and Lateral Spreading

As discussed in *Section 3.7.1.2 Existing Conditions*, the proposed project site is not located within a State or County Seismic Hazard Zone for liquefaction. Lateral spreading is a geologic hazard commonly associated with liquefaction. This phenomenon occurs when ground-shaking induces the horizontal displacement of relatively flat-lying soil towards an open or "free" face such as an open body of water, drainage channel, or excavation. The project site is not located in a liquefaction hazard zone or adjacent to any waterway, drainage channel or excavation site. Thus, there is minimal risk of lateral spread affecting, or being exacerbated by, the proposed project. The site's level topography and absence of a shallow groundwater table determines that the likelihood of landslide occurrence is low. The site is not located within any identified landslide hazard zone and would not expose people or structures to risks from landslides. **(Less than Significant Impact)**

Impact GEO-2: The project would not result in substantial erosion or the loss of topsoil. **(Less than Significant Impact)**

The proposed project would install four new 90-foot tall cantilever light poles (two on each side of the track), planned to be supported on 36-inch diameter drilled pier foundations, extending to a depth of 14 to 20 feet below ground surface. This would require minimal ground disturbing activities, including minor excavation to construct the foundations for the pole-mounted lights and speaker posts and route the electrical conduit. Small portions of the project site would be exposed during this time. By implementing standard grading and best management practices, and adhering to the measures set forth in *Section 3.10 Hydrology and Water Quality* for the management of surface runoff and construction-related erosion, the proposed project would have a less than significant impact on soil erosion at the site. The following erosion measures are C.3 requirements under the Municipal Regional Stormwater Permit and would reduce possible construction-related erosion impacts:

- All excavation and grading work would be scheduled in dry weather months or construction sites would be weatherized⁴⁰ to withstand or avoid erosion.
- Stockpiles and excavated soils would be covered with secured tarps or plastic sheeting.
- Vegetation in disturbed areas would be replanted as quickly as possible.

Implementation of the identified erosion control measures would ensure that erosion and sedimentation impacts are less than significant. **(Less than Significant Impact)**

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

As discussed under Impact GEO-1 and GEO-2, the proposed project is not located in a Liquefaction Hazard Zone or a Landslide Hazard Zone. A design-level geotechnical investigation has been prepared for the proposed stadium lights and PA system project, which provides an analysis of the potential for any soil conditions to affect the structural integrity of the lights and pose hazards to on-site and nearby uses. The proposed lights and PA system would adhere to recommendations included in the geotechnical investigation to avoid and/or minimize hazards related to on-site geologic conditions. For these reasons, the proposed project would not result in adverse effects due to unstable geologic units or soil. **(Less than Significant Impact)**

⁴⁰ Weatherized refers to measures that would protect exposed soils from rain and stormwater runoff.

Impact GEO-4: The project 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. **(Less than Significant Impact)**

As discussed in *Section 3.7.1.2 Existing Conditions*, the soils underlying the project site have a low to moderate expansion potential. The project will be designed in accordance with the 2019 Building Code and the recommendations of the design-level geotechnical investigation prepared for the project and referred to the DSA for final review. In this manner, the project will not create direct or indirect risks to life or property due to the moderately expansive soils on-site. **(Less than Significant Impact)**

Impact GEO-5: The project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. **(No Impact)**

The proposed project is a stadium lighting and PA system project which would not require the disposal of wastewater. **(No Impact)**

Impact GEO-6: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(Less than Significant Impact with Mitigation Incorporated)**

Although not anticipated, construction activities could disturb paleontological resources, if present. Regardless, the project would implement the following mitigation measures, as necessary, to reduce potential impacts to paleontological resources.

Mitigation Measures: The project proposes to implement the following mitigation measure to reduce impacts to paleontological resources to a less than significant level:

MM GEO-6.1: If vertebrate fossils are discovered during construction, all work on the site will stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The District will be responsible for implementing the recommendations of the paleontological monitor, and a final report documenting the implementation of the treatment program shall be prepared.

The proposed project, with implementation of the mitigation measure identified above (MM GEO-6.1) in the unlikely event that paleontological resources are uncovered during construction, would not result in a significant impact to paleontological resources. **(Less Than Significant Impact with Mitigation Incorporated)**

3.7.2.2 *Cumulative Impacts*

Impact GEO-C: The project would not result in a cumulatively considerable contribution to a significant geology and soils impact. **(Less than Significant Cumulative Impact)**

Cumulative projects in the City of Mountain View and adjacent jurisdictions will be subject to similar geology, soils, and seismicity conditions as the proposed project. All cumulative projects occurring within the City of Mountain View will implement conditions of approval, mitigation measures, and ensure consistency with the California Building Code in order to avoid impacts related to seismic, geologic, and soils hazards and/or reduce them to a less than significant level.

Adhering to the mitigation measures for discovery of paleontological resources would ensure that these resources are not significantly impacted by the proposed project. Cumulative projects in the City would also be required to implement similar measures to reduce their individual impacts to these resources.

For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative geology and soils impacts. **(Less than Significant Cumulative Impact)**

3.8 GREENHOUSE GAS EMISSIONS

3.8.1 Environmental Setting

3.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

3.8.1.2 *Regulatory Framework*

Federal

Clean Air Act

The EPA is the federal agency responsible for implementing the Clean Air Act. The U.S. Supreme Court in its 2007 decision in *Massachusetts et al. v. Environmental Protection Agency et al.*, ruled that CO₂ is an air pollutant as defined under the Clean Air Act, and that EPA has the authority to regulate emissions of GHGs. Following the court decision, EPA has taken actions to regulate, monitor, and potentially reduce GHG emissions (primarily mobile emissions).

State

Assembly Bill 32

Under the California Global Warming Solution Act, also known as Assembly Bill (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, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order 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 (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, as compared to 2005 emissions levels. 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 2040 establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional

2017 Clean Air Plan

BAAQMD is the regional, government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties. BAAQMD and other agencies prepare clean air plans as required under the state and federal CAAs. The *Bay Area 2017 Clean Air Plan* focuses on two closely related BAAQMD goals: protecting public health and protecting the climate. The 2017 CAP lays the groundwork for the BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. The 2017 CAP includes a wide range of control measures designed to decrease 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.

Local

City of Mountain View Greenhouse Gas Reduction Program

The City of Mountain View adopted a Greenhouse Gas Reduction Program (GGRP) in July 2012. The GGRP is a long-range plan that implements the GHG emissions-reduction goals of the General Plan and serves as a programmatic GHG reduction strategy under CEQA. The GGRP includes goals, policies, performance standards, and implementation measures for achieving GHG emission reductions, to meet the requirements of AB 32. The GGRP includes a goal to improve communitywide emissions efficiency per-service population (i.e. residents and full-time employees) by 15 to 20 percent over 2005 levels by 2020 and by 30 percent over 2005 levels by 2030.

3.8.1.3 *Existing Conditions*

The project site an existing track and sports field within the MVHS campus. The track and sports field is used to host sporting events for MVHS teams, including practices and competitions. The maximum attendance of sporting events is typically for football games, two to five of which are hosted on-campus with the use of portable, temporary lights each year. Maximum attendance is approximately 1,000 people and over 2,000 people for normal and rivalry games, respectively. For all other events, attendance is approximately 200 people.

GHG emissions occur as a result of energy use from operations (i.e. natural gas use, water use, waste generation, etc.) and from vehicles traveling to and from the site. Electricity used at the site is GHG-emissions free because it is provided by SVCE, which purchases electricity from entirely GHG-free sources.

3.8.2 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?

3.8.2.1 *Project Impacts*

Impact GHG-1:	The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. (Less than Significant Impact)
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Construction

GHG emissions would be generated during construction of the proposed project, primarily from the operation of heavy equipment and materials transport to and from the site. Neither the District, nor the City of Mountain View nor BAAQMD have an adopted threshold of significance for

construction-related GHG emissions. BAAQMD recommends the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. Best management practices assumed to be incorporated into construction of the project include but are not limited to using at least 10 percent local building materials and recycling or reusing at least 50 percent of construction waste or demolition materials. Construction of the project is estimated to last six months. Because construction would be temporary and would not result in a permanent increase in emissions, the project would not result in a significant GHG impact due to construction emissions. **(Less than Significant Impact)**

Operation

Once operational, the proposed stadium lights and PA system would indirectly generate GHG emissions due to the energy required to power them. As discussed in *Section 3.6 Energy*, the proposed lights would not result in wasteful or unnecessary consumption of energy, as their use would be regulated by District's existing policies and regulations and the increase in energy expenditures would be marginal. Additionally, the electricity provided to the project site would be sourced from SVCE and would be 100 percent GHG emission-free.

The proposed project is estimated to result in a net increase of 500 attendees for regular football games, a net increase of 200 attendees for rivalry football games, and a net increase of 300 attendees for all other sporting events and special events, which are spread out throughout the year. The maximum increase in attendance (for regular football games) would correspond to a net increase in 170 daily vehicle trips and associated GHG emissions. While an increase in vehicle trips would occur, the increase would be negligible because the increase in trips would be limited to additional attendees of sporting events and special events which are currently hosted on campus. Further, sporting events and special events would occur intermittently at the field and the majority of events would have lower attendance than football games. The additional attendees would predominantly be students and parents from within the District boundaries; thus, the vehicle miles traveled (VMT) of the project would be less than events which have a regional or Countywide base. The proposed project would not increase enrollment capacity at MVHS. Aside from additional vehicle trips and operational energy use, the proposed project would not generate GHG emissions (e.g. no water use, solid waste, wastewater, or heating/cooling). Therefore, the proposed project would not result in a significant GHG emissions impact. **(Less than Significant Impact)**

Impact GHG-2: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

City of Mountain View Greenhouse Gas Reduction Program

As described previously, the City of Mountain View GGRP identifies a series of GHG emissions reduction measures to be implemented by development projects that would allow the City to achieve its GHG reduction goals. None of the mandatory reduction measures are directly applicable to the proposed lighting and PA system project. The proposed project would install LED lighting fixtures which are designed for energy efficiency, consistent with City measures for reducing GHG emissions from excess energy use. As described under Impact GHG-1, the proposed project would result in a

marginal increase in GHG emissions, primarily attributable to increased vehicle trips to the site as a result of increased event attendance. The increase in attendance (and associated vehicle trips) would not result in significant GHG emissions. For these reasons, the proposed project would not conflict with the City of Mountain View GGRP. **(Less than Significant Impact)**

3.8.2.2 *Cumulative Impacts*

Impact GHG-C: The project would not result in a cumulatively considerable contribution to a GHG emissions impact. **(Less than Significant Cumulative Impact)**

The discussion above addresses the project's contribution to the cumulative GHG emissions impacts on a regional, statewide, and global basis. Cumulatively considerable GHG emission impacts from cumulative development in Mountain View would be avoided by implementing measures included in the City's GGRP and incorporating mitigation measures into specific development projects, as necessary. **(Less than Significant Cumulative Impact).**

3.9 HAZARDS AND HAZARDOUS MATERIALS

3.9.1 Environmental Setting

3.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, and the Resource Conservation and Recovery Act. 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.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. 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 that 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.

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).⁴¹

⁴¹ CalEPA. "Cortese List Data Resources." Accessed January 10, 2020. <https://calepa.ca.gov/sitecleanup/corteselist>.

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 risk management plans as the CUPA.

3.9.1.2 *Existing Conditions*

Hazardous materials used at Mountain View High School include janitorial and landscaping materials, science class chemicals, photochemicals, and swimming pool maintenance chemicals. Hazardous materials reportedly are stored in secure areas with shelf liners and secondary containment. Floors of hazardous materials areas reportedly are inspected daily and hazardous materials storage areas are appropriately placarded. There are transformers, owned by Pacific Gas and Electric (PG&E) and the District, located on the high school campus.⁴²

Naturally-occurring asbestos (NOA) has been reported in soils from northern Santa Clara County, in which the project site is located. Groundwater was encountered at a depth of 120 to 130 feet. Fluctuations of groundwater levels can occur due to such factors as variations in rainfall, temperature, runoff, irrigation, and other factors. Groundwater flow is reported to be towards the north-northeast.

Site topography is generally level, with a site elevation of approximately 190 feet above mean sea level. The vicinity topography slopes very gently towards the north.

Historic Uses

The project site is located in the existing Mountain View High School campus. Historically, the project site was cultivated with orchards from at least the late-1930s through the mid-1950s. The original school buildings on the campus were constructed in 1961 and the football field was added shortly after.

On-Site Sources of Contamination

Residual Agricultural Chemicals

Historical agricultural use may have resulted in the presence of residual agricultural chemicals in shallow soils on the school campus. A Limited Phase II Subsurface Investigation was completed for the previously approved expansion project (2018) to determine the extent of contamination on-site. The Phase II focused on the area of campus previously proposed for development (the central/eastern portion of campus). The results of the Phase II indicated that organochlorine pesticides, arsenic, and lead were all detected at either below their respective Environmental Screening Levels (ESLs) or naturally-occurring background concentrations.

⁴² A transformer owned by PG&E is located west of the project site between the parking lot and the football field and a transformer owned by the District is located south of the project site near the small gym.

Regulatory Database Search

Various federal and state regulations require that government agencies maintain records of environmental permits; records of properties generating, handling, or storing hazardous materials; records of properties impacted by regulated compounds; and records of properties under investigation by the government for alleged violations of hazardous material regulations.

A search of federal and state databases was undertaken as part of the Phase I ESA. A list of the databases searched and the results are provided in Appendix D. Mountain View High School was listed in the Resource Conservation Recovery Act (RCRA) Small Quantity Generator, Facility Index System (FINDS), ECHO, CUPA listings, California Environmental Reporting System (CERS), CERS HAZ WASTE, and Hazardous Waste (HAZNET) databases for hazardous waste disposal. A notice of a RCRA generator violation was issued to the school in November 2005 for general violation of generator requirements. The violation was reported as corrected in February 2006. The CUPA listing documented Mountain View High School as a facility with a hazardous materials business plan (HMBP) with seven to nine chemicals and as a generator of 100 kg to less than five tons of hazardous waste per year. The CERS listings similarly documented Mountain View High School as a hazardous waste generator and a chemical storage facility. Violations from 2016 and 2017 were for paperwork issues. The HAZNET listings were for disposal of wastes including off-spec/aged/surplus organics, liquids with metals, photochemicals / photoprocessing waste, and laboratory waste chemicals, among others (1994 to 2016). Additional HAZNET listings from 1998, 1999, 2002 and 2015 were for disposal of asbestos-containing waste; listings from 1998 and 2002 also indicated disposal of polychlorinated biphenyl (PCB) waste. No significant information was included in the ECHO or FINDS database listings. None of the listings indicate a significant environmental concern.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.⁴³

Naturally-Occurring Asbestos

The presence of ultramafic rock outcrops, indicating the potential presence of NOA, was documented approximately 11 miles to the southeast and 12 miles to the northwest from the project site. The DTSC Schools Division recommends testing for NOA if such outcrops are present within 10 miles of a school site. Based on the proximity, there was no need for any additional testing.

Off-Site Sources of Contamination

An environmental regulatory database search was also completed for properties that could be hazardous to the project site. The District Office building adjoining east of MVHS was included on the Leaking Underground Storage Tank (LUST), Historical LUST and Cortese databases for a spill of diesel to soil only from a former Underground Storage Tank (UST). The LUST case was closed in 1995. The District Office also was included on databases related to storage/generation of hazardous materials and wastes. Based on the information available, and the down-gradient location of the District Office from the site, the listings are not of concern to the site.

⁴³ California Environmental Protection Agency. "Cortese List Data Resources". Accessed January 10, 2020. <https://calepa.ca.gov/sitecleanup/corteselist/>.

Airports

The project site is not located within the Santa Clara County Airport Land Use Commission (ALUC) jurisdiction, or within the vicinity of an airstrip. The project site is located 3.4 miles southwest of the Moffett Federal Airfield and seven miles south of Palo Alto Municipal Airport

Wildland Fires

The project site is not located within a California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone.⁴⁴

3.9.2 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 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?

⁴⁴ California Department of Forestry and Fire Protection. "Fire Hazard Severity Zones Maps." November 2007. <https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed January 20, 2020.

3.9.2.1 *Project Impacts*

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

Construction of the proposed project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and fluids. All hazardous materials would, however, be transported, contained, stored, used, and disposed of in accordance with manufacturers' instructions and would be handled in compliance with all applicable standards and regulations. Construction-related hazardous materials use would be temporary, which does not constitute routine transport, use, or disposal.

The proposed stadium lighting and PA system project would not involve the routine transport, use, or disposal of hazardous materials. For sporting practices, games, and special events, as proposed by the project, the extent of hazardous materials used would generally be limited to those needed for cleaning and maintenance. Compliance with applicable federal, state, and local laws and regulations pertaining to the handling, storage, and disposal of hazardous materials would ensure that no significant hazards to the public or the environment result, if such routine activities were to occur. The project would facilitate flexible use of the track and sports field for events which currently occur on campus; thus, no significant hazard to the public or the environment would result. **(Less than Significant Impact)**

Impact HAZ-2: The project 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. **(Less than Significant Impact with Mitigation Incorporated)**

Residual Agricultural Chemicals

As described above in *Section 3.9.1.2 Existing Conditions*, soil samples were collected from a small portion of the school campus and laboratory tested for OCPs and pesticide-related metals. Although the lab results show that man-made contaminants (OCPs and lead) did not exceed the levels established for residential or other sensitive uses (including schools), additional sampling is recommended, as construction of the proposed lighting and PA system project would occur in a different area of campus than the previously sampled area. Furthermore, since completion of the soil sampling the RWQCB has updated their ESLs (effective January 24, 2019) and the levels of residual agricultural contaminants should be compared to the most current screening levels. Construction of the proposed lights and PA system could expose construction workers and/or the environment to elevated levels of OCPs, arsenic, and lead. This would constitute a significant impact.

Mitigation Measures: The project shall implement the following mitigation measures to reduce impacts from exposure to OCPs, arsenic, and lead to a less than significant level:

MM HAZ-2.1: The project shall implement the following mitigation measures to reduce impacts from exposure to OCPs and lead to a less than significant level:

- Prior to excavation at the project site, additional soil sampling/testing shall be completed to define the lateral and vertical extent of the impacted soil.
- The soil detected above the regulatory standards for residential uses shall be excavated and disposed off-site at a permitted facility.
- The soils that remain shall undergo confirmation sampling to ensure their concentrations are below the appropriate regulatory thresholds.

With implementation of MM HAZ-2.1, impacts to construction workers and/or the environment from elevated pesticides and metals identified in shallow soils at the site would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

Naturally Occurring Asbestos

As discussed in *Section 3.9.1.2*, the distance to the nearest NOA-containing rock exceeds the DTSC recommended distance of 10 miles that would trigger soil sampling, therefore, no testing for NOA was recommended. **(Less than Significant Impact)**

Off-Site

As discussed above, regulatory databases were reviewed to identify known or suspected off-site sources of contamination. Information contained in the database search report did not reveal the presence of vicinity properties appearing likely to have significantly impacted the site through documented releases to soil and/or groundwater. **(Less than Significant Impact)**

Impact HAZ-3: The project 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. **(Less than Significant Impact)**

The proposed project is located within MVHS campus. As described above, hazardous materials used at Mountain View High School include janitorial and landscaping materials, science class chemicals, photochemicals, and swimming pool maintenance chemicals. Hazardous materials reportedly are stored in secure areas with shelf liners and secondary containment. Floors of hazardous materials areas reportedly are inspected daily and hazardous materials storage areas are appropriately placarded. During construction of the proposed project, the mitigation measures described above (MM HAZ-2.1) would be implemented to ensure that school uses are not exposed to hazardous materials, substances, or waste. Operation of the field lights and PA system would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Therefore, the impact would be less than significant. **(Less than Significant Impact)**

Impact HAZ-4: The project would not 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, create a significant hazard to the public or the environment. **(Less than Significant Impact)**

As described in *Section 3.9.1.2 Existing Conditions*, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. **(Less than Significant Impact)**

Impact HAZ-5: The project would not 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(No Impact)**

The project site is located 3.3 miles southwest of the Moffett Federal Airfield and seven miles south of Palo Alto Municipal Airport. The project is not within the Airport Influence Area or safety zones for either airport. **(No Impact)**

Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The proposed project is the installation of field lights and PA system and would not alter the existing emergency access to the project site and/or the existing roadway system surrounding the site. Therefore, the project would not interfere with an emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

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

As described previously in *Section 3.9.1.2 Existing Conditions*, the project site is not located within a CALFire Hazard Severity Zone. Therefore, the proposed project would not expose people or structures to wildland fires. **(No Impact)**

3.9.2.2 *Cumulative Impacts*

Impact HAZ-C: The project would not result in a cumulatively considerable contribution to a significant hazards and hazardous materials impact. **(Less than Significant Cumulative Impact)**

Cumulative projects in the Cities of Mountain View and Los Altos are likely to be proposed on sites that were previously developed with industrial or commercial uses. It is likely that hazardous materials may have been stored and used on, and/or transported to and from some of these properties as part of the use of the sites. Historical or current hazardous materials use could result in residual soil and/or groundwater contamination related to petroleum products, leaking storage tanks, or chemical releases. Contamination on sites proposed for future projects in the City could have impacts on the health and safety of construction workers, adjacent uses, and future site occupants.

In addition, many of the properties in Mountain View and surrounding cities were used for agricultural purposes prior to their development for industrial and residential uses and agricultural chemicals such as pesticides and fertilizers may have been used on these sites in the past. The use of these chemicals can result in widespread residual soil contamination, sometimes in concentrations that exceed regulatory thresholds. In addition, development and redevelopment of some of the sites would require demolition of existing buildings that may contain ACMs and/or lead based paint. Demolition of these structures could expose construction workers or other persons in the vicinity to harmful levels of asbestos or lead.

Based on the above-described conditions, which are present on most project sites to varying degrees, potentially significant environmental impacts could occur under the cumulative development scenario since such conditions can lead to the exposure of residents and/or workers to substances that have been shown to adversely affect health. Although individual impacts could generate hazardous materials impacts, these impacts are typically localized to a specific development site and there is low potential for any cumulative projects' impacts to overlap. Each of the cumulative projects under consideration would be required to assess the potential for past or current hazardous site conditions to affect, or be affected by, the proposed project. In accordance with General Plan policies, cumulative projects would include mitigation measures or permit conditions to reduce potential impacts from the project to the health and safety of the public and the environment. Measures would include incorporating the requirements of applicable existing local, state, and federal laws, regulations, and agencies such as DTSC and Cal/OSHA, during all phases of project development. By adhering to federal and state regulations, City policies, and the mitigation measures set forth in this section, the proposed project would not result in a significant hazardous materials impact, nor would it result in a cumulatively considerable contribution to a significant hazards and hazardous materials impact. **(Less than Significant Cumulative Impact)**

3.10 HYDROLOGY AND WATER QUALITY

3.10.1 Environmental Setting

3.10.1.1 *Regulatory Framework*

Overview

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 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.

Federal and State

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) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, monitoring for projects of certain risk levels. 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.⁴⁵ 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.

Water Resources Protection Ordinance and District Well Ordinance

The Santa Clara Valley Water District (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.

3.10.1.2 *Existing Conditions*

The project site consists of a track and sports field within the MVHS campus. The track and sports field contains a rubberized track, turf athletic field, metal and wood bleachers, and various auxiliary buildings which support uses of the field. The site is approximately 190 feet above sea level.

Drainage and Flooding

The site is located within a developed, suburban area of Mountain View, and there are no streams or waterways present on the site. The nearest waterways to the project site include Stevens Creek (approximately 0.3-mile east of the site) and Permanente Creek (approximately one mile west of the site). The project site is located within the Permanente Creek watershed.⁴⁶

Runoff from Mountain View High School is conveyed into a 12 to 30-inch storm drain line in Bryant Avenue and an 18 to 24-inch storm drain line in Truman Avenue. Runoff from the Mountain View High School campus enters the storm drain line and flows to Permanente Creek, which then discharges into Stevens Creek and eventually flows into the San Francisco Bay.

⁴⁵ MRP Number CAS612008

⁴⁶ City of Mountain View. *Mountain View General Plan Update – Current Conditions Report*. Figure 12-3 Major Surface Water Features. 2009.

The project site is not located within a designated 100-year floodplain. According to the FEMA's Flood Insurance Rate Map, the project site is located within Zone X.⁴⁷ Flood Zone X is defined as an area with a 0.2 percent annual chance of flood hazard.

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 “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Stormwater runoff from the project area is collected by storm drains and discharged into Permanente Creek and eventually flows to the San Francisco Bay. The 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.

Groundwater

The project site is located within the Santa Clara Valley Groundwater Basin, Santa Clara Subbasin. Groundwater is expected at depths of approximately 120 to 130 feet beneath ground surface. Groundwater flows towards the north-northeast direction. The project site is not located within any of the Santa Clara Valley Water District's (Valley Water) designated groundwater recharge areas.⁴⁸

Dam Failure

The site is not located within the dam failure inundation zones of the storage reservoirs in Santa Clara County, as mapped by Valley Water, including Anderson (2016) and Stevens Creek (1994) dams.

Seiches, Tsunamis, and Mudflows

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project sites that in the event of a seiche will affect the sites.

A tsunami or tidal wave is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site is located approximately five miles south of the San Francisco Bay. The project site does not lie within a tsunami inundation hazard area.⁴⁹

⁴⁷ Federal Emergency Management Agency. “FEMA Flood Map Service Center”. Accessed January 21, 2020. <https://msc.fema.gov/portal/home..>

⁴⁸ SCVWD. *2016 Groundwater Management Plan*. Figure 1-3. 2016.

⁴⁹ Association of Bay Area Governments. *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*. Accessed January 21, 2020. <http://resilience.abag.ca.gov/tsunamis/>.

A mudflow is the rapid movement of a large mass of mud formed from loose soil and water. The project site is not susceptible to mudflows.⁵⁰

3.10.2 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?

3.10.2.1 *Project Impacts*

Impact HYD-1:	The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Less than Significant Impact)
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Construction-Related Water Quality Impacts

Construction activities (e.g., grading and excavation) on the project site may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, the surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. Construction of the project would disturb less than one acre of the site, which is the threshold for compliance with the Construction General Permit. Although the project would not be required to file an NOI and prepare a SWPPP, as required by the Construction General Permit, standard

⁵⁰ Association of Bay Area Governments. "Landslide Maps and Information". Accessed January 21, 2020. <http://resilience.abag.ca.gov/landslides/>.

measures would be implemented by the project to prevent stormwater pollution and minimize potential sedimentation during construction.

Standard Measures

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains. Silt sacks shall also be installed at all catch basins.
- Earthmoving or other dust-producing activities would be suspended during periods of high winds.
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered.
- All trucks hauling soil, sand, and other loose materials would be covered and all trucks would be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers).
- Vegetation in disturbed areas would be replanted as quickly as possible.
- A construction entrance shall be installed and maintained at all times to prevent sediment tracking.

With implementation of the identified construction measures, construction of the proposed project would have a less than significant impact on water quality. **(Less than Significant Impact)**

Post-Construction Water Quality Impacts

The proposed project would install four pole-mounted lights and 12 pole-mounted loudspeakers at the MVHS track and sports field. The project would not add or replace more than 10,000 square feet of impervious surface area; therefore, the project would not be subject to conformance with Provision C.3 of the MRP. Stormwater treatment control measures would not be required to be implemented by the proposed project due to the small scale of disturbance. Therefore, the proposed project would not result in any post-construction water quality impacts. **(Less than Significant Impact)**

Impact HYD-2: The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(Less than Significant Impact)**

As mentioned in *Section 3.10.1.2 Existing Conditions*, the project site is not located within a groundwater recharge area. The proposed project would not extract groundwater nor create a new demand for water which could impact groundwater supplies. For these reasons, the proposed project would not decrease groundwater supplies and would not impede sustainable groundwater management of the Santa Clara subbasin. **(Less than Significant Impact)**

Impact HYD-3: The project 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. **(Less than Significant Impact)**

The proposed project would not alter the course of a stream or river. The proposed project could result in a minor increase in impervious surfaces and associated stormwater runoff, primarily due to the light pole and speaker foundations. The amount of stormwater runoff generated by the proposed project would be negligible and would not result in a significant drainage impact. During construction, erosion and siltation would be managed by adherence to standard stormwater control measures, as described under Impact HYD-1. Once operational, the proposed project would not increase stormwater runoff at a rate which would result in flooding on- or off-site or exceed the capacity of the existing drainage system. The drainage pattern of the site would remain the same upon project implementation, with runoff captured by storm drain inlets in surrounding streets before being conveyed to the City's storm drain system. Due to the small scale of development and the minimal impervious surfaces which would be created, the proposed project would not substantially increase polluted runoff or impede or redirect flood flows. For these reasons, the proposed project would not result in a significant drainage impact. **(Less than Significant Impact)**

Impact HYD-4: The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

The project site is located in a moderate to low flood risk area (Flood Zone X). The project site is located approximately five miles from the San Francisco Bay and is outside of tsunami and seiche zones. The project proposes to install four pole-mounted stadium lights and an upgraded PA system; none of the project components would be sources of pollutants. Therefore, the project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

The RWQCB updates its Basin Plan triennially to reflect current conditions and track progress towards meeting water quality objectives. The proposed project would comply with the Construction General Permit, the MRP and construction BMPs discussed in Impact HYD-1, thereby ensuring construction-period and post-construction water quality impacts are minimized. By adhering to existing regulations, the proposed project would not prevent the RWQCB from attaining the water quality objectives set forth in the Basin Plan.

Valley Water prepared a Groundwater Management Plan (GMP) 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 GMP 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. Implementation of the proposed project would not interfere with any actions set forth by Valley Water in its GMP regarding groundwater recharge, transport of groundwater, and/or groundwater quality. Therefore, the proposed project would not preclude the implementation of the GMP. **(Less than Significant Impact)**

3.10.2.2 *Cumulative Impacts*

Impact HYD-C: The project would not result in a cumulatively considerable contribution to a significant hydrology and water quality impact. **(Less than Significant Cumulative Impact)**

Projects in the cumulative scenario listed in Table 3.0-1: Cumulative Projects List would involve redevelopment of existing developed sites with substantial impervious surfaces, and these projects would be required to conform to applicable City of Mountain View 2030 General Plan goals, policies, action statements and Municipal Code requirements regarding stormwater runoff, infrastructure and flooding. The proposed project would result in a negligible increase in stormwater runoff and would not make a significant contribution to cumulative hydrology and water quality impacts throughout the City.

The existing policies and regulations would reduce the hydrology and water quality impacts of the proposed project and cumulative projects in the area; therefore, the project would not result in significant cumulative impacts to hydrology and water quality. **(Less than Significant Cumulative Impact)**

3.11 LAND USE AND PLANNING

3.11.1 Environmental Setting

3.11.1.1 *Regulatory Framework*

The Lead Agency for the project is the Mountain View Los Altos High School District. The project would not be subject to the land use regulations of the City of Mountain View (e.g. 2030 General Plan and Municipal Code) except when analyzing off-site impacts within the jurisdiction of the City. The project site is not part of an approved habitat conservation plan or natural community conservation plan.

3.11.1.2 *Existing Conditions*

The project site is part of the existing Mountain View High School campus located at 3535 Truman Avenue in the City of Mountain View. Mountain View High School is one of the two high schools in the MVLA District. The other high school is Los Altos High School located at 201 Almond Avenue in Los Altos.

The Mountain View General Plan Land Use Map shows the general distribution, location, and intensity of land uses throughout the City. Mountain View High School is designated as *Neighborhood/Community Parks, Schools, and Open Space*. According to the City's General Plan, this land use designation is intended for open space, leisure, recreational, and educational uses that serve surrounding neighborhoods and districts.

The Mountain View High School Campus is located in a mostly residential neighborhood, consisting primarily of one- to two-story single-family units. There is an existing church to the west of the campus at the northeast quadrant of Truman Avenue and Oak Avenue. Alta Vista, a continuation high school, is located adjacent to the east of the project site. The project site is not part of an approved habitat conservation plan or natural community conservation plan.

3.11.2 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?

3.11.2.1 *Project Impacts*

Impact LU-1:	The project would not physically divide an established community. (No Impact)
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The proposed project would not change the existing school use on the site. Installation of the proposed lights and PA system would be limited to within the boundaries of the Mountain View

High School campus. While there are residential neighborhoods surrounding all sides of the campus, existing neighborhoods would not be divided, nor would access to these neighborhoods be inhibited by the proposed project. The proposed project does not involve the construction of dividing infrastructure like highways, freeways, or major arterial streets. Therefore, the proposed project would not physically divide an established community. **(No Impact)**

Impact LU-2: The project 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. **(No Impact)**

The District is the Lead Agency for the proposed project and the proposed project does not conflict with any District land use plan, policy, or regulation, including the District's 2018 Master Plan. As discussed above, the project is not subject to the land use plans, policies, or regulations of the City of Mountain View, aside from project effects which would occur off-site in the City's jurisdiction. These effects, primarily limited to noise and traffic, are discussed in their respective resource sections (*Sections 3.13 and 3.17*). The project would be consistent with District plans, policies, and regulations. Additionally, as discussed above in *Section 3.11.1.2 Existing Conditions*, the project site is not part of an approved habitat conservation plan or natural community conservation plan. Therefore, no impacts would occur due to conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect. **(No Impact)**

3.11.2.2 Cumulative Impacts

Impact LU-C: The project would not result in a cumulatively considerable contribution to a significant land use and planning impact. **(Less than Significant Cumulative Impact)**

As discussed under Impact LU-1 and LU-2, the project would not divide an established community, and would be consistent with land use and facility requirements identified in the District's 2018 Master Plan. Other projects in the City would be required to go through the City's development review process. Projects would be analyzed for conformance with applicable policies adopted for the purpose of avoiding or mitigating an environmental impact through the CEQA review process. The project, in combination with other cumulative development, would not result in a significant cumulative land use impact. **(Less than Significant Cumulative Impact)**

3.12 MINERAL RESOURCES

3.12.1 Environmental Setting

3.12.1.1 *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.

3.12.1.2 *Existing Conditions*

The project site is located within an existing high school campus. No record exists of gravel or other mineral resource extraction on the project site or high school campus.

3.12.2 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?

3.12.2.1 *Project Impacts*

Impact MIN-1:	The project 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. (No Impact)
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The proposed project involves the construction of stadium lights and PA system on a site that is already developed, within the Mountain View High School campus. There are no known mineral resources on-site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource. **(No Impact)**

Impact MIN-2: The project 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. **(No Impact)**

The project site has not been identified as a locally important mineral resource recovery site in the City of Mountain View's General Plan, or in any other land use plan. Therefore, loss of an important mineral resource recovery site would not result from implementation of the proposed project. **(No Impact)**

3.12.2.2 *Cumulative Impacts*

Impact MIN-C: The project would not result in a cumulatively considerable contribution to a significant mineral resources impact. **(No Cumulative Impact)**

The proposed project would not result in an impact due to the loss of availability of a known mineral resource, nor would it result in the loss of an important or locally planned mineral resource recovery site. The potential for future mineral recovery within the project site and in the project area is minimal. Therefore, the proposed project would not contribute to a cumulatively considerable mineral resource impact. **(No Cumulative Impact)**

3.13 NOISE

The following discussion is based, in part, on a noise and vibration assessment prepared by *Illingworth & Rodkin, Inc.* The assessment, dated April 7, 2020, is included in this EIR as Appendix D.

3.13.1 Environmental Setting

3.13.1.1 *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} , DNL, or CNEL.⁵¹ 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.

⁵¹ 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 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

3.13.1.2 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. 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 3.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 3.13-1: 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. <i>Transit Noise and Vibration Assessment Manual</i> . September 2018.			

Local

Mountain View Los Altos High School District Board and Administrative Policies

The District has adopted policies which regulate the use of stadium lights and public address systems on District facilities. Board Policy (BP) 7325 sets guidelines for the creation and periodic review of administrative regulations that guide the use of stadium lights and public address systems.

Administrative Regulation (AR) 7325(a) sets general regulations and use guidelines for stadium lights and public address systems. The following regulations and use guidelines in AR 7325(a) are applicable to the proposed project's noise impacts:

-Use Guidelines for Public Address Systems

The use of the public address systems shall be limited by the following restriction except under unusual circumstances, and then as approved by the Superintendent or designee. Except for Commencement exercises, only District owned or provided sound equipment shall be used when using the stadium or fields, and they must be used without modification.

- 1) School administration shall make sure that operators of the public address systems have been properly trained, and shall limit the number of people allowed to use the public address

systems. The District will develop written procedures for users that describe the restrictions of use.

- 2) Commencement exercises may use supplemental public address equipment rented by the District, as well as District owned public address systems. District owned public address systems may be used for teacher workday activities, such as – but not limited to – student body events, emergency drills, evacuations and special events. Otherwise, use of the public address systems shall be limited to athletic competitions, evening special events, and events preapproved for certain school holidays, as described and limited in item 6 below. Running commentary (play by play announcements) shall be permitted only during football competition. All other athletic competitions shall limit the use of the public address systems to announcements, warm-up music or similar uses without running commentary.
- 3) Sound equipment shall not be used during athletic practice.
- 4) Public address systems will not be used on Sundays, except under unusual circumstances and approved by the Superintendent or designee and subsequently by the Board at a public session of a Board meeting, or else by the Board at a public session of a Board meeting upon appeal of the Superintendent’s denial.
- 5) The District will have the stadium public address system professionally designed, installed, tuned, and field-tested with the goal of meeting the standards of the Mountain View 2030 General Plan to the greatest extent that goal is capable of being accomplished in a successful manner within a reasonable period time, taking into account economic, environmental, legal, social, and technological factors. The District’s other sound equipment, including portable public address systems, will be modified or purchased with the same goal.
- 6) Holiday Use: Use of public address systems for Martin Luther King, Jr. Day, Labor Day or Veteran’s Day requires prior written approval by the Superintendent or designee and subsequently by the Board at a public session of a Board meeting, or else by the Board at a public session of a Board meeting upon appeal of the Superintendent’s denial. Approval shall be given only if the use is in support of a curricular objective of the District and in solemn commemoration of the ideals these holidays represent. Use of the public address systems on these school holidays is otherwise not allowed, and on other school holidays is not allowed, except for the grandfathered exception of the MVHS Turkey Trot on Thanksgiving Day. Allowed use of public address systems on school holidays shall be limited by all provisions described in BP 7325 and this body of administrative regulations. Use of public address systems during holidays shall not begin prior to 10:00 a.m.; shall be limited to necessary and occasional announcements, and occasional music played at volumes low enough not to interfere with ordinary conversation at the school site’s boundary lines; and shall end by 2:00 p.m. The one grandfathered exception to the start time is the MVHS Turkey Trot event that is permitted to begin use of sound equipment at 8:00 a.m. on Thanksgiving morning.

-Marching Band Use and Competitions

The competitive season for Mountain View High School and Los Altos High School marching bands historically begins in August and continues through November. The competitive season may be extended in order to prepare for postseason regional or national competitions, but in no case before August 1 or after December 31, except by permission of the Superintendent or designee.

- 1) Marching Band Practice: Practice may be held with the use of the stadium lights and the public address system one weeknight per week ending by 8:00 p.m. and an additional weeknight per week ending by 6:30 p.m. Marching band practice may be held during morning, afternoon and Saturday hours without stadium lights, but with the restriction that there must be 12 hours between an evening practice and the following morning's practice.
- 2) Community Impact: Marching band directors shall take reasonable steps to minimize the impact of sound on the surrounding neighborhoods during practice sessions. The District shall have minor alterations made to practice areas as necessary to facilitate the implementation of these steps.
- 3) Night performances by either the marching band or the pep band are limited to five night athletic competitions, Commencement, and at most three special evening events approved by the Superintendent or designee.

Mountain View General Plan Noise Standards

The City of Mountain View's 2030 General Plan establishes the following goals and policies that would be applicable to the proposed project.

Policy NOI 1.1: Use the Outdoor Noise Acceptability Guidelines as a guide for planning and development decisions.

Policy NOI 1.4 Use site planning and project design strategies to achieve the noise level standards in NOI 1.1 (Land use compatibility) and in NOI 1.2 (Noise-sensitive land uses). The use of noise barriers shall be considered after all practical design-related noise measures have been integrated into the project design.

Policy NOI-1.6: Minimize noise impacts on noise-sensitive land uses, such as residential uses, schools, hospitals, and child-care facilities.

Policy NOI 1.7: Restrict noise levels from stationary sources through enforcement of the Noise Ordinance.

The Outdoor Noise Acceptability Guidelines (Table 7.1 in the General Plan) show that for residential single-family, duplex, and mobile homes, noise levels up to 55 dBA DNL are normally acceptable, noise levels of 55 to 70 dBA DNL are conditionally acceptable, noise levels of 70 to 75 dBA DNL are normally unacceptable, and noise levels greater than 75 dBA DNL are clearly unacceptable. For schools, libraries, churches, hospitals, and nursing homes, noise levels up to 60 dBA DNL are normally acceptable, noise levels of 60 to 70 dBA DNL are conditionally acceptable, noise levels of 70 to 80 dBA DNL are normally unacceptable, and noise levels greater than 80 dBA DNL are clearly unacceptable.

Mountain View City Code

The City of Mountain View addresses noise regulations and goals in the Zoning Ordinance of the City Code. These regulations help protect the community from exposure to excessive noise and also specify how noise is measured and regulated. Noise is also regulated through project conditions of

approval. The Mountain View Police Department and the City Attorney's office 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), the construction occurs in areas immediately adjoining noise-sensitive land uses (e.g., residences), and/or when construction duration lasts over 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.

The City of Mountain View also identifies limits on 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 City 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 Zoning Administrator.

Los Altos General Plan Noise Standards

The Natural Environment & Hazards Element of the City of Los Altos' General Plan contains Noise and Land Use Compatibility Standards policies that are applicable to the project. Residential land uses are considered normally acceptable when sites are exposed to noise levels below 60 dBA L_{dn} , conditionally acceptable when exposed to noise levels between 60 and 70 dBA L_{dn} , normally unacceptable when exposed to noise levels of between 70 and 75 dBA L_{dn} and clearly unacceptable when exposed to noise levels above 75 dBA L_{dn} .

City of Los Altos Municipal Code

The City's Noise Control Ordinance was adopted to control unnecessary, excessive, and annoying noise and vibration within the City. Specifically, Chapter 6.16.50 of the Los Altos Municipal Code establishes exterior noise limits for various zoning districts, as shown in Table 3.13-2.

Table 3.13-2: City of Los Altos Exterior Noise Limits		
Receiving Land Use Category	Time Period	Noise Level (dBA)
All R1 Zoning Districts	10:00 p.m. – 7:00 a.m.	45
	7:00 a.m. – 10:00 p.m.	55
All R3 Zoning Districts	10:00 p.m. – 7:00 a.m.	50
	7:00 a.m. – 10:00 p.m.	55
All OA Zoning Districts	10:00 p.m. – 7:00 a.m.	55
	7:00 a.m. – 10:00 p.m.	60
All C Zoning Districts	10:00 p.m. – 7:00 a.m.	60
	7:00 a.m. – 10:00 p.m.	65
<i>Source: City of Los Altos, 2017</i>		

The Municipal Code prohibits the production of noise on one property that would (i) exceed the noise standard on any other property for a cumulative period of more than thirty minutes in any hour; (ii) exceed the noise standard plus five dB on any other property for a cumulative period of more than fifteen minutes in any hour; (iii) exceed the noise standard plus 10 dB on any other property for a cumulative period of more than five minutes in any hour; (iv) exceed the noise standard plus 15 dB on any other property for a cumulative period of more than one minute in any hour; or (vi) exceed the noise standard plus 20 dB or the maximum measured ambient on any other property for any period of time.

The Code states that if the measured ambient level exceeds the maximum permissible noise level within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five dB increments in each category as appropriate to encompass or reflect such ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level. If the noise measurement occurs on a property adjacent to a zone boundary, the noise level limit applicable to the lower noise zone, plus five dB is the applicable noise limit.

To ensure that unnecessary or excessive noise disturbances from specific activities and equipment are avoided, the Noise Control Ordinance sets noise thresholds for musical instruments, loudspeakers, loading and unloading, construction and demolition, and air-conditioning equipment (*Section 6.16.070*). Exceeding those thresholds is considered a prohibited act and would constitute a violation of the Ordinance.

3.13.1.3 *Existing Conditions*

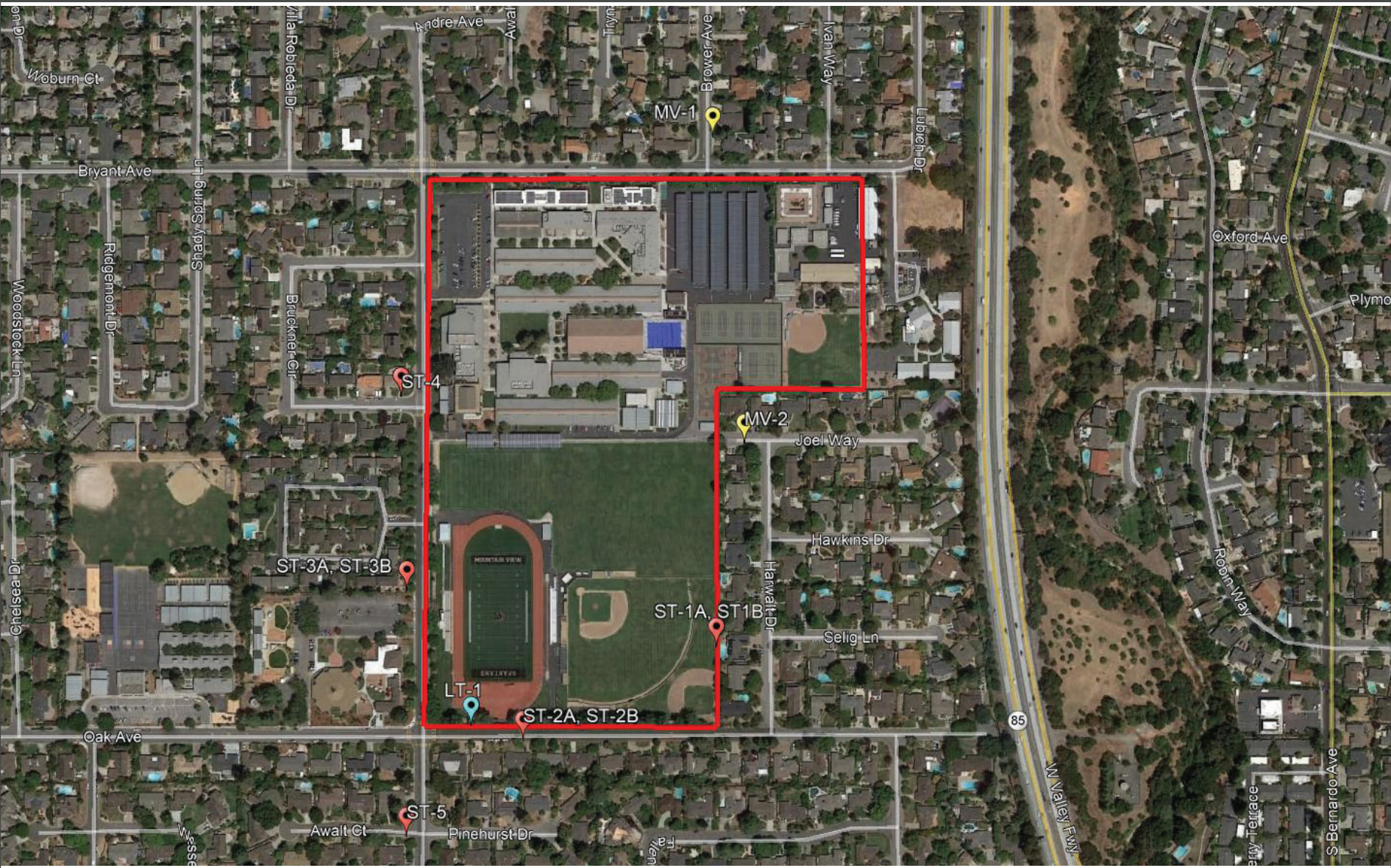
The Mountain View High School campus is located west of SR 85, north of Oak Avenue, and south of Bryant Avenue at 3535 Truman Avenue in Mountain View. The school is in a residential area. Single-family residences are located on the east of the site, on the north across Bryant Avenue, on the south across Oak Avenue and on the west across Truman Avenue. The residences to the north and west are located within the City of Mountain View and the residences to the east and south are located in the City of Los Altos. Two churches are located to the southwest; Grace Community Covenant Church and Foothill Covenant Church.

Existing noise measurements were taken on October 5, 2018 and October 25, 2019 to characterize the ambient noise levels at the site and in the project vicinity. The noise measurement locations are shown on Figure 3.13-1. The survey on October 5, 2018 consisted of two short-term noise measurements (shown as MV-1 and MV-2 on Figure 3.13-1). The survey on October 25, 2019 was taken during a homecoming football game with an attendance of approximately 2,000 people and consisted of one long-term measurement (LT-1) and five short-term measurements (ST-1 through ST-5). The ambient noise environment in the area results primarily from vehicular traffic on nearby streets. Intermittent airplane flyovers and activities at MVHS also contribute to ambient noise levels. The short-term noise measurement results are summarized in Table 3.13-3 below; the long-term measurement results are shown in Table 3.13-4.

Table 3.13-3: Short-Term Noise Measurements							
Location and Date	L_{max}	L₍₁₎	L₍₁₀₎	L₍₅₀₎	L₍₉₀₎	L_{eq}	Worst-hour Football Noise, L_{eq}¹
MV-1A: 3389 Brower Avenue (10/5/2018, 12:50 p.m. – 1:00 p.m.)	69	64	58	48	45	54	-
MV-1B: 3389 Brower Avenue (10/5/2018, 1:00 p.m. – 1:10 p.m.)	74	65	58	49	46	55	-
MV-2A: 1701 Joel Way (10/5/2018, 1:20 p.m. – 1:30 p.m.)	63	59	52	50	49	51	-
MV-2B: 1701 Joel Way (10/5/2018, 1:30 p.m. – 1:40 p.m.)	52	52	50	47	46	48	-
ST-1A: East side of site near baseball field (10/25/2019, 7:00 p.m. – 7:10 p.m.)	75	74	68	58	55	64	64
ST-1B: East side of site near baseball field (10/25/2019, 7:10 p.m. – 7:20 p.m.)	77	75	69	59	56	65	65
ST-2A: 1638 Oak Avenue (10/25/2019, 7:30 p.m. – 7:40 p.m.)	74	72	68	61	58	64	65
ST-2B: 1638 Oak Avenue (10/25/2019, 7:40 p.m. – 7:50 p.m.)	74	73	70	61	59	65	66
ST-3A: Truman Avenue Residences (10/25/2019, 8:00 p.m. – 8:10 p.m.)	81	75	68	63	60	66	67
ST-3B: Truman Avenue Residences (10/25/2019, 8:10 p.m. – 8:20 p.m.)	82	80	76	68	61	72	71
ST-4: 1110 Bruckner Circle (10/25/2019, 8:30 p.m. – 8:40 p.m.)	64	64	60	55	52	57	58
ST-5: Truman Avenue and Awalt Court (10/25/2019, 8:50 p.m. – 9:00 p.m.)	74	68	62	54	50	58	62

Table 3.13-4: Long-Term Noise Measurements				
Location and Date	Hourly-Average Noise Level, L_{eq}			DNL
	Daytime	Nighttime	Football Game	
LT-1: Southwest end of Mountain View High School football field (Friday, 10/25/2019 through Friday, 11/1/2019)	50 to 73	38 to 56	69 to 72	57 to 62

The nearest noise-sensitive receptors to the project site include residences to the west across Truman Avenue (represented by ST-3), residences to the south across Oak Avenue (represented by ST-2 and LT-1), and residences to the east of the field along Harwalt Drive (represented by ST-1).



NOISE MEASUREMENT LOCATIONS

FIGURE 3.13-1

3.13.2 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?

3.13.2.1 *Project Impacts*

Impact NOI-1:	The project 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. (Less than Significant Impact with Mitigation Incorporated)
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Construction Noise

A significant noise impact would result if construction-related noise would temporarily increase ambient noise levels at sensitive receptors. Hourly average noise levels exceeding 60 dBA L_{eq} at the property lines shared with residential land uses, and the ambient noise level by at least five dBA L_{eq} for a period of more than one year, would constitute a significant temporary noise increase at adjacent residential land uses.

Construction activities of the project would occur over a period of approximately six months. Construction would occur only during the allowable hours under Section 8.70.1 of the Mountain View Municipal Code (between 7:00 a.m. and 6:00 p.m. Monday through Friday). Installation of the proposed lighting and PA system would require minor excavation of the field to construct the pole foundations, trenching and boring for electrical conduit installation, installation via hydraulic crane of the lighting poles, mounting of the luminaires, and restoration of disturbed surfaces including pavement and landscaping that was removed during excavation and trenching. Construction equipment to be used would include an excavator, boring machine, concrete truck and pump, and a crane. Typical noise levels for different construction equipment at a distance of 50 feet are shown in Table 3.13-5 below.

Table 3.13-5: Typical Construction Equipment Noise Levels at 50 feet		
Equipment Category	L_{max} Level (dBA)^{1,2}	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor ³	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous
Notes: ¹ Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant. ² Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation. ³ Portable air compressor rated at 75 cfm or greater that operates at greater than 50 psi.		

As shown in Table 3.13-5, excavators, cranes, boring jack power units, and concrete pumps would be anticipated to generate noise levels of 80 to 85 dBA L_{max} at a distance of 50 feet. The nearest residences are located approximately 75 feet south of the project site. Construction noise levels drop

off at a rate of about six dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional five to 10 dBA noise reduction at distant receptors.

While construction noise levels generated by the project would exceed ambient levels by five dBA, construction of the project would not occur for more than 12 months, which is the amount of time at which substantial construction noise increases would be considered significant. Moreover, standard construction best management practices would be implemented at the project site as follows:

Standard Measures

- Construction staging areas shall be established at locations that will create the largest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with barriers or enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.

Given the short duration of construction, implementation of construction best management practices, and the fact that construction of the project would be limited to the allowable hours under the Municipal Code (between 7:00 a.m. and 6:00 p.m. Monday through Friday), impacts would be less than significant. **(Less than Significant Impact)**

Operational Noise

A significant permanent noise increase would occur if the project would substantially increase noise levels at sensitive receptors in the project vicinity. A substantial noise increase would occur if: a) the noise level increase is five dBA DNL or greater, with a future noise level of less than 60 dBA DNL, or b) the noise level increase is three dBA DNL or greater, with a future noise level of 60 dBA DNL or greater.

Project Traffic

Based on the transportation analysis completed by *Hexagon Transportation Consultants* (refer to Appendix E), PM peak hour traffic noise increase resulting from the project would increase noise by zero to one dB along all affected roadway segments, except for the segment of Oak Avenue east of Truman Avenue, where a two dB increase is expected. This increase is only anticipated for a select few evening hours on nights of events with the highest attendance; therefore, the overall traffic noise increase would be less than one dBA L_{dn} . Traffic noise increases resulting from the project would be less than three dBA and would be considered less than significant. **(Less than Significant Impact)**

Football Games

Based on the noise monitoring survey (see Table 3.13-3), the varsity homecoming football game resulted in worst-hour average noise levels of 67 to 71 dBA L_{eq} at the nearest residences to the west, with maximum noise levels in the range of 71 to 82 dBA L_{max} . The nearest residences to the south of the field were exposed to hourly average noise levels of 65 to 66 dBA L_{eq} with maximum noise levels in the range of 68 to 74 dBA L_{max} . The nearest residences to the east of the field were exposed to hourly average noise levels of 64 to 65 dBA L_{eq} , with maximum noise levels in the range of 71 to 77 dBA L_{max} . The attendance of the homecoming game was approximately 2,000 people.

Based on measurements made at various high school football games in the Bay Area^{52,53,54}, the variation in spectator noise primarily depends upon the attendance and level of excitement generated by the game. Otherwise, noise levels generated by the PA system or the referees' whistles would be about the same regardless of the number of people in attendance. Table 3.13-6 below summarizes hourly average noise levels calculated at the nearest receivers, based on the number of spectators resulting from the project and the results of the noise monitoring survey. The results shown for residences to the north take into account shielding provided by intervening structures.

Table 3.13-6: Worst Hour Noise Levels during Football Events (dBA L_{eq})					
Number of Spectators	Residences to West	Residences to South	Residences to East	Residences to Northwest	Residences to North, Shielded
1,500 (Typical)	70	65	63	57	52
2,200 (Homecoming) ¹	71	66	64	58	53
¹ Currently hosted at MVHS using temporary lights.					

Ambient hourly average noise levels between 7:00 p.m. and 10:00 p.m. on non-game nights currently range from 48 to 58 dBA L_{eq} at residences to the south along Oak Avenue and to the west along Truman Avenue. As shown in Table 3.13-6, the noise from football games would exceed ambient noise levels by up to 22 dBA L_{eq} at the closest residences to the west and south, by 15 dBA L_{eq} at residences to the east, by nine dBA L_{eq} at the residences to the northwest, and by four dBA L_{eq} at the residences to the north.

While noise levels would increase compared to ambient conditions, football games currently occur on campus, with attendance rates of approximately 1,000 people for normal football games and up to 2,000 people for rivalry games. The largest increase in attendance following installation of the lights would occur during normal games (approximately 500 people). As shown in Table 3.13-6, the difference in hourly average noise levels between games with 1,500 spectators and games with 2,200 spectators, when calculated at nearby residences, would be approximately one dBA L_{eq} . Therefore,

⁵² Illingworth & Rodkin, Inc. *Santa Teresa High School Stadium Lighting Project, Environmental Noise Assessment*. September 12, 2013.

⁵³ Illingworth & Rodkin, Inc. *Lynbrook High School Field Improvements and Lighting Project Environmental Noise Assessment*. June 3, 2010.

⁵⁴ Illingworth & Rodkin, Inc. *Silver Creek High School Sports Lighting Project Environmental Noise Assessment*. September 9, 2013.

the games with the greatest net increase in spectators (normal football games with an increase of 500 people) would not increase hourly average noise levels at nearby residences by more than one dBA L_{eq} . All other sporting events and special events currently occur on campus and would experience a smaller net increase in attendance and corresponding noise levels. The proposed project would not result in a substantial increase in hourly average noise levels because the maximum net increase in noise would be less than three dBA.

Table 3.13-7 below shows the DNL noise levels during typical, and homecoming football games at surrounding residences. The DNL levels were calculated based on the worst-hour noise levels shown in Table 3.13-6 above. Noise level measurement made at the nearby Los Altos High School on Saturday, September 28 indicated that junior varsity football games resulted in noise levels approximately two dB lower than varsity football games, which occurred immediately after. The levels shown in the table below assume three sustained hours of junior varsity play (with noise levels reduced by two dB from the worst-hour noise levels in Table 3.13-6), followed by three hours of sustained varsity play (with levels equal to those in Table 3.13-6).

Table 3.13-7: DNL Resulting from Football Events between 4:00 p.m. and 10:00 p.m. (dBA)					
Number of Spectators	Residences to West	Residences to South	Residences to East	Residences to Northwest	Residences to North, Shielded
1,500 (Typical)	63	58	56	50	45
2,200 (Homecoming)	64	59	57	51	46

As shown in Table 3.13-7, noise levels resulting from typical and homecoming games occurring continuously between the hours of 4:00 p.m. and 10:00 p.m. would exceed 55 dBA DNL at the closest residences to the west, south, and east of the field. As described previously, MVHS currently plays all of its football games on campus during daytime hours with the exception of two to five games per season which are played in the evening using temporary field lighting. With the installation of permanent field lighting, games would be played in the evening and an increase in attendance is anticipated. No games would continue past 10:00 p.m. The attendance of normal games is estimated to increase from 1,000 to 1,500 attendees, which would increase noise levels by two dBA when measured over a 24-hour period. The attendance of rivalry games would increase from 2,000 to 2,200 attendees, which would increase noise levels by less than one dBA over a 24-hour period. Further, the majority of football games currently occur on campus and the expected attendance increases would increase average noise levels during games by less than one dBA when measured over a one-hour period. As football games are currently played at the site and attendance increases will not result in substantial noise increase (three dBA or greater) at nearby sensitive receptors, the proposed project would not result in a significant operational noise impact due to the use of lights for football games. **(Less than Significant Impact)**

Other Sports Games, Practices, and Events

Noise levels generated by soccer and lacrosse games are generally limited to whistles and some cheering. These noise levels would not be as prominent as the noise levels generated by football

games. Based on noise monitoring of soccer games at other high schools^{55,56}, whistles and cheering would be anticipated to generate maximum noise levels of about 58 to 63 dBA L_{max} at residences adjoining the field. Hourly average noise levels during soccer and lacrosse events would be anticipated to be approximately 48 dBA L_{eq} at the closest residences to the west, located about 280 feet from the center of the field. Evening soccer and lacrosse events would increase noise levels at nearby sensitive receptors by less than one dBA DNL, which is not considered a substantial noise increase.

The proposed field lights would allow marching band practices to occur during evening hours. Marching band practices would occur on two weeknights per week between August and November. One practice would conclude by 8:00 p.m. and the other practice would conclude by 6:30 p.m. Based on prior measurements of marching band practice noise levels at Santa Teresa High School in San José, California⁵⁷, marching band practices generate noise levels of 61 dBA L_{eq} at a distance of approximately 570 feet with an average maximum noise level of 75 dBA L_{max} . This corresponds to an hourly average noise level of 67 dBA L_{eq} and maximum noise levels of 80 dBA L_{max} at the nearest residence to the west. The resulting DNL from one hour and fifteen minutes of marching band practice would be 55 dBA DNL. The estimated noise levels from marching band practices would not amount to a substantial increase in day-night average noise levels at nearby sensitive receptors.

Field lights would also be used for commencement and up to three special evening events per year, which would conclude by 9:00 p.m. Attendance for these events would vary by event, with the largest attendance anticipated for commencement. Noise levels resulting from events would depend on the nature of the events and their attendance. With attendance levels similar to a typical football game (approximately 1,500 attendees), but a duration shorter than that of the combined varsity and junior varsity games used for calculations in Table 3.13-7, commencement would result in noise levels approximately two dBA below those of a typical football game. With attendance increases similar to those of football games, increased commencement attendance would result in a noise level increase of two dBA DNL, which is not considered substantial. With increased attendance, other special events would be similar in noise level to non-football sporting events such as soccer and lacrosse and would result in less than one dBA DNL noise level increases at nearby sensitive receptors.

In addition to field lighting, the proposed project includes an upgrade to the audio system at the track and sports field. The PA system would include a distributed speaker system, with multiple speakers that would be angled down towards the field. The PA system proposed by the project is the standard type used at high school sports fields that are similar in size to the project. The PA system would be used during games and other events, such as commencement. Normally, a distributed sound system is equivalent or superior to a single- or dual-speaker system when considering potential community noise impacts. Announcements made over the PA system would be similar to levels generated during existing football games. The PA system would be used less frequently and not be allowed for running commentary during events such as soccer and lacrosse games. The intermittent use of the PA system

⁵⁵ Illingworth & Rodkin, Inc. *Silver Creek High School Sports Lighting Project Environmental Noise Assessment*. September 9, 2013.

⁵⁶ Illingworth & Rodkin, Inc. *Santa Teresa High School Sports Lighting Project Environmental Noise Assessment*, September 12, 2013.

⁵⁷ Illingworth & Rodkin, Inc. *Santa Teresa High School Sports Lighting Project Environmental Noise Assessment*. September 12, 2013.

(and resulting noise levels) are taken into account in the calculations shown in Table 3.13-6 and Table 3.13-7. The new PA system would be designed to reduce spillover into the adjacent residential areas.

For the reasons described above, the noise resulting from non-football sporting events, marching band practice, and special events would result in a less than significant operational noise impact. **(Less than Significant Impact)**

Impact NOI-2: The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

The closest structures to the project site are residences located approximately 75 feet to the south and a church and residences approximately 100 feet to the west. Groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to buildings in the proximity of the construction areas.

The construction activities proposed by the project would include minor excavation, trenching and boring, use of a hydraulic crane, and restoration of disturbed surfaces. Based on vibration levels presented in the Federal Transit Administration Manual for typical construction equipment⁵⁸, equipment associated with project construction would be anticipated to generate vibration levels of 0.003 to 0.08 in/sec PPV at a distance of 25 feet. Vibration levels at a distance of 75 feet were calculated to be 0.001 to 0.06 in/sec PPV and 0.001 to 0.05 in/sec PPV at a distance of 100 feet. Construction vibration would not be anticipated to cause cosmetic or structural damage to the nearest buildings and would not be considered excessive. As construction moves away from the southern and western property lines, vibration levels would be even lower. Therefore, the project would not result in a significant impact due to construction vibration. **(Less than Significant Impact)**

Impact NOI-3: The project would not 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. The project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

The project does not lie within an airport land use plan or within two miles of a public airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels. **(No Impact)**

⁵⁸ Office of Planning and Environment, U.S. Department of Transportation. *Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration*. September 2018.

3.13.2.2 *Cumulative Impacts*

Impact NOI-C: The project would not result in a cumulatively considerable contribution to a significant noise impact. **(Less than Significant Cumulative Impact)**

Construction of the proposed project and the projects listed in the cumulative project table (Table 3.0-1) may occur at the same time such that temporary construction-related noise impacts could occur. However, the majority of the surrounding projects are significant distances away from the proposed project, which would reduce any overlapping construction noises or vibration. Mountain View High School is currently undergoing campus expansions, with construction anticipated to occur until 2026. The proposed project would contribute to construction noise impacts; however, the project's contribution would be minimal because it would occur over the period of approximately six months and would not require substantial ground disturbing activities. Once operational, the proposed project would result in increased noise levels because it would facilitate greater attendance of sporting events on campus. As discussed under Impact NOI-1, the operational noise impacts of the proposed project would be less than significant. Further, operational noise impacts from the MVHS Expansion Project would occur during different times of day than the proposed project, as the lights would be used in the evening hours and noise generated by increased student activity would typically occur between the hours of 7:00 a.m. and 4:00 p.m. Any future projects proposed at MVHS, such as expansions or campus modifications beyond what was already analyzed in the MVHS Expansion Project (2018), would be required to undergo project-specific noise analyses and incorporate mitigation measures, as necessary, into the project to reduce noise impacts on surrounding sensitive receptors. For these reasons, the proposed project would result in a less than significant cumulative noise impact. **(Less than Significant Cumulative Impact)**

3.14 POPULATION AND HOUSING

3.14.1 Environmental Setting

3.14.1.1 *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. The City of Mountain View Housing Element and related land use policies were last updated in 2014.

Regional and Local

Plan Bay Area 2040

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 Priority Development Areas (PDAs).

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).

3.14.1.2 *Existing Conditions*

According to the California Department of Finance, the City of Mountain View had a population of approximately 81,992 with 36,422 households as of January 2019.⁵⁹ ABAG projects the City's population will increase to 138,980 by 2040.⁶⁰

Currently, Mountain View High School has an enrollment of approximately 2,181 students.⁶¹ The District anticipates that Mountain View High School's student population will grow by 410

⁵⁹ California Department of Finance. *E-5 City/County Population and Housing Estimates*. May 2019. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>. Accessed January 21, 2020.

⁶⁰ Association of Bay Area Governments. *Plan Bay Area Projections 2040*. November 2018.

⁶¹ Mountain View Los Altos High School District. *Mountain View High School Profile 2019*. <https://mvhs.mvla.net/documents/About%20MVHS/School%20Profile/2019-20%20-%20School%20Profile.pdf>

additional students, increasing its enrollment to 2,591 students, and in 2019 began an expansion of its campus facilities to increase its capacity by 410 students by 2026. There are no existing residences on the project site.

3.14.2 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?

3.14.2.1 *Project Impacts*

Impact POP-1:	The project 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). (Less than Significant Impact)
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As discussed in *Section 2.0 Project Information and Description*, the proposed project would allow for improved nighttime use of the Mountain View High School track and field facilities for athletic competitions and other events. The greatest attendance of such events is estimated at approximately 2,200 persons. Improving the suitability of existing athletic facilities to accommodate existing numbers of students and community members would not induce population growth, either directly or indirectly. The proposed project would not facilitate increased enrollment at the school. Therefore, the impact of the project would be less than significant. **(Less than Significant Impact)**

Impact POP-2:	The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact)
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There are no existing residences on the project site. The proposed project would not displace substantial numbers of people from the project site or adjacent areas and would not create a need for replacement housing elsewhere. There would be no impact from the proposed project on existing housing or populations. **(No Impact)**

3.14.2.2 *Cumulative Impacts*

Impact POP-C: The project would not result in a cumulatively considerable contribution to a significant population and housing impact. **(Less than Significant Cumulative Impact)**

The District estimates student enrollment will peak in the 2021-2022 school year and has undertaken an expansion of facilities to accommodate the maximum projected enrollment. The proposed project, however, would only improve the use of existing facilities. Future population growth consistent with the planned expansion of Mountain View High School campus facilities would be unrelated to the proposed project's improvement of existing facilities for use by currently enrolled students. Therefore, the proposed project would not contribute to a cumulatively considerable population impact. **(Less than Significant Cumulative Impact)**

3.15 PUBLIC SERVICES

3.15.1 Environmental Setting

3.15.1.1 *Regulatory Framework*

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.

3.15.1.2 *Existing Conditions*

Fire Protection

Fire protection to the project area is provided by the City of Mountain View Fire Department (MVFD). The MVFD provides fire suppression and rescue response, hazard prevention and education, and disaster preparedness. The MVFD participates in a mutual aid program with the cities of Gilroy, Milpitas, Mountain View, Palo Alto, San José, Santa Clara and Sunnyvale. Santa Clara County Fire Department, South Santa Clara County Fire District, Cal Fire Santa Clara Unit, and Moffett Field also participate in the mutual aid program.⁶² Through this program, should the City of Mountain View need assistance, one or more of the mutual aid cities would provide assistance to locations within the City of Mountain View in whatever capacity needed. The nearest MVFD station to the site is Station No. 2 located at 160 Cuesta Drive approximately 1.4 miles northwest of the site.

Police Protection

Police protection services are provided to the project area by the Mountain View Police Department (MVPD). As of 2018, there were 148 full, regular, and limited period personnel employed by the MVPD.⁶³ Officers patrolling the project area are dispatched from police headquarters, located approximately 3.5 miles northwest of the project site at 1000 Villa Street.

Schools

The project site is the Mountain View High School (ninth through twelfth grade) campus. Mountain View High School has a current student enrollment of approximately 2,181 students. The District anticipates student enrollment will increase by 410 students.

In 2019, the District began an expansion of necessary campus facilities to increase Mountain View High School capacity by 410 students by 2026, by which point enrollment is expected to stabilize.

⁶² Santa Clara County Fire Department. *Mutual Aid Plan*. Accessed January 20, 2020.
<http://xsc.sccfd.org/supporting-documents/mutual-aid-plan-documentation>.

⁶³ Mountain View Police Department. *Annual Report 2018*. Accessed on January 23, 2020.

Parks

Nearby parks to the project site include Cooper Park located at 502 Chesley Avenue (approximately 0.7-miles northwest of the site), De Anza Park located at 1150 Lime Drive in Sunnyvale (approximately 0.7-miles east of the site), and Cuesta Park located at 615 Cuesta Drive (approximately 1.2 miles northwest of the project site).

Other Public Services

Mountain View High School has an on-site library for students. In addition, the City of Mountain View is served by the Mountain View Public Library, located approximately three miles northwest of the site at 585 Franklin Street. Other public facilities in Mountain View include the Rengstorff Community Center, Rengstorff Park and Pool, Skate Park, and Shoreline Regional Park which includes a 662-acre wildlife preserve and open space with wetlands, marshes, upland habitats, sailing lake, a golf course, and the historic Rengstorff house.

3.15.2 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, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- 1) Fire protection?
- 2) Police protection?
- 3) Schools?
- 4) Parks?
- 5) Other public facilities?

3.15.2.1 *Project Impacts*

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. (No Impact)
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The proposed project would not increase the population of the surrounding area, or the number of students enrolled at the project site. Therefore, the proposed project would not increase demand for public services, including fire protection services. Service ratios and response times of the MVFD and mutual aid fire departments would not be affected. Thus, the proposed project would have no impact on the environment due to additional or altered fire protection facilities. **(No Impact)**

Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. **(No Impact)**

As stated above in Impact PS-1, the proposed project would not increase demand on public services. Police protection service ratios or response times would not increase as a result of the proposed project, and the proposed project would not necessitate additional or altered police protection facilities. Therefore, the proposed project would have no impact on the environment due to effects on police protection services. **(No Impact)**

Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. **(No Impact)**

The proposed project would allow the existing Mountain View High School facilities to accommodate currently enrolled students. The operation of the proposed project would not increase enrollment in a way that would impact school service ratios or other performance. Therefore, the proposed project would have no impact resulting from additional demand for school facilities. **(No Impact)**

Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **(No Impact)**

As stated above in discussion of Impact PS-1, the proposed project would not increase demand for public services or necessitate additional governmental facilities. In fact, the proposed project would increase the utility of existing recreational facilities within the existing campus of Mountain View High School. For this reason, the proposed project would have no impact on the environment due to an increased need for public park facilities. **(No Impact)**

Impact PS-5: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. **(No Impact)**

Service ratios, response times, and other performance objectives of public services in the City of Mountain View would not be affected by the proposed project. The proposed project would not necessitate the alteration of existing public service facilities, or the construction of additional facilities. For these reasons, the project would not result in substantial adverse impacts due to provision of additional or altered government facilities. **(No Impact)**

3.15.2.2 *Cumulative Impacts*

Impact PS-C: The project would not result in a cumulatively considerable contribution to a significant public services impact. **(No Cumulative Impact)**

As discussed above in Impact PS 1-5, the proposed project would not result in any adverse impacts to the provision of public services in the project area, or the City of Mountain View as a whole. The proposed project would be consistent with the current and projected school and recreational uses, and would not induce substantial demand on these, or other, public services in the future. Therefore, the proposed project would have no cumulative contribution to significant public services impacts. **(No Cumulative Impact)**

3.16 RECREATION

3.16.1 Environmental Setting

3.16.1.1 *Existing Conditions*

Nearby parks to the project site include Cooper Park located at 502 Chesley Avenue (approximately 0.7-miles northwest of the site), De Anza Park located at 1150 Lime Drive in Sunnyvale (approximately 0.7-miles east of the site), and Cuesta Park located at 615 Cuesta Drive (approximately 1.2 miles northwest of the project site).

Other recreational facilities in Mountain View include the Rengstorff Community Center, park, skate park, Rengstorff park and pool, and Shoreline Regional Park which includes a 662-acre wildlife preserve and open space with wetlands, marshes, upland habitats, sailing lake, a golf course, and the historic Rengstorff House.

3.16.2 Impact Discussion

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

- 1) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

3.16.2.1 *Project Impacts*

Impact REC-1:	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. (No Impact)
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As stated above in *Section 3.15 Public Services*, the proposed project would not increase demand for public parks or other recreation facilities. Therefore, the proposed project would not result in or accelerate the physical degradation of neighborhood or regional parks and recreation facilities. **(No Impact)**

Impact REC-2:	The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Less than Significant Impact)
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The proposed project includes the construction of pole-mounted lights and an upgraded PA system on the existing track and field stadium, which would facilitate recreational uses on-site. Use of the proposed sports field would allow improved nighttime use of the Mountain View High School track and field facilities for athletic competitions and other events and would be limited to the existing student population. The addition of on-site improvements to recreational facilities is included as part

of the proposed project and the potential environmental impacts from the construction of these facilities is analyzed within this EIR. The proposed project would not require the construction or expansion of offsite recreational facilities that could result in adverse impacts to the physical environment. **(Less than Significant Impact)**

3.16.2.2 *Cumulative Impacts*

Impact REC-C: The project would not result in a cumulatively considerable contribution to a significant recreation impact. **(Less than Significant Cumulative Impact)**

As discussed under Impact REC-1 and Impact REC-2, the proposed project would not result in adverse impacts to recreational facilities, nor would it construct or expand facilities which would have adverse effects on the environment. Use of the proposed project would be consistent with past and planned future use of the project site and would not result in contributions to a resource impact of a cumulatively considerable nature. **(Less than Significant Cumulative Impact)**

3.17 TRANSPORTATION

The following discussion is based in part on a Transportation Impact Analysis (TIA) prepared for the proposed project by *Hexagon Transportation Consultants*. The report, dated April 2, 2020, is included as Appendix E to this DEIR.

3.17.1 Environmental Setting

3.17.1.1 *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 are required by Governor's Office of Planning and Research (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.

Regional and Local

Congestion Management Program

MTA 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 LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. MTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

3.17.1.2 *Existing Conditions*

Regional Access

State Route 85 (SR 85) is a six-lane freeway in the vicinity of the project site that extends from US 101 in Mountain View to US 101 in San Jose. The freeway has two mixed-flow lanes and one HOV lane in each direction. The closest interchange to the project site is at Fremont Avenue.

State Route 237 (SR 237) is a four- to six-lane freeway in the vicinity of the project site that extends from El Camino Real in the west to I-880 in Milpitas in the east. The intersection of Grant Road and El Camino Real provides access to and from SR 237. Access to SR 237 is also provided from SR 85.

Local Access

Grant Road is north-south arterial that extends between Foothill Expressway in the south and El Camino Real in the north, where it transitions into SR 237. Between El Camino Real and Covington Road, Grant Road has four lanes and a raised median. South of Preston Drive, Grant Road has two lanes. The southbound direction narrows to a single lane between Covington Road and Preston Drive. The northbound direction widens to two lanes north of Preston Drive. On street parking is allowed along various locations on Grant Road. South of Covington Road, the posted speed limit is 25 mph, and north of Covington Road, the posted speed limit is 35 mph. Grant Road provides access to the project site via its intersections with Bryant Avenue and Oak Avenue.

Fremont Avenue is a two-lane collector that is oriented in an east-west direction in the vicinity of the project. The roadway begins in Los Altos at El Monte Avenue, running parallel to Foothill Expressway, until its intersection with Miramonte Avenue. Fremont Avenue has a full interchange with SR 85 near the MVHS school site. Between Grant Road and the Sunnyvale city limit, Fremont Avenue has a landscaped median with left-turn pockets provided at intersections. On-street parking is prohibited along both sides of the street in the project vicinity. Fremont Avenue has a posted speed limit of 30 mph. It provides access to the project site via its intersection with Truman Avenue.

Bryant Avenue is a two-lane neighborhood collect that runs in an east-west direction between Grant Road and Lubich Drive. On-street parking is allowed for the whole day along the southern side. Parking is prohibited along the northern side of the street between 8 AM and 2 PM east of Truman Avenue. Parking is prohibited between 7 AM and 6 PM on both sides of Bryant Avenue west of Churin Drive and along the north side of Bryant Avenue between Churin Drive and Truman Avenue. The posted speed limit is 30 mph between Grant Road and Truman Avenue, and 25 mph east of Truman Avenue. Bryant Avenue provides direct access to MVHS.

Truman Avenue is a two-lane neighborhood collector that runs in a north-south direction between Bryant Avenue and Fremont Avenue. On-street parking is prohibited on Truman Avenue from 8 AM to 2 PM between Andre Avenue to the Foothill Covenant Church along both sides of the street. It has a posted speed limit of 25 mph. Truman Avenue provides direct vehicle access to MVHS parking lots and pedestrian access to the track and athletic field.

Oak Avenue is a two-lane local street that runs in an east-west direction between Grant Road and Ravenswood Drive. On-street parking is allowed on both sides of the street for the entire street. It has

a posted speed limit of 25 mph. Oak Avenue is adjacent to the southern frontage of MVHS, but there is no vehicle access onto the campus from Oak Avenue.

Pedestrian Facilities

Existing pedestrian facilities in the area consist of sidewalks on Truman Avenue and Oak Avenue. Sidewalks are only provided on the northern side of Oak Avenue in the vicinity of the site. There are pedestrian crosswalks on all legs of the Truman Avenue and Oak Avenue intersection. Pedestrian access to the sports field is provided via the entrance located on Truman Avenue at the northwest corner of the field.

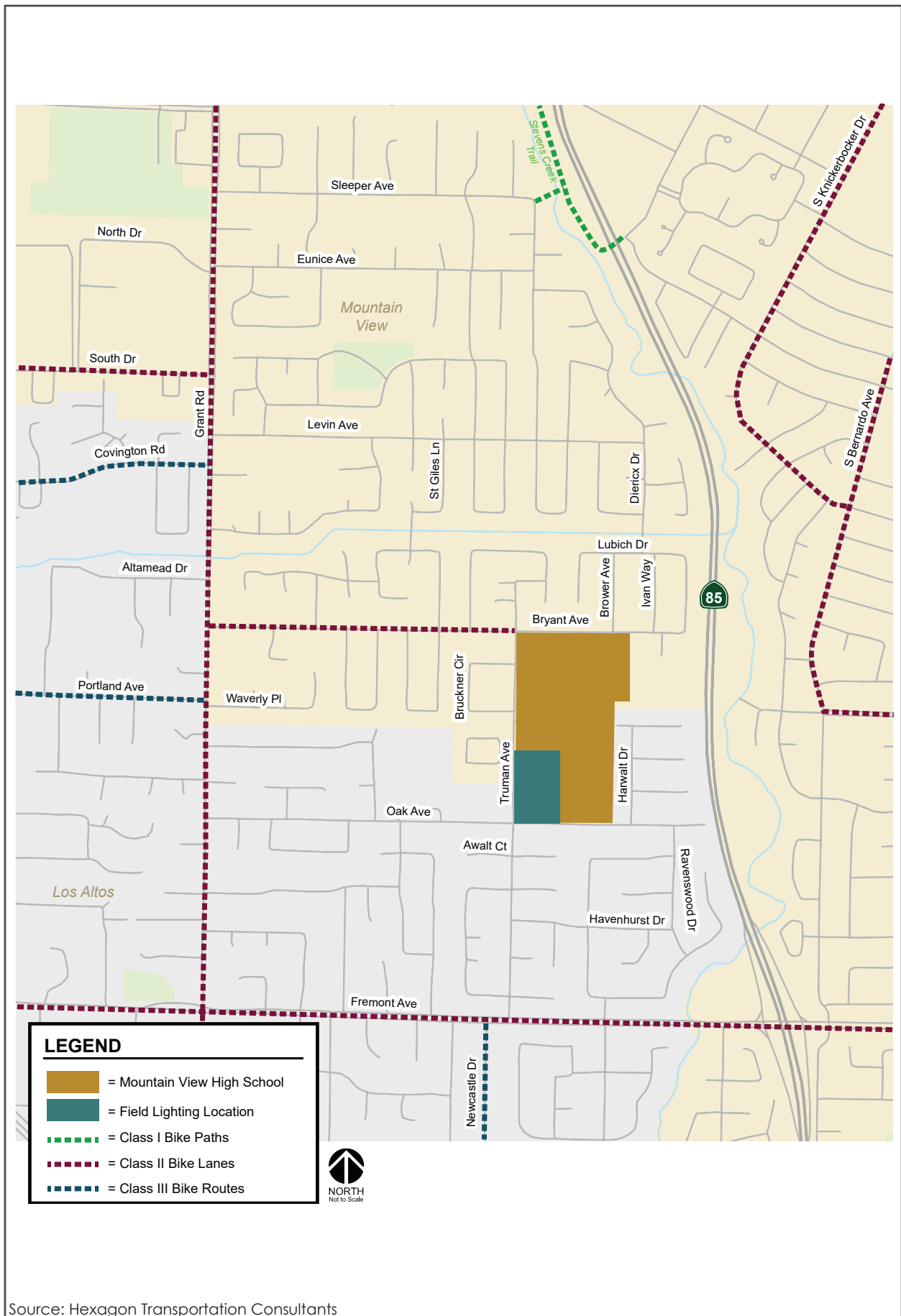
Bicycle Facilities

Bicycle facilities providing access to the project site include a Class I bike trail, striped bike lanes (Class II bikeways), and shared bike routes (Class III bikeways). The existing bicycle facilities are shown on Figure 3.17-1.

The Class I Stevens Creek Trail runs in a north-south direction from Shoreline at Mountain View to Dale Avenue. Near its southern terminus, access to the trail is provided at the intersection of Sleeper Avenue and Franklin Avenue. Students and attendees can proceed further south on Franklin Avenue, Diericx Drive, Lubich Drive, and Brower Avenue to access the high school. Class II bike lanes are present on Grant Road, South Drive, Bryant Avenue, Fremont Avenue, and Covington Road in the vicinity of the site. A Class III bike route is present on Portland Avenue, Covington Road, and Newcastle Drive. Signage is provided along these roadways to remind motorists and bicyclists to share the road. Numerous residential streets near MVHS are not marked as bike routes, but they carry low traffic volumes and are conducive to bicycling. Overall, the project site is well-served by existing bicycle facilities in the vicinity.

Transit Service

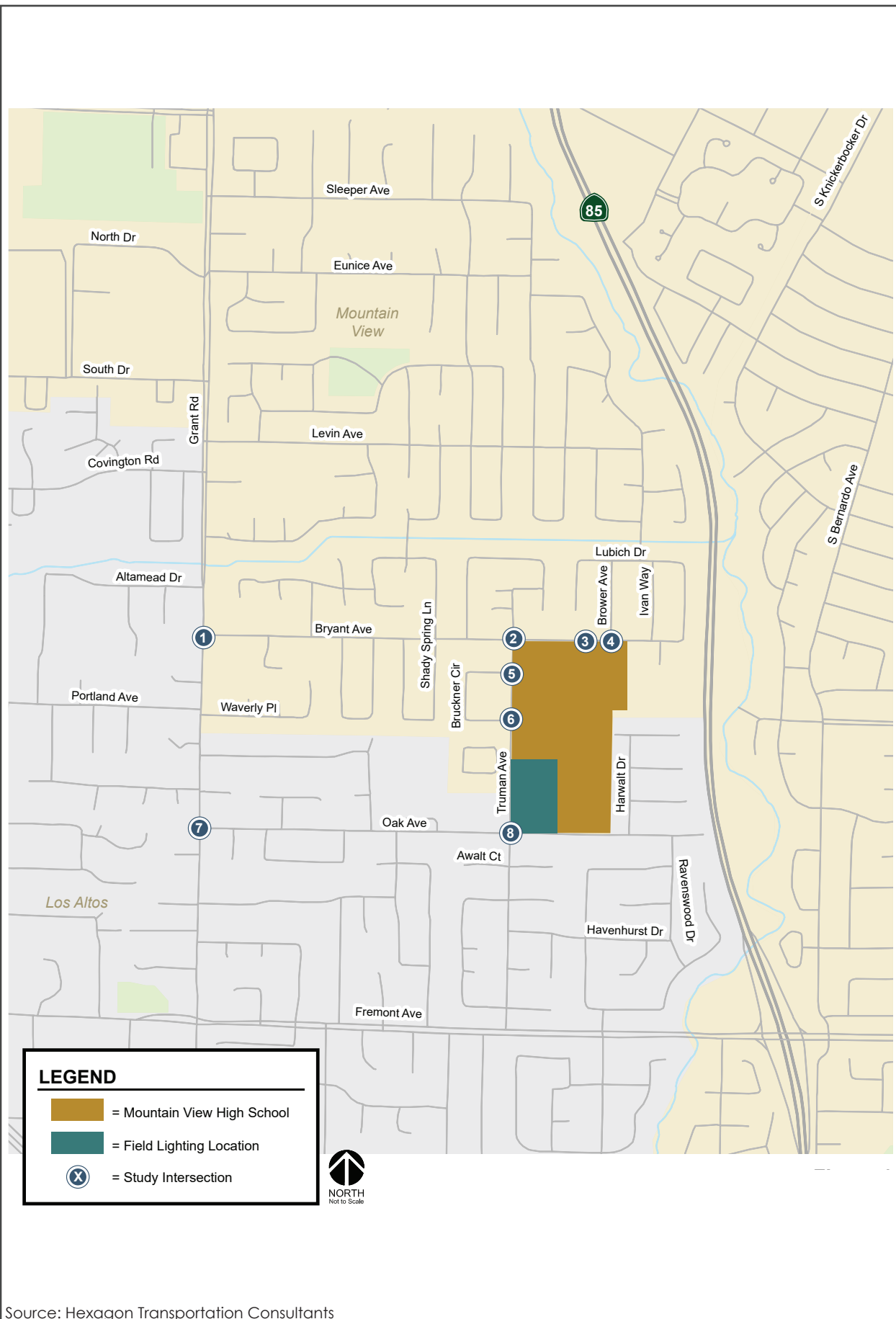
There is no VTA bus service in the area at night. VTA bus services are not expected to be utilized by attendees of the evening/night events at MVHS.



Source: Hexagon Transportation Consultants

EXISTING BICYCLE FACILITIES

FIGURE 3.17-1



Source: Hexagon Transportation Consultants

SITE LOCATION AND STUDY INTERSECTIONS

FIGURE 3.17-2

Study Intersections

Existing traffic volumes were obtained from Friday evening (5:00 PM to 7:00 PM) counts collected on November 1, 2019. There were no sporting events at the school during the count collection. The counts were taken on a Friday evening as that's when games would generally occur and traffic count would be the highest. The intersections studied in the TIA are shown on Figure 3.17-2 and listed below:

1. Grant Road and Bryant Avenue
2. Truman Avenue and Bryant Avenue (unsignalized)
3. High School Driveway and Bryant Avenue (unsignalized)
4. Brower Avenue and North Parking Lot Driveway/Bryant Avenue (offset unsignalized)
5. Truman Avenue and Bruckner Circle North/West Parking Lot Driveway (offset unsignalized)
6. Truman Avenue and Bruckner Circle South/South School Access Driveway (offset unsignalized)
7. Grant Avenue and Oak Avenue (Los Altos)
8. Truman Avenue and Oak Avenue (unsignalized)

Overall, all eight of the study intersections were found to operate at an acceptable level of service under existing conditions during the PM peak hour (on a typical Friday without sporting events. As described below in *Section 3.17.2.1*, the acceptable level of service standard for the Cities of Mountain View and Los Altos is LOS D or better. 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.

3.17.2 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) For a land use project, 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 land uses (e.g., farm equipment)?
- 4) Result in inadequate emergency access?

3.17.2.1 *Significant Impact Criteria*

Significance criteria for impacts on signalized intersections are based on the Cities of Mountain View and Los Altos level of service standards. For the unsignalized intersections, the City of Mountain View has applied significance thresholds 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 Los Altos level of service standards, a development is said to create a significant adverse impact 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 local intersections) 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.

Unsignalized Intersections

The project is said to create a significant adverse impact on traffic conditions at an unsignalized intersection in the City of Mountain View if for the 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 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.

Transit Services

Significant impacts to transit service would occur if the project:

- Creates demand for public transit services above the capacity that is provided or planned; or
- Disrupts existing transit services or facilities; or
- Conflicts with an existing or planned transit facility; or
- Conflicts with transit policies adopted by the City of Mountain View, VTA, or Caltrans for their respective facilities in the study area.

Pedestrian and Bicycle Facilities

The Mountain View 2030 General Plan (July 2012) describes related policies necessary to ensure pedestrian and bicycle facilities are safe and effective for City residents. Using the General Plan as a guide, significant impacts to these facilities would occur when a project or an element of the project:

- Creates a hazardous condition that does not currently exist for pedestrians and bicyclists, or
- otherwise interferes with pedestrian accessibility to the site and adjoining areas; or
- Conflicts with an existing or planned pedestrian or bicycle facility; or

- Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Mountain View, VTA, or Caltrans for their respective facilities in the study area.

3.17.2.2 *Project Impacts*

Impact TRN-1: The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. **(Less than Significant Impact)**

The Cities of Mountain View and Los Altos do not currently have adopted VMT policies. The Cities of Mountain View and Los Altos' adopted transportation policies utilize level of service as the metric to determine the functionality of the roadway system and the effect of new development on the roadway network. 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. The following discussion of level of service is provided as it pertains to consistency with the Cities of Mountain View and Los Altos' adopted transportation policies.

Methodology

The level of service method evaluates intersection operations based on average control delay time for all vehicles at the intersection, as set forth in the 2000 *Highway Capacity Manual* (HCM). This methodology requires the use of the VTA-approved TRAFFIX software to determine intersection level of service. The effects of project-generated traffic were determined using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the traffic related to the proposed field light and PA system installation at MVHS was estimated for the PM peak hour. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips were assigned to specific streets and intersections.

The normal (i.e. non-rivalry) evening football games are expected to have the highest net increase in attendance (500 attendees); therefore, the transportation analysis was focused on potential impacts resulting from these games. All other field uses would have smaller net increases in attendance and would result in lesser impacts compared to baseline conditions. The level of service analysis was conducted for eight study intersections in the vicinity of MVHS under baseline and baseline plus project conditions. Baseline conditions represent the roadway traffic conditions with the football games currently held at the school. Baseline plus project conditions represent baseline traffic volumes with the addition of traffic generated by the additional attendees.

Trip Generation

Vehicle trips that would be generated by the evening sporting events at the school were estimated based on data collected for a homecoming football game on a Friday night at Archbishop Mitty High School in San José, California.⁶⁴ *Hexagon* counted the number of vehicles parked at Archbishop

⁶⁴ Because there are no standard trip generation rates included in the Institute of Transportation Engineers (ITE) Trip Generation Manual for the proposed project, trip generation rates were estimated based on attendance/parking rates for a high school homecoming football game in the area which was hosted with portable lights. At the time of

Mitty High School, at an adjacent church, and on the surrounding streets during the homecoming game on Friday, October 5, 2018 and on a regular Friday night on October 26, 2018. The difference between the two parking counts represents Archbishop Mitty High School game night traffic. Based on the number of additional parked vehicles and the estimated attendance at the Friday night game, the vehicle occupancy rate was an average of 3.24 persons per vehicle for the game attendees.

The vehicle occupancy rate was used to estimate the number of vehicle trips that currently occur during sports games. Currently, the MVHS has football games in the afternoon/early evening with up to 1,000 attendees. With the proposed field lighting, attendance would increase to up to 1,500 attendees. These evening/night games would have junior varsity games played prior to the varsity game; junior varsity games typically have fewer attendees. It was assumed that there would be 450 attendees for the junior varsity games, with 150 attendees staying for the varsity games. Therefore, before the varsity game starts, there would be an additional 1,350 inbound attendees for the varsity game (for a total of 1,500 attendees) and 300 outbound attendees leaving after the junior varsity game. Based on the rate of 3.24 persons per vehicle, the project is expected to generate 417 inbound trips and 93 outbound trips from 6:30 p.m. to 7:30 p.m. for games starting at 7:00 p.m., which occurs after the peak hour of local traffic (5:30 p.m. to 6:30 p.m.). The traffic analysis is conservative by evaluating the traffic conditions during the peak hour with the project trips.

To determine the net project trips, the trips associated with existing attendees of normal football games was subtracted from the anticipated number of attendees following installation of the field lights. Table 3.17-1 below shows the trip generation estimates for the project.

Trip Distribution and Assignment

The trip distribution patterns for the project were estimated based on existing travel patterns on the surrounding roadway network and the locations of complementary land uses. The net peak-hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern and potential parking locations. Although the school has on-site parking lots, the event attendees would also park on Truman Avenue and Oak Avenue at the church across Truman Avenue from the field.

Baseline Plus Project Intersection Analysis

To determine the net increase in traffic resulting from the project, baseline conditions were assumed to represent the traffic which currently occurs during night games hosted with portable lights. Traffic volumes under baseline conditions were estimated by adding the trips from the existing normal football games with 1,000 attendees and the existing homecoming games with 2,000 attendees to the existing traffic volumes. The project estimates for the additional 500 attendees for normal games and the additional 200 attendees for homecoming games were then added to the baseline traffic volumes to yield baseline plus project traffic volumes. The results of the level of service analysis (Table 3.17-2) show that when measured against the City of Mountain View and Los Altos level of service standards, all of the study intersections would operate at an acceptable level of service during the PM peak hour under baseline and baseline plus project conditions.

preparation of the traffic study, homecoming football games at MVHS and LAHS had already occurred; thus, existing data from a high school homecoming football game in the area was used.

Table 3.17-1: Trip Generation Estimates					
		Friday Evening PM Peak Hour Trips			
Land Use	Size	Rate (persons/vehicle)	In	Out	Total
Proposed Field Lighting ¹					
Junior Varsity Game	300 outbound attendees	3.24	-	93	93
Varsity Game	1,350 inbound attendees	3.24	417	-	417
Existing Games ²					
Junior Varsity Game	200 outbound attendees	3.24	-	62	62
Varsity Game	900 inbound attendees	3.24	278	-	278
Net Project Trip Generation			139	31	170
<p><u>Notes:</u></p> <p>Trip rates based on counts conducted in October 2018 for a Friday night football game at Mitty High School in San José.</p> <p>¹ Under project conditions, it was assumed that 300 out of 450 attendees would leave after the junior varsity game, 150 attendees would stay for the varsity game, and 1,350 additional attendees would attend the varsity game for a total of 1,500 attendees.</p> <p>² Under existing conditions, it was assumed that 200 out of 300 attendees would leave after the junior varsity game, 100 attendees would stay for the varsity game, and 900 additional attendees would attend the varsity game for a total of 1,000 attendees.</p>					

Table 3.17-2: Baseline Plus Project Intersection Levels of Service									
Intersections	Peak Hour	Baseline with Normal Football Games ¹				Baseline with Homecoming Games ²			
		Existing		Existing with Project		Existing		Existing with Project	
		Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Grant Road and Bryant Avenue	PM	19.5	B-	21.6	C+	24.4	C	25.4	C
2. Truman Avenue and Bryant Avenue*	PM	8.0	A	8.3	A	9.5	A	10.2	B
3. School Driveway and Bryant Avenue*	PM	9.1	A	9.2	A	9.8	A	10.1	B
4. Brower Avenue/School Driveway and Bryant Avenue*	PM	9.3	A	9.4	A	9.6	A	9.7	A

5. Truman Avenue and Bruckner Circle North*	PM	10.5	B	11.3	B	11.7	B	12.1	B
6. Truman Avenue and Bruckner Circle North*	PM	9.1	A	9.2	A	9.2	A	9.2	A
7. Grant Avenue and Oak Avenue	PM	24.1	C	25.9	C	26.4	C	26.8	C
8. Truman Avenue and Oak Avenue*	PM	9.6	A	10.2	B	10.7	B	11.0	B
<u>Notes:</u> *Denotes an unsignalized intersection ¹ The number of attendees would increase from 1,000 to 1,500 for normal football games as a result of the project. ² The number of attendees would increase from 2,000 to 2,200 for homecoming games as a result of the project.									

The proposed project would not degrade the intersection level of service to unacceptable levels at any of the study intersections. Therefore, the project would not conflict with the City of Los Altos or City of Mountain View policies pertaining to level of service. **(Less than Significant Impact)**

Pedestrian, Bicycle, and Transit Facilities

The proposed project would likely increase the use of surrounding pedestrian facilities because many game attendees would park off-site and walk to the sports field. Attendees parked on surrounding streets or at the adjacent church would cross Truman Avenue at the field entrance where no crosswalk is present. The project would also increase the amount of vehicle traffic on Truman Avenue, which would increase conflict between vehicles and pedestrians at the entrance. To increase pedestrian safety, the District may elect to have a crossing guard at the field entrance.

The proposed project would not involve the removal or obstruction of any pedestrian, bicycle, or transit facilities. Given that sporting events would start and end after dark, it is expected that there would be minimal bicycle usage. As discussed previously, there is no VTA bus service in the area at night. The proposed project would not create a substantial new demand for transit services or decrease the performance of existing facilities in the area. Therefore, the proposed project would not conflict with program plan, policy or ordinance related to pedestrian, bicycle, and transit facilities. **(Less than Significant Impact)**

Impact TRN-2: The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(Less than Significant Impact)**

Senate Bill 743 was passed in 2013 and mandated a shift in the metrics used for transportation analysis under CEQA from LOS to VMT. CEQA Guidelines Section 15064.3, subdivision (b) (1) establishes that VMT is the metric to use to analyze transportation impacts of land use projects. Lead Agencies have until July 1, 2020 to adopt and implement a VMT policy. The District and the cities of Mountain View and Los Altos have not yet adopted any analysis procedures, standards, or guidelines

related to VMT. Therefore, the following analysis of project VMT is presented for informational purposes only.

The project would result in an increase in attendance for football games and other sporting events. An increase in number of attendees would result in an increase in VMT generated by the additional attendees. The project would result in a maximum increase in attendance of 500 people (for normal football games). Football season typically lasts for seven weeks between September and November with three to five games hosted at MVHS. Therefore, the average trip increase per day would be approximately 62 trips.⁶⁵ The project would increase the attendance of other sporting events, such as soccer in winter and lacrosse in spring, by up to 300 attendees. These games are typically held twice per week. Therefore, the average trip increase per day would be approximately 74 trips.⁶⁶ As a result of the project, the average trip increase per day would range from 62 to 74 trips, depending on the sporting season. According to OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018), land use projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. By this definition, the proposed project would result in a less than significant VMT impact. **(Less than Significant Impact)**

Impact TRN-3: The project 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). **(Less than Significant Impact)**

The proposed project would install lights and an upgraded PA system at the existing track and sports field within MVHS campus. The proposed project would be designed and constructed in accordance with the 2019 California Building Code and would be reviewed by the State Department of General Services, Division of the State Architect to ensure that the proposed project would not increase hazards to users of the site as a result of any design features. No alterations to the surrounding circulation system are proposed for the project that would exacerbate traffic hazards in the vicinity of the project site, nor is the proposed land use incompatible with the current land use designation in the City of Mountain View General Plan Land Use Map. Therefore, the proposed project would not increase hazards due to design features or incompatible land uses. **(Less than Significant Impact)**

Impact TRN-4: The project would not result in inadequate emergency access. **(Less than Significant Impact)**

It is anticipated that the majority of attendees would park off-site along Truman Avenue and in the Foothill Covenant Church parking lot, with some vehicles parked along Oak Street and the school parking lots closer to the field entrance. Emergency access to the project site would not be inhibited by the additional attendees parking on surrounding streets. The existing emergency access route (at the northwest corner of the site on Truman Avenue) would remain, and parking in front of the driveway would be disallowed. Construction activities for the proposed project would occur directly

⁶⁵ 500 attendees / 3.24 persons per vehicle x 2 trips (inbound and outbound) x 1 event per week / 5 days per week = 62 trips per day

⁶⁶ 300 attendees / 3.24 persons per vehicle x 2 trips (inbound and outbound) x 2 events per week / 5 days per week = 74 trips per day

adjacent to the emergency vehicle access lane; however, the proposed development would not obstruct the access lane during construction or operational phases. The District will coordinate review of the final project design by the City's Police and Fire Departments that will ensure incorporation of all emergency access and circulation requirements and maintain impacts at less than significant levels. Therefore, the project would not result in inadequate emergency access. **(Less than Significant Impact)**

3.17.2.3 *Cumulative Impacts*

Impact TRN-C: The project would not result in a cumulatively considerable contribution to a significant transportation impact. **(Less than Significant Cumulative Impact)**

As described under Impact TRN-1, the proposed project would not result in substantial vehicle delay. While additional trips to and from the site would be generated by the project, the study intersections were found to currently operate at acceptable levels of service and the project would not degrade the level of service to an unacceptable level at any intersection.

Of the cumulative projects shown in Table 3.0-1, the most relevant to the proposed project is the Mountain View High School Expansion Project. The expansion project, the construction of which is currently underway and anticipated to continue until 2026, entails the construction of a new classroom building, engineering building, student services building, and auxiliary gymnasium on the MVHS campus, in addition to various site improvements. The project was adopted in response to expected increases in enrollment at MVHS of 410 students and an increase of 20 staff. As described in the Initial Study prepared for the expansion project, an increase in vehicle trips would occur following build out of the school; however, based on the City of Mountain View and City of Los Altos level of service standards, the increase would not constitute a significant impact.⁶⁷ Further, a large majority of the additional attendees of events at the sports field would be encompassed within the expected enrollment increases which were analyzed and found to have a less than significant transportation impact in the 2018 Initial Study. The proposed project would not facilitate an increase in enrollment and would contribute marginally to transportation impacts resulting from cumulative development. Therefore, the proposed project would have a less than significant cumulative transportation impact. **(Less than Significant Cumulative Impact)**

⁶⁷ Mountain View – Los Altos High School District. *Initial Study for the Mountain View High School Expansion Project*. November 2018.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 Environmental Setting

3.18.1.1 *Regulatory Framework*

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

3.18.1.2 *Existing Conditions*

Native Americans occupied Santa Clara Valley and the greater Bay Area for more than 5,000 years. The exact time period of the Ohlone (originally referred to as Costanoan) migration into the Bay Area is debated by scholars. Dates of the migration range between 3000 B.C. and 500 A.D. Regardless of the actual time frame of their initial occupation of the Bay Area and, in particular, Santa Clara Valley, it is known that the Ohlone had a well-established population of approximately 7,000 to 11,000 people with a territory that ranged from the San Francisco Peninsula and the East Bay, south through the Santa Clara Valley and down to Monterey and San Juan Bautista.

The Ohlone people practiced hunting, fishing, and collecting seasonal plant and animal resources, including tidal and marine resources from San Francisco Bay. The customary way of living, or lifeway, of the Costanoan/Ohlone people disappeared by about 1810 due to disruption by introduced diseases, a declining birth rate, and the impact of the California mission system established by the Spanish in the area in 1777. Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley and they often established settlements near local waterways.

The project site is within the territory of the Ohlone and Muwekma Indian tribes, who had settlements along creeks in the area. The project site is located at an urban site and is approximately 0.3-mile west of the nearest waterway, Stevens Creek. The location of the project site decreases the likelihood that subsurface artifacts may be located on-site. There are no known prehistoric or historic archaeological resources on the project site. To date, no tribes have contacted the District to request

they be notified of projects pursuant to AB 52. There are no known tribal cultural resources on the site.

3.18.2 Impact Discussion

For the purpose of determining the significance of the project's impact on tribal cultural resources, would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, 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.

3.18.2.1 *Project Impacts*

Impact TCR-1:	The project 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). (Less than Significant Impact with Mitigation Incorporated)
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No tribes have sent written requests for notification of projects to the District or the City of Mountain View under AB 52. No known tribal cultural resources are present on-site, however, there is the possibility that tribal cultural resources are uncovered during project construction. As described in Impact CUL-2 and CUL-3 in *Section 3.5 Cultural Resources*, the project would implement mitigation measures to avoid impacts to unknown subsurface cultural resources and human remains. These measures would be applicable to tribal cultural resources and would function to avoid impacts to such resources if they are discovered on-site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed on local or state registers. **(Less than Significant Impact with Mitigation Incorporated)**

Impact TCR-2:	The project 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. (Less than Significant Impact with Mitigation Incorporated)
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As discussed under Impact TCR-1, there are no known tribal cultural resources on-site, and no tribes have sent written requests for notification of projects to the District of the City of Mountain View

under AB 52. As discussed in *Section 3.5 Cultural Resources*, in the unlikely event that human remains or other TCRs are discovered during construction activities, implementation of MM CUL-2 and CUL-3 would reduce the project's impact to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

3.18.2.2 *Cumulative Impacts*

Impact TCR-C: The project would not result in a cumulatively considerable contribution to a significant tribal cultural resources impact. **(Less than Significant Cumulative Impact)**

Cumulatively, other projects in cities of Mountain View and Los Altos may require excavation and grading or other activities that have the potential to affect tribal cultural resources. These projects would be required to implement standard conditions or mitigation measures that would avoid impacts and/or reduce them to a less than significant level consistent with CEQA and AB 52 requirements. These projects would also be subject to the federal, state, and county laws regulating archaeological resources and human remains. As stated previously, extensive prior development on-site has not resulted in impacts to tribal cultural resources. In addition, the proposed project would not foreseeably result in activities within the project site, or in the project area, which would have a significant tribal resource impact. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant tribal cultural resources impact. **(Less than Significant Cumulative Impact)**

3.19 UTILITIES AND SERVICE SYSTEMS

3.19.1 Environmental Setting

3.19.1.1 *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, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The California Water Service (Cal Water) Los Altos Suburban (LAS) District, which supplies water to the site, adopted its most recent UWMP in June 2016.

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.

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.

3.19.1.2 *Existing Conditions*

Water Service

As stated above, water service to the project area is provided by Cal Water. The Cal Water LAS District serves most of the incorporated City of Los Altos and some sections within the cities of Cupertino, Los Altos Hills, Mountain View, Sunnyvale, and adjacent unincorporated areas of Santa Clara County. The water supplied by the LAS District is sourced from pumped groundwater and treated surface water that is purchased from the Santa Clara Valley Water District (Valley Water). In 2015, 10,188 acre-feet (AF) of water was supplied via 18,479 municipal connections in the LAS District. The water system includes 297 miles of pipeline, 65 booster pumps, and 46 storage tanks.

The high school campus is served by existing eight and 12-inch water lines in Bryant Avenue and a 12-inch water line in Truman Avenue. There is an existing four-inch potable water line located underneath the staff parking lot, centrally located in the school's campus.

Sanitary Sewer/Wastewater Treatment

Sanitary sewers in the City of Mountain View are operated and maintained by the Wastewater Section of the Public Works Department. The City operates a sanitary sewer system that consists of 159 miles of gravity sewers, approximately one mile of 42-inch force main, and two pump stations. There are approximately 16,000 sanitary sewer laterals in the City.⁶⁸ Mountain View High School is served by existing eight-inch sanitary sewer lines in Bryant Avenue and Truman Avenue.

The Palo Alto Regional Water Quality Control Plant (PARWQCP) provides wastewater treatment for the communities of Los Altos, Los Altos Hills, Mountain View (including Mountain View High School), Palo Alto, Stanford University, and the East Palo Alto Sanitary District. The PARWQCP has an annual treatment capacity of 40 million gallons per day (mgd). Mountain View has an allocation of 15.1 mgd at the plant. In 2015, the average dry weather flow to the PARWQCP was 18.4 mgd, with Mountain View contributing 6.4 mgd.⁶⁹ Projected dry weather flows to the PARWQCP are anticipated to increase to between 28 and 34 mgd in the year 2062, based on estimates for population growth provided by the Association of Bay Area Governments (ABAG).⁷⁰ It is anticipated that existing facilities will provide adequate capacity to meet dry weather and maximum month flows through 2035, assuming the same level of treatment is required.

Storm Drainage System

Storm drains in the City of Mountain View are operated and maintained by the Wastewater Section of the Public Works Department. Runoff from the project site is conveyed to a 12- to 30-inch storm drain line in Bryant Avenue and an 18- to 24-inch storm drain line in Truman Avenue and flows into the Permanente Creek Diversion Channel, which then discharges into Stevens Creek and eventually flows to the San Francisco Bay.

Solid Waste

Solid waste collection and recycling services for residents and businesses in Mountain View are provided by Foothill Disposal. Once collected, solid waste and recyclables are transported to the SMaRT station in Sunnyvale for sorting. Non-recyclable waste is transported to the Kirby Canyon Sanitary Landfill in South San José. As of January 1st, 2019, Kirby Canyon Sanitary Landfill has a remaining capacity of 15.7 million cubic yards and an estimated closure date of 2071.⁷¹ The City has a contract to dispose of solid waste at Kirby Canyon until 2021.

⁶⁸ City of Mountain View. *Sewer System Management Plan*. June 2018.

⁶⁹ City of Mountain View. *2015 Urban Water Management Plan*. March 2016.

⁷⁰ City of Palo Alto. *PARWQCP Long Range Facilities Plan – Final Report*. October 2012.

⁷¹ Azevedo, Becky. Technical Manager, Waste Management. *Personal Communication*. March 2019.

3.19.2 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 infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- 5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.19.2.1 *Project Impacts*

Impact UTL-1:	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. (Less than Significant Impact)
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The proposed project would not create a new demand for stormwater drainage, natural gas, or telecommunications facilities. The proposed lights and PA system would marginally increase the demand for electric power at MVHS; however, this increase would not necessitate the construction of new facilities or expansion of existing facilities. The stadium lights would facilitate an increase in attendance at sporting events and special events, which would incrementally increase demand for water and wastewater treatment during these events. As discussed above in *Section 3.19.1.2*, the existing wastewater treatment plant is adequately prepared to service the project area through 2035. The resulting increase in wastewater would occur intermittently for sporting events and the project would not require the construction of new facilities or expansion of existing facilities. Therefore, the impact would be less than significant. **(Less than Significant Impact)**

Impact UTL-2:	The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant Impact)
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The proposed project would result in a minor increase in demand for water corresponding to the increase in number of attendees for events at MVHS. The LAS District 2015 UWMP found that Cal

Water has more than sufficient well capacity to meet the demands unserved by Valley Water's purchases through 2040. Furthermore, as part of the previously approved expansion project, the existing turf is proposed to be replaced with artificial turf, which would reduce the overall water demand of the high school. Therefore, the project would have a less than significant impact on water supplies. **(Less than Significant Impact)**

Impact UTL-3: The project 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. **(Less than Significant Impact)**

The proposed project would result in a minor increase in demand for wastewater treatment corresponding to the increase in number of attendees for events at MVHS. There is approximately 8.7 mgd of average dry weather flow capacity available to serve the City of Mountain View at the PARWQCP. Events which currently occur on campus, such as football games and commencement, have similar attendance rates to the proposed project and do not result in exceedances of wastewater treatment capacity at the PARWQCP. Therefore, the project's minor contribution to existing wastewater treatment demands in the City and other jurisdictions that rely on the PARWQCP for wastewater treatment would not result in an exceedance of capacity at the plant. **(Less than Significant Impact)**

Impact UTL-4: The project 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. **(Less than Significant Impact)**

The proposed project would result in a minor increase in solid waste generation corresponding to the increase in number of attendees for events at MVHS. Solid waste generated on-site would be disposed of at Kirby Canyon Sanitary Landfill in South San José, a landfill with a capacity of 15.7 million cubic yards and an estimated closure date of 2071, as estimated in 2019. Events which currently occur on campus, such as football games and commencement, have similar attendance rates to the proposed project and do not generate solid waste in excess of state or local standards or the capacity of local infrastructure. For these reasons, it is expected that the Kirby Canyon Sanitary Landfill would have sufficient capacity to serve the solid waste disposal needs created by the proposed project. **(Less than Significant Impact)**

Impact UTL-5: The project would not be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

In 2018, the City of Mountain View diverted 78 percent of the community's waste away from landfills by means of recycling, waste reduction, composting, and other diversion programs.⁷² This

⁷² City of Mountain View. "Zero Waste." Accessed February 27, 2020.
<https://www.mountainview.gov/depts/pw/recycling/zero/default.asp>

diversion rate exceeds current State requirements and is on track to meet the required diversion rate of 75 percent by 2020 established by AB 341. The proposed project, by itself, would not prevent the City of Mountain View from maintaining acceptable waste diversion ratios. The additional solid waste generated at MVHS by additional attendees at games and events would be disposed of in compliance with all applicable federal, state, and local policies and regulations regarding solid waste, including the California Integrated Waste Management Act of 1989, the Santa Clara County Integrated Waste Management Program, and the City of Mountain View's 2030 General Plan. **(Less than Significant Impact)**

3.19.2.2 *Cumulative Impacts*

Impact UTL-C: The project would not result in a cumulatively considerable contribution to a significant utilities and service systems impact. **(Less than Significant Impact)**

As discussed in their respective sections, the City's stormwater, water, wastewater, solid waste, and other utility service systems are adequately prepared to serve General Plan buildout through 2030 upon adherence to existing policies, plans and regulations. Cumulative projects in the City will be evaluated at a project-level to ensure compliance with level of service standards for the utilities discussed above; necessary improvement to utility service systems will be made to ensure that the combined effects of growth do not impact the overall system. The proposed project is consistent with the City of Mountain View's General Plan designation for the site and would not conflict or interfere with implementation of impact reduction measures; therefore, the proposed project would not result in a cumulatively considerable contribution to a significant utilities and service systems impact. **(Less than Significant Cumulative Impact)**

3.20 WILDFIRE

3.20.1 Environmental Setting

3.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (Cal Fire) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.⁷³

3.20.2 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?

3.20.2.1 *Project Impacts*

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 would not result in wildfire impacts. **(No Impact)**

3.20.2.2 *Cumulative Impacts*

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 would not result in cumulative wildfire impacts. **(No Cumulative Impact)**

⁷³ California Board of Forestry and Fire Protection. "Fire Hazard Severity Zones Maps." Accessed January 21, 2020. <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>

SECTION 4.0 GROWTH-INDUCING IMPACTS

Impact GRO-1: The project would not foster or stimulate significant economic or population growth in the surrounding environment. **(Less than Significant Impact)**

4.1 INTRODUCTION AND THRESHOLDS:

As stated in the CEQA Guidelines Section 15126.2(d), a project is considered growth-inducing if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing in the surrounding environment.
- Remove obstacles to population growth or tax community service facilities to the extent that the construction of new facilities would be necessary.
- Encourage or facilitate other activities that would cause significant environmental effects.

Examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or industrial parks in areas that are currently only sparsely developed or are undeveloped.

4.1.1 Economic or Population Growth

The proposed project is located within the MVHS campus. The proposed field lights and PA system would serve existing uses of the MVHS campus, such as sporting events and practices and special events, such as commencement ceremonies. The proposed project would not facilitate an increase in enrollment at MVHS. Attendees of events at MVHS would come from the existing students and faculty enrolled at the school, as well as family and community members in the area. For these reasons, the proposed project would not foster or stimulate significant economic or population growth in the surrounding environment. **(Less than Significant Impact)**

4.1.2 Removal of Obstacles to Growth

The project site is located in an urban area of Mountain View and implementation of the project would not result in an expansion of urban services or the pressure to expand beyond the City's existing boundaries or sphere of influence.

The project would not open undeveloped land to further growth or provide expanded utility capacity that would be available to serve future unplanned development. Development of the project would be restricted to the site boundaries. Existing utility lines and service providers would be available to serve the proposed lighting and PA system project.

The proposed project is consistent with the growth assumptions of the 2018 District Master Plan and the City of Mountain View 2030 General Plan and would not tax community service facilities to the extent that construction of new facilities would be necessary. The project would not encourage or

facilitate other activities that would cause significant environmental effects. For these reasons, the project would not result in a significant growth-inducing impact by removing obstacles to growth.
(Less than Significant Impact)

SECTION 5.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

This section was prepared pursuant to CEQA Guidelines Section 15126.2(c), which requires a discussion of the significant irreversible changes that would result from the implementation of a proposed project. Significant irreversible changes include the use of nonrenewable resources, the commitment of future generations to similar use, irreversible damage resulting from environmental accidents associated with the project, and irretrievable commitments of resources.

5.1 USE OF NONRENEWABLE RESOURCES

During construction and operation of the project, nonrenewable resources would be consumed. Unlike renewable resources, nonrenewable resources cannot be regenerated over time. Nonrenewable resources include fossil fuels and metals. Renewable resources, such as lumber and other wood byproducts, could also be used.

Energy, as discussed in more detail in *Section 3.6*, would be consumed during both the construction and operational phases of the project. The construction phase would require the use of nonrenewable construction material, such as concrete, metals, plastics, and glass. Nonrenewable resources and energy would also be consumed during the manufacturing and transportation of building materials, site preparation, and construction of the field lights and PA system. The operational phase would consume energy to illuminate the track and sports field; additional energy would also be consumed due to the increased attendees of evening events and associated gasoline consumption, water use, and solid waste disposal.

Development of the project would result in an increase in demand for nonrenewable resources. However, the proposed LED lights would be designed for energy efficiency and their use would be limited by established regulations, including AR 7325 and BP 7325. The lights would use electricity provided by SVCE, which is 100 percent GHG-emissions free. Further, the lights and PA system would not consume substantial amounts of energy, as they would be used only for 25 sports games throughout the annual season, sports practices, and a few special events. For these reasons, the proposed project would minimize its use of nonrenewable energy resources.

5.2 COMMITMENT OF FUTURE GENERATIONS TO SIMILAR USE

The project would be developed on a site that is already developed for school uses. Development of the project would not commit a substantial amount of resources to construct the four pole-mounted lights and 12 speakers. The proposed project would not result in development of a previously undeveloped area or permanent land use changes throughout the project area. The proposed project would limit development to within the project boundaries. Therefore, the proposed project would not commit future generations to similar use.

5.3 IRREVERSIBLE DAMAGE FROM ENVIRONMENTAL ACCIDENTS

The project does not propose new or uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would impact other areas. As discussed in *Section 3.9 Hazards and Hazardous Materials*, there are no significant unmitigable hazards and hazardous

materials conditions on-site or off-site that would substantially affect the public and surrounding environment. There are no significant unmitigable geology and soils impacts from implementation of future projects. For these reasons, the proposed project would not result in irreversible damage that may result from environmental accidents.

5.4 IRRETRIEVABLE COMMITMENT OF RESOURCES

As discussed above under *Section 5.1*, the project would consume nonrenewable resources during construction and operation. With implementation of existing regulations, the project would minimize its consumption of nonrenewable resources.

SECTION 6.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The proposed project would not result in any significant and unavoidable impacts.

SECTION 7.0 ALTERNATIVES

7.1 INTRODUCTION

The CEQA Guidelines give extensive direction on identifying and evaluating EIR alternatives to a proposed project (Section 15126.6). The purpose of analyzing alternatives in an EIR is to identify ways to substantially lessen or avoid the significant effects a proposed project may have on the environment. 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. Although the alternatives do not have to meet every goal and objective set for the proposed project, they should “feasibly attain most of the basic objectives of the project.”

The CEQA Guidelines (Section 15126.6) do not require that all possible alternatives be evaluated, only that a range of feasible alternatives be discussed so as to encourage both meaningful public participation and informed decision making. In selecting alternatives to be evaluated, consideration may be given to their potential for reducing significant unavoidable impacts, reducing significant impacts that are mitigated by the project to less than significant levels, and further reducing less than significant impacts.

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’s objectives, and (3) the feasibility of the alternatives available. Each of these factors is described below.

7.1.1 Significant Impacts of the Project

As mentioned above, the CEQA Guidelines advise that the alternatives analysis in an EIR should be limited to alternatives that would avoid or substantially lessen any of the significant effects of the project and would achieve most of the project objectives. Alternatives may also be considered if they would further reduce impacts that are already less than significant because of required or proposed mitigation. Impacts that would be significant, and for which the project includes mitigation to reduce them to less than significant levels include:

- Health risks associated with exposure to TACs during temporary construction activities.
- Construction-related impacts to nesting raptors, and other migrating birds and their nests.
- Impact on subsurface cultural resources, tribal cultural resources, and human remains, during construction.
- Health risks associated with exposing construction workers and future users of the site to residual soil contamination.

Pursuant to CEQA Guidelines Section 15124, the EIR must include a statement of the objectives sought by the proposed project.

7.1.2 Project Objectives

The objectives for the proposed project are as follows:

- Provide the capability to host sport events and games at the athletic stadium on the Mountain View High School campus at night when students, parents, and community members can more easily attend.
- Provide athlete and spectator safety by providing superior lighting conditions during sports events and games at night.
- Provide an upgraded PA system that focuses and contains sound within the stadium area.
- Provide outdoor athletic facilities for outdoor night sport events that are consistent with typical high school facilities throughout Santa Clara County and the San Francisco Bay Area.
- Provide practice times for after school sports and marching band due to school bell schedule and limited available daylight.

7.2 PROJECT ALTERNATIVES

7.2.1 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a wide range of factors and influences. The Guidelines advise that such factors *can* include (but are not necessarily 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)].

7.2.2 Alternatives Considered But Rejected

7.2.2.1 *Location Alternative*

The CEQA Guidelines encourage consideration of an alternative site when significant effects of the project might be avoided or substantially lessened (Section 15126.6(f)(2)(A)). Only locations that would avoid or substantially lessen any of the significant impacts of the project and meet most of the project objectives need be considered for inclusion in the EIR.

The project proposes to develop four pole-mounted lights and up to 12 speakers at the existing track and athletic field, to be used for sporting practices, games, and special events. The track and field and the adjacent grass fields to the north/northeast are the only locations on the MVHS campus currently used for sporting events. Installation of the proposed field lights and PA system at an alternative location on-campus (such as the adjacent grass fields) would not be feasible, unless a new track and sports field were to be constructed on the campus with the capacity to host all MVHS sporting events. The District considered hosting nighttime events for MVHS at Foothill College, as LAHS and MVHS have done in the past, however this was determined to be infeasible due to scheduling conflicts and the increased travel which would be required for sporting events. Installation of field lights and a PA system at an off-site location with available sporting facilities and capacity to host events would not provide MVHS the capability to host sport events and games on-campus and, therefore, would not meet the objectives of the project. Further, any project of similar size and intensity would likely result in similar operational impacts, as well as impacts associated with project construction.

In considering an alternative location in an EIR, the CEQA Guidelines advise that 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”.⁷⁴ If an alternative on-campus location were to be selected for the proposed field lights and PA system, new athletic facilities would need to be constructed, which would result in increased environmental impacts. If Foothill College were to be used for nighttime events, increased vehicle travel and associated air pollutant and GHG emissions would occur. If an alternative off-site location was selected, it is not likely that the alternative location would substantially lessen any identified impacts. Moreover, it would not meet some of the project objectives like the capability of the MVHS to host sport events and games in their own school campus. As a result, no other site alternative was evaluated.

7.2.3 Selection of Alternatives

In addition to the No Project Alternative, the CEQA Guidelines advise that the range of alternatives discussed in the EIR should be limited to those that “would avoid or substantially lessen any of the significant impacts of the project” [Section 15126.6(f)]. The discussion below addresses a No Project Alternative and a Reduced Intensity Alternative. These two alternatives are discussed for their potential impacts as compared to the proposed project and ability to achieve the project objectives.

7.2.3.1 *No Project/No Development Alternative*

The CEQA Guidelines specifically require consideration of the 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 is “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.” The Guidelines emphasize that an EIR should take a practical approach, and not “...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)]. Currently, there are temporary lights used for some events and the PA system does not focus sound on the field.

The No Project alternative would involve no changes to the physical environment and thus would have no environmental effects. Under this alternative, stadium lighting for night games at Mountain View High School would continue to be provided by portable lighting systems that are powered by diesel generators. The portable lights are currently used for two to five football games per year. The current PA system consists of three speakers which are attached to the press box at the western bleachers. As such, air pollution emissions, GHG emissions, and noise associated with construction would be avoided because no lighting or PA systems would be installed. In addition, operational impacts associated with nighttime event traffic and crowd noise would be less compared to the proposed project as the number of events and attendance would increase with permanent lights. However, this alternative would involve diesel-powered portable lighting. Operational diesel emissions would be greater compared to the proposed project. It is anticipated that overall air pollution and GHG emissions associated with diesel generators would be greater than emissions associated with energy use to power permanent energy-efficient lighting fixtures.

⁷⁴ CEQA Guidelines Section 15126.6(f)(2)(A)\

The No Project Alternative would not meet any of the objectives of the proposed project. This alternative would not extend play time on the fields at the MVHS campus (Objective 1), improve safety (Objective 2), improve the PA system (Objective 3), provide nighttime recreational activities for students (Objectives 4 and 5).

7.2.3.2 *Portable Lighting Alternative*

The Portable Lighting Alternative would involve no physical change to the sports field but would involve increased use of portable lights for night games, practices, and special events. Currently, two to five night football games are hosted at MVHS using portable lights. Under this alternative, stadium lighting at MVHS would continue to be provided by portable lighting systems that are powered by diesel generators; however, the use of portable lighting systems would be increased to facilitate the same intensity of field use as is proposed by the project (i.e. up to 25 sporting events, weekly sports practices, and up to three special events). The existing PA system (comprised of three speakers attached to the press box) would be retained under this alternative.

Operational diesel emissions from the portable lights and health risks to nearby sensitive receptors would be greater than the proposed project and greater than the No Project/No Development Alternative. It is anticipated that overall air pollution and GHG emissions associated with diesel generators would be greater than emissions associated with energy use to power permanent energy-efficient lighting fixtures since the permanent system would be powered by electricity. Portable lights are typically 20 to 30 feet tall and are generally less effective than taller, pole-mounted lights at directing the beam of light onto the playing surface without creating spill light. For this reason, the increased use of portable lights would likely lead to greater light and glare impacts than the proposed project. Additionally, the use of diesel-powered generators for a greater number of events would marginally increase the overall ambient noise conditions at the site. Because the Portable Lighting Alternative would not involve ground disturbance or construction, the alternative would reduce the project's impacts on cultural and paleontological resources and hazardous materials. While the Portable Lighting Alternative would reduce emissions resulting from construction of the proposed lighting and PA systems, these emission reductions would be offset by the increased use of diesel generators for evening events at MVHS.

The Portable Lighting Alternative would meet some, but not all, of the objectives of the proposed project. This alternative would meet Objective 1 by providing increased capacity for MVHS to host nighttime events. This alternative would also meet Objective 5 by providing additional practice times for after school sports and marching band. This alternative would not provide superior lighting conditions for athletes and spectators, as portable lighting systems would continue to be used (Objective 2). This alternative would not include an upgraded PA system (Objective 3) and would not provide athletic facilities consistent with public schools in the region (Objective 4).

7.2.4 Environmentally Superior Alternative

The *CEQA Guidelines* state 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 (Section 15126.6(e)(2)).

Table 7.2-1 summarizes the level of impact for the proposed project and each project alternative.

Table 7.2-1: Comparison of Impacts from Alternatives to the Proposed Project		
Significant Impacts of the Proposed Project	Level of Impact	
	No Project – No Development	Portable Lighting Alternative
Air Quality	Avoided	Greater
Biological Resources	Avoided	Avoided
Cultural Resources	Avoided	Avoided
Geology and Soils	Avoided	Avoided
Hazards/Hazardous Materials	Avoided	Avoided
Meets Project Objectives	No	Partially
Environmentally Superior Alternative	Yes	No

As shown in Table 7.2-1, the environmentally superior alternative would be the No Project-No Development Alternative, which would avoid all project impacts, however it would achieve none of the project objectives.

SECTION 8.0 REFERENCES

The analysis in this Environmental Impact Report is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 9.0 LEAD AGENCY AND CONSULTANTS

9.1 LEAD AGENCY

Mountain View Los Altos High School District

Mike Mathiesen, Associate Superintendent

9.2 CONSULTANTS

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Transportation Consultants

Kai-Ling Kuo, Transportation Engineer

Jocelyn Lee, Transportation Engineer

Previsualists, Inc.

Aesthetics Consultants

Don Carmickle, CEO

SECTION 10.0 ACRONYMS AND ABBREVIATIONS

AR	Administrative Regulation
BP	Board Policy
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
IESNA	Illuminating Engineering Society of North America
MND	Mitigated Negative Declaration
MVHS	Mountain View High School
MVLA	Mountain View-Los Altos
NOD	Notice of Determination
NOP	Notice of Preparation
PA	Public Address
RWQCB	Regional Water Quality Control Board
USFWS	United States Fish and Wildlife Service
SR	State Route
FMMP	Farmland Mapping and Monitoring Program
CAL FIRE	California Department of Forestry and Fire Protection
O ₃	Ozone
NO _x	Nitrogen Oxides
PM	Particulate Matter
CO	Carbon Monoxide
SO _x	Sulfur Oxides
NO ₂	Nitrogen Dioxide
PM _{2.5}	Fine Particulate Matter
PM ₁₀	Coarse Particulate Matter
TAC	Toxic Air Contaminant
CARB	California Air Resources Board
EPA	Environmental Protection Agency
DPM	Diesel Particulate Matter
BAAQMD	Bay Area Air Quality Management District

CAP	Clean Air Plan
ROG	Reactive Organic Gas
VDEC	Verifiable Diesel Emission Control Device
MBTA	Migratory Bird Treaty Act
USACE	United States Army Corps of Engineers
VTa	Valley Transportation Authority
NHPA	National Historic Preservation Act
CFR	Code of Federal Regulations
NAHC	Native American Heritage Commission
MLD	Most Likely Descendant
Btu	British thermal unit
GWh	Gigawatt Hours
SVCE	Silicon Valley Clean Energy
PG&E	Pacific Gas and Electric
GHG	Greenhouse Gas
SHMA	Seismic Hazards Mapping Act
CGS	California Geological Survey
CBC	California Building Code
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Bgs	Below ground surface
CO ₂	Carbon Dioxide
CH ₄	Methane
HFC	Hydrofluorocarbon
PFC	Perfluorocarbon
SF ₆	Sulfur hexafluoride
MMTCO _{2e}	Million Metric Tons of Carbon Dioxide Equivalent
MTC	Metropolitan Transportation Commission
ABAG	Association of Bay Area Governments
SCS	Sustainable Community Strategy
PDA	Priority Development Area
GGRP	Greenhouse Gas Reduction Program
VMT	Vehicle Miles Traveled

ESA	Environmental Site Assessment
CUPA	Certified Unified Program Agency
FAR Part 77	Federal Aviation Regulations, Part 77
FAA	Federal Aviation Administration
DTSC	Department of Toxic Substances Control
SWRCB	State Water Resources Control Board
CalARP	California Accidental Release Prevention Program
NOA	Naturally-Occurring Asbestos
LUST	Leaking Underground Storage Tank
ALUC	Airport Land Use Commission
OCP	Organochlorine Pesticides
ESL	Environmental Screening Level
NPDES	National Pollutant Discharge Elimination System
NFIP	National Flood Insurance Program
SWPPP	Storm Water Pollution Prevent Plan
MRP	Municipal Regional Permit
LID	Low Impact Development
FEMA	Federal Emergency Management Act
GMP	Groundwater Management Plan
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
RHNA	Regional Housing Needs Allocation
MVFD	Mountain View Fire Department
MVPD	Mountain View Police Department
TCR	Tribal Cultural Resource
AB	Assembly Bill
SB	Senate Bill
UWMP	Urban Water Management Plan
LAS	Los Altos Suburban
Cal Water	California Water Service Company
AF	Acre-feet
PARWQCP	Palo Alto Regional Water Quality Control Plant
FHSZ	Fire Hazard Severity Zone